



Agenda Bill

City Council Regular Business Meeting - 16 Dec 2019

Department

City Manager

Staff Contact

Brian Wilson, City Manager

Agenda Bill Title

Resolution No. 419, Approval of Supporting the Adoption of a Regional Clean Fuels Standard

Summary

At the November 18, 2019 City Council Regular Meeting, Council expressed an interest in preparing a resolution similar to the recent one passed by the Issaquah City Council related to Supporting a Regional Clean Fuels Standard.

A Clean Fuel Standard aims to reduce pollutants and greenhouse gas (GHG) emissions from transportation sources to address climate change and air quality. On October 21, 2019 Council Adopted the 2020 State Legislative priorities, and among those priorities the following is listed:

Act on Climate Change and the Environment

- Support policies that reduce climate polluting emissions and ensure equity for lower income communities and communities of color to share in the economic opportunities presented by solutions to climate change.
- Support policies for the creation of a stretch Residential Energy Code and the authority for local adoption, low carbon/clean fuel standards, and a price on carbon.
- Support efforts to review developing markets for recyclables and address deficiencies in domestic sorting, processing and remanufacturing capabilities.

Background

PSCAA is a regional government agency with jurisdiction over King, Kitsap, Pierce and Snohomish counties. Approximately 40% of emissions in the region are the result of transportation-related emissions. In 2017, the PSCAA adopted goals to reduce greenhouse gas emissions by 50% below 1990 levels by 2050. PSCAA has evaluated GHG reduction measures and identified a Clean Fuel Standard as important in achieving substantial GHG reductions and air quality benefits in the region.

The Clean Fuel Standard draft rule seeks to reduce the carbon intensity of transportation-related fuels using a market-based system of benchmarks, credits and deficits to provide incentives for low carbon fuels. Low carbon fuels include biodiesel and renewable diesel, electricity, ethanol and renewable natural gas. The proposed rule and a summary of the rule are attached as Exhibits C and D.

The proposed rule sets annual life-cycle carbon intensity reduction benchmarks for fuels, starting with an initial reporting-only year. Fuels whose carbon intensities are above the reduction benchmark generate deficits and fuels whose carbon intensities are below the reduction benchmark generate credits. One credit or deficit is equal to one metric ton of carbon dioxide equivalent (CO₂e).

Each year, deficit producers are required to "retire" credits in equal proportion to their deficits in order to comply with the program. This can include a variety of mechanisms: purchasing credits from credit generators, incorporating renewable fuels and/or other refinery efficiency investments. Regulated entities required to participate include importers and producers of fuels such as gasoline, diesel, ethanol, biodiesel, and fossil compressed natural gas (CNG) and liquefied natural gas (LNG).

Providers of fuels with a carbon intensity lower than the benchmark (credit generators) are eligible to 'opt in' to generate and sell credits. Opt-in fuels include electricity, bio-CNG, bio-LNG, hydrogen, renewable propane and alternative jet fuel. The proposed rule includes exemptions for specific fuel applications, including interstate locomotives, ocean-going vessels, aircraft, military tactical vehicles and tactical support equipment and small volume fuel producers and fuels used in small volumes.

PSCAA estimates that the proposed rule, with corresponding carbon intensity reductions in transportation fuel of 15%, 20% and 25%, would result in annual reductions of 1.8, 2.3 and 3 million metric tons of GHG emissions by 2030.

In addition, PSCAA estimates that the proposed rule will result in the reduction of harmful criteria pollutants and air toxins, particularly in communities located along major roadways. These include mobile source air carcinogens including benzene and fine particle pollution emissions, which is noted to correspond to reductions in potential cancer risk, with the greatest impact for communities with greatest current exposure.

State Legislation

Washington State is the only state on the west coast without a clean fuel standard (Oregon, California and British Columbia have standards). California's program, which began in 2010, requires a 10 percent reduction by 2020 and a 20 percent reduction by 2030 in the carbon intensity of transportation fuels. Oregon's program, which began in 2015, requires a 10 percent reduction by 2025.

Similar legislation providing for a state-wide Clean Fuels Standard in Washington was proposed in the 2019 legislative session (HB 1110).

The Washington legislation operates similarly to the other states on the west coast, with goals for carbon fuel intensity reduction of 10 percent by 2028, and 20 percent by 2035 from a base of 2017. The 2019 legislation was passed by the House but did not proceed through the Senate. Importantly, the state-wide legislation contrasts with the faster timeline proposed by the PSCAA (a 25% reduction by 2030). The timing of reductions could impact the required rate of technology adoption or production, which could have an effect on costs. In the study for the Clean Fuels Standard (Puget Sound Regional Transportation Fuels Analysis, ICF 2019) conducted for the PSCAA, the identified targets were ambitious but feasible.

Proposed Resolution and Letter

The resolution presented (Exhibit A) provides for support for the development of a Clean Fuels Standard for the reasons noted above. In addition, a proposed letter to the Puget Sound Clean Air Agency (Exhibit B) for the rule-making process articulates that support and outlines specific areas of consideration related to the proposed rule. These comments include:

- Alignment with the City's 2020 State Legislative Priorities
- A request for consideration on the timing of the emission reduction targets.

If approved, Staff would notify the PSCAA of the resolution and transmit the letter.

Options

1. Approve Resolution No. 419
 2. Do Not Approve Resolution No. 419
-

Administrative Recommendation

Staff recommends Council sign the letter of support for a Regional Clean Fuels Standard and adopt Resolution No. 419.

Suggested Motion

Move to adopt Resolution No. 419 and send the letter of support to the Puget Sound Clean Air Agency.

Attachments

- [A. Draft Resolution No. 419 - Clean Fuels Standard](#)
 - [B. Letter of Support to Puget Sound Clean Air Agency](#)
 - [C. Summary of Clean Fuel Standard](#)
 - [D. PSCAA Proposed Rule](#)
-

CITY OF BURIEN, WASHINGTON

RESOLUTION NO. 419

A RESOLUTION OF THE CITY OF BURIEN, WASHINGTON, SUPPORTING THE ADOPTION OF A CLEAN FUELS STANDARD.

WHEREAS, Burien recognizes the need for a safe, healthy environment and stable climate for our community now and in the future; and

WHEREAS, research by the Climate Impacts Group at the University of Washington have identified impacts in the Pacific Northwest as a result of climate change, including increased heat, reduced snowpack, increased incidence of heavy rain events, increased wildfire threats, low summer stream flows and higher stream temperatures, and rising sea levels and other coastal impacts; and

WHEREAS, the City has established goals to act on climate change and the environment through the support of policies for the creation of a stretch Residential Energy Code and the authority for local adoption, low carbon/clean fuel standards, and a price on carbon; and

WHEREAS, transportation related emissions contribute to poor air quality, particularly in neighborhoods adjacent to major roadways, and represent more than one third of total community greenhouse gas emissions; and

WHEREAS, gasoline and diesel use in transportation are responsible for nearly two-thirds of air pollution in the Puget Sound region, which is linked to asthma, pulmonary disease, lost work days and cancer risk; and

WHEREAS, the K4C (King County Cities Climate Collaboration) has identified a low carbon fuel standard as a catalytic, strategic action that is critical to achieve local, regional and state climate goals; and

WHEREAS, a Clean Fuel Standard is a significant climate mitigation, air quality and health improvement measure which will reduce greenhouse gas emissions, fine particulates and mobile air toxics, that cannot be implemented effectively at the municipal level; and

WHEREAS, the City recognizes that climate change is one of the paramount environmental and economic challenges for our generation and the actions undertaken today will shape the health, safety, economy and environment for our community and region in the future.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BURIEN, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. Support for a Clean Fuel Standard. The City supports the adoption of a Clean Fuel Standard and urges the Puget Sound Clean Air Agency and State of Washington to adopt a Standard to significantly reduce harmful air pollution and help achieve community, regional, and state greenhouse gas reduction targets.

Section 2. Effective Date. This resolution shall take effect immediately upon passage by the Burien City Council.

ADOPTED BY THE CITY COUNCIL OF THE CITY OF BURIEN, WASHINGTON, AT A REGULAR BUSINESS MEETING THEREOF THIS 2ND DAY OF DECEMBER, 2019.

CITY OF BURIEN

Jimmy Matta, Mayor

Austin Bell, Deputy Mayor

Bob Edgar, Councilmember

Lucy Krakowiak, Councilmember

Krystal Marx, Councilmember

Pedro Olguin, Councilmember

Nancy Tosta, Councilmember

ATTEST/AUTHENTICATED:

Megan Gregor, City Clerk

Approved as to form:

Lisa Marshall, City Attorney

Filed with the City Clerk:
Passed by the City Council:
Resolution No.



City of Burien
400 SW 152nd Street
Suite 300
Burien, WA 98166-1911

P 206.241.4647
F 206.248.5539

burienwa.gov

December 2, 2019

Puget Sound Clean Air Agency
1904 Third Avenue, Suite 105
Seattle, WA 98101

VIA EMAIL

RE: Clean Fuels Standard

Dear Mr. Kenworthy and Board Members,

On behalf of the City of Burien I am pleased to submit this letter to the Puget Sound Clean Air Agency on the proposed Clean Fuel Standard rule which is currently open for public comment.

As a community with a rapidly growing urban center containing transportation infrastructure, running both east to west and north to south through our community, we are acutely aware of the impacts of growth and transportation in our community.

The City supports the adoption of a Clean Fuel Standard at either the regional or State level and believes it is an important step in achieving the Council's 2020 State Legislative priority of "Acting on Climate Change and the Environment." Through these priorities, Council has committed to supporting policies for the creation of a stretch Residential Energy Code and the authority of local adoption, low carbon/clean fuel standards, and a price on carbon. We know that in order to achieve these goals, actions are needed at the regional, state and federal levels.

The Clean Fuel Standard also aligns with the shared strategic actions for transportation outlined in the joint commitments of the King County Cities Climate Collaboration, or K4C, of which the City is a member. Those actions include a "catalytic policy commitment" in support of a low carbon fuel standard.

In the adoption of a Clean Fuel Standard, the City respectfully requests that the Agency take into consideration the timeline for implementation of the fuel standards. The proposed timeline is aggressive relative to the version proposed at the State level as well as those of California and Oregon. While the ICF report states that the 2030 target is feasible, consideration should be made for the necessary technology and production capacity required to achieve this standard versus progress being led by California. The concern here is the potential cost to achieve these standards under the proposed timeline.

Thank you for taking the time to consider the City's comments. Recently, the City Council passed a resolution in support of a Clean Fuels Standard, which is attached for reference. If you have any questions about the City's comments, please contact Brian J. Wilson, City Manager, at brianj@burienwa.gov or 206.248.5503.

Sincerely,

Mayor Jimmy Matta
Burien City Council

Austin Bell, Deputy Mayor

Bob Edgar, Councilmember

Lucy Krakowiak,
Councilmember

Krystal Marx,
Councilmember

Pedro Olguin,
Councilmember

Nancy Tosta, Councilmember



Clean Fuel Standard

Draft Rule Summary

The Puget Sound Clean Air Agency has prepared a Clean Fuel Standard draft rule that would apply to transportation fuels supplied or sold in the four-county Puget Sound region – King, Kitsap, Pierce, and Snohomish counties. A Clean Fuel Standard would reduce greenhouse gas pollution to address climate change and protect human health.

What is a Clean Fuel Standard?

A Clean Fuel Standard reduces greenhouse gas pollution from transportation through a system of deficit and credit trading that requires transportation fuels to become cleaner over time.

What's in the draft rule?

Pollution Reduction Target

The proposed target is a 25 percent reduction in carbon intensity for the region's transportation fuel pool by 2030.

Regulated Transportation Fuels

Gasoline, diesel, ethanol, biodiesel, renewable diesel, fossil natural gas, propane, and any blend of these fuels.

Opt-In Transportation Fuels

Electricity, renewable natural gas, alternative jet fuel, hydrogen, and renewable propane.

Exempted Fuel Applications

Interstate locomotives, ocean-going vessels, aircraft, military vehicles, and small volume fuel producers.

Highly Impacted Communities

The draft rule specifies that 35% of credit revenue generated by electric utilities and transit agencies must focus on benefiting highly impacted communities by increasing access to and awareness of electric transportation options.

The rule would form Community Advisory Groups to provide input to electric utilities on equity considerations. The rule would also establish an Equity Credit Aggregator to use any unclaimed electricity credits, and an Equity Advisory Committee to provide input on the selection of the Equity Credit Aggregator and its annual scope of work.

Rulemaking timeline

October 9, 2019: Release of a draft Clean Fuel Standard rule, starting a 90-day public comment period.

January 6, 2020: The public comment period closes.

Early 2020: The Agency will consider all comments received during the comment period. The Agency's Board of Directors will then consider action on a potential final rule no sooner than the Board's meeting on February 27, 2020.

How to provide public comment

Comments can be provided in the following ways:

Email: CleanFuels@pscleanair.org.

Mail: Send to the Puget Sound Clean Air Agency, 1904 Third Avenue, Suite 105, Seattle, WA 98101

In-person public hearing:

- Thursday, December 19, 2019
- 12:30-4:30 p.m. and 5-8 p.m.
- Washington State Convention Center, 705 Pike St, Seattle, Washington

More information: pscleanair.org/CleanFuelStandard



PUGET SOUND CLEAN AIR AGENCY
1904 3rd Avenue, Suite 105
Seattle, Washington 98101-3317
(206) 343-8800

REGULATION IV

Copies of Regulations I, II, III, and IV are available by writing, calling, or visiting the Agency. Our regulations are also available on the Agency's web site at <www.pscleanair.org>.

**Regulation IV of the
PUGET SOUND CLEAN AIR AGENCY**

1904 3rd Avenue, Suite 105
Seattle, Washington 98101-3317

Table of Contents

ARTICLE 1: PURPOSE AND DUTY	4
SECTION 1.01 Purpose.....	4
Article 2: Definitions and Acronyms.....	4
SECTION 2.01 Definitions for the Purposes of the CFS	4
SECTION 2.02 Acronyms for Purposes of the CFS.....	16
Article 3: Carbon Intensity Reduction Benchmarks and Compliance Schedules	19
SECTION 3.01 Transportation Fuel Pool Reduction Benchmarks	19
Article 4: Applicable and Opt-In Fuels and Exemptions.....	22
SECTION 4.01 Applicability of a Clean Fuel Standard for Transportation Fuels	22
SECTION 4.02 Applicable Transportation Fuels.....	22
SECTION 4.03 Opt-In Transportation Fuels.....	22
SECTION 4.04 Exemptions for Specific Fuel Applications	23
Article 5: Regulated and Opt-in Entities.....	24
SECTION 5.01 Fuel Reporting Entities	24
SECTION 5.02 Opt-in Entities	26
Article 6: Establishing Fuel Pathways	30
SECTION 6.01 Establishing Carbon Intensity for Gasoline, Diesel, and Substitute Pathways	30
SECTION 6.02 Establishing Carbon Intensity for Electricity Pathways.....	41
Article 7: Credits and Deficits	42
SECTION 7.01 Credit and Deficit Basics	42
SECTION 7.02 Transacting Credits	43
SECTION 7.03 Fuels to Include in Credit and Deficit Calculation.....	45
SECTION 7.04 Calculating Credits and Deficits	46
SECTION 7.05 Project Based Credits	50
SECTION 7.06 Demonstrating Compliance.....	53
SECTION 7.07 Credit Clearance Market	54
Article 8: Registration and Reporting Procedures	57
SECTION 8.01 CFS Online Registration	57

SECTION 8.02 Fuel Transactions and Compliance Reporting	62
SECTION 8.03 Change of Ownership or Operational Control	71
SECTION 8.04 Recordkeeping and Auditing	72
Article 9: Enforcement and Other Provisions	74
SECTION 9.01 Administrative Orders.....	74
SECTION 9.02 Violations and Civil Penalties.....	74
SECTION 9.03 Authority to Suspend, Revoke, Modify, or Invalidate	75
SECTION 9.04 Confidentiality	77
SECTION 9.05 Program Review.....	77
Article 10: Severability.....	77

List of Tables

Table 1. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 for Gasoline and Fuels Used as a Substitute for Gasoline.....	19
Table 2. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 for Diesel Fuel and Fuels Used as a Substitute for Diesel Fuel.....	20
Table 3. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 and beyond for Alternative Jet Fuel.....	20
Table 4. Carbon Intensity Look-Up Table.....	38
Table 5. Indirect Land Use Change Values for Use in CI Determination	39
Table 6. Temporary and Indeterminate Fuel Pathway Code Lookup Table.....	40
Table 7. Energy Density of Fuels	47
Table 8. Energy Economy Ratio (EER) for Fuels Used in Light, Medium, and Heavy Duty Applications	49
Table 9. Annual Compliance Calendar for Regulated and Opt-in Entities.....	70

ARTICLE 1: PURPOSE AND DUTY

SECTION 1.01 Purpose

Transportation contributes almost half of greenhouse gas (GHG) emissions in the Agency's jurisdiction (comprised of King, Kitsap, Pierce, and Snohomish counties in the State of Washington). The purpose of this regulation is to reduce greenhouse gas (GHG) emissions and prevent air pollution by reducing the full fuel-cycle carbon intensity of the transportation fuel pool used in the Agency's jurisdiction by 25 percent below 2016 levels by 2030 through a Clean Fuel Standard (CFS), and associated regulatory program. The CFS will help achieve the Agency's adopted target to reduce GHG equivalent emissions by 50 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050 (Resolution 1361, February 23, 2017).

Article 2: Definitions and Acronyms

SECTION 2.01 Definitions for the Purposes of the CFS

- (a) **ABOVE THE RACK** means sales of transportation fuel at pipeline origin points, pipeline batches in transit, and at terminal tanks before the transportation fuel has been loaded into trucks.
- (b) **AGENCY** means the Puget Sound Clean Air Agency, whose jurisdiction includes King, Kitsap, Pierce, and Snohomish counties in the State of Washington.
- (c) **AGGREGATOR OR CREDIT AGGREGATOR** means an entity that registers to participate in the Clean Fuels Program, on behalf of one or more credit generators to facilitate credit generation and trade credits.
- (d) **AGGREGATOR DESIGNATION FORM** means an Agency-approved document through which a credit generator designates an aggregator to act on its behalf.
- (e) **AGGREGATED TRANSACTION INDICATOR** means an identifier for reported transactions that are a result of an aggregation or summing of more than one transaction in CFS Online. An entry of 'True' indicates that multiple transactions have been aggregated and are reported with a single Transaction Number. An entry of 'False' means that the transaction record results from one fuel transaction reported as a single Transaction Number.
- (f) **ALTERNATIVE FUEL** means any transportation fuel that is not gasoline or diesel fuel, including those fuels specified in Section 4.03.
- (g) **ALTERNATIVE JET FUEL** means a drop-in fuel, made from petroleum or non-petroleum sources, which can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines or existing fuel distribution infrastructure.

- (h) **AVIATION GASOLINE** means a complex mixture of volatile hydrocarbons, with or without additives, suitably blended to be used in aviation engines.
- (i) **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.
- (j) **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.
- (k) **BILL OF LADING** means a document issued that lists goods being shipped and specifies the terms of their transport.
- (l) **BIODIESEL** means a fuel as defined in Washington RCW 19.112.010.
- (m) **BIODIESEL BLEND** means biodiesel blended with diesel.
- (n) **BIOGENIC FEEDSTOCK** means a feedstock that has been identified as likely to be suitable for co-processing with petroleum including oil from pyrolysis, triglycerides such as virgin vegetable oils, used cooking oils, and fat-based oils to produce renewable hydrocarbon fuels.
- (o) **BIO-CNG** means biomethane which has been compressed to CNG. Bio-CNG has equivalent performance characteristics when compared to fossil CNG.
- (p) **BIO-LNG** means biomethane which has been compressed and liquefied into LNG. Bio-LNG has equivalent performance characteristics when compared to fossil LNG.
- (q) **BIO-L-CNG** means biomethane that has been liquefied and transported to a dispensing station where it was then re-gasified and compressed to a pressure greater than ambient pressure and has performance characteristics at least equivalent to fossil CNG.
- (r) **BIOMASS** means non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms, including: products, by-products, residues and waste from agriculture, forestry, and related industries; the non-fossilized and biodegradable organic fractions of industrial and municipal wastes; and gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material.
- (s) **BIOMASS-BASED DIESEL** means a biodiesel or a renewable diesel.
- (t) **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.

- (u) **BLENDSTOCK** means a 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.
- (v) **BUFFER ACCOUNT** means an account held by the Agency that collects and stores forfeited credits for the purpose of addressing invalidated credits or uncovered deficits.
- (w) **BUSINESS PARTNER** refers to the counterparty in a specific transaction involving the fuel reporting entity. This can be either the buyer or the seller of fuel.
- (x) **CARBON INTENSITY (CI)** means the quantity of life cycle greenhouse gas emissions, per unit of fuel energy, expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ).
- (y) **CARGO HANDLING EQUIPMENT** 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.
- (z) **CARRYBACK CREDIT** means a credit that was generated during or before the prior compliance period that a regulated entity acquires between January 1st and April 30th of the current compliance period to meet its compliance obligation for the prior compliance period.
- (aa) **CFS ONLINE** means the interactive, secured, web-based, electronic data tracking, reporting and compliance system that the Agency develops, manages, and operates to support the Clean Fuel Standard.
- (bb) **CLEAN FUEL** means a transportation fuel whose carbon intensity is lower than the applicable clean fuel standard.
- (cc) **CLEAN FUEL STANDARD PROGRAM** means the Agency program that manages implementation of Regulation IV, including CFS Online.
- (dd) **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.
- (ee) **CLEAR GASOLINE** means gasoline derived from crude oil that has not been blended with a renewable fuel.
- (ff) **COMPRESSED NATURAL GAS (CNG)** means natural gas that has been compressed to a pressure greater than ambient pressure.
- (gg) **CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS** means a measure that examines the changes in the price of a basket of goods and services

purchased by urban consumers, and is published by the U.S. Bureau of Labor Statistics.

- (hh) **CONTROL OFFICER** means the Air Pollution Control Officer of the Agency, as defined in RCW 70.94.030.
- (ii) **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.
- (jj) **CO-PROCESSING** means the processing and refining of renewable or alternative low-carbon feedstocks intermingled with crude oil and its derivatives at petroleum refineries.
- (kk) **CREDIT CLEARANCE MARKET** means a cost-containment mechanism defined in Section 7.07. The market is held at the agency's discretion between June 1st and July 31st of each year, in which entities that have already demonstrated compliance for the previous year may pledge and sell accumulated credits and entities that have not yet demonstrated compliance for the previous year are required to purchase and retire their pro rata share of credits.
- (ll) **CREDITS** and **DEFICITS** means the units of measure used for determining a regulated entity's compliance with the average carbon intensity requirements. Credits and deficits are denominated in units of whole metric tons of carbon dioxide equivalent (CO₂e).
- (mm) **CREDITS ACQUIRED** means the total credits acquired by the regulated entity in the current compliance period from other regulated entities, credit generators, and aggregators, including carryback credits.
- (nn) **CREDITS CARRIED OVER** means the total credits carried over by the regulated entity from the previous compliance period.
- (oo) **CREDITS GENERATED** means the total credits generated by the regulated entity in the current compliance period.
- (pp) **CREDIT GENERATOR** means a fuel reporting entity or a project operator that generates CFS credit in CFS Online.
- (qq) **CREDITS ON HOLD** means 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 entity's compliance obligation.
- (rr) **CREDITS RETIRED** means the total credits retired by the regulated entity within CFS Online for the current compliance period.
- (ss) **CREDITS SOLD** means the total credits sold by, or otherwise transferred from, the regulated entity in the current compliance period to other regulated entities, credit generators, and aggregators.

- (tt) **CRUDE OIL** means any naturally occurring flammable mixture of hydrocarbons found in geologic formations.
- (uu) **DEFICITS CARRIED OVER** are the total deficits carried over by the regulated entity from the previous compliance period.
- (vv) **DEFICITS GENERATED** means the total deficits generated by the regulated entity for the current compliance period.
- (ww) **DEFICIT GENERATOR** means a fuel reporting entity that generates deficits in CFS Online.
- (xx) **DIESEL FUEL** (also called conventional diesel fuel) means a light middle distillate or middle distillate fuel suitable for compression ignition engines blended with not more than 5 volume percent biodiesel and conforming to the specifications of ASTM D975.
- (yy) **E10** means gasoline containing 10 volume percent fuel ethanol.
- (zz) **ELECTRIC UTILITY** means a consumer-owned utility or investor-owned utility, as those terms are defined in RCW 19.29A.010.
- (aaa) **ELECTRIC CARGO HANDLING EQUIPMENT (eCHE)** means cargo handling equipment using electricity as the fuel.
- (bbb) **ELECTRIC POWER FOR OCEAN-GOING VESSEL (eOGV)** means shore power provided to an ocean going vessel at-berth.
- (ccc) **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.
- (ddd) **ELECTRIC VEHICLE (EV)**, for purposes of this regulation, refers to Battery Electric Vehicles (BEVs) and Plug-In Hybrid Electric Vehicles (PHEVs).
- (eee) **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. EERs are often a comparison of miles per gasoline gallon equivalent between two fuels. EERs for fixed guideway systems are based on megajoules/number of passenger-miles.
- (fff) **ENVIRONMENTAL ATTRIBUTE** means greenhouse gas emission reduction recognition in any form, including 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 non-governmental agency.

- (ggg) **ETHANOL** means denatured fuel ethanol intended for blending with gasoline for use in spark ignition engines that conforms to the specifications of ASTM D4806.
- (hhh) **EQUITY CREDIT AGGREGATOR** means a qualified entity approved by the Agency to aggregate credits for electricity used as a transportation fuel, when those credits would not otherwise be utilized, for the purpose of addressing equity in the promotion of electric transportation options.
- (iii) **FINISHED FUEL** means a fuel that is used directly in a vehicle for transportation purposes without requiring additional chemical or physical processing.
- (jjj) **FIRST FUEL REPORTING ENTITY** means the first entity responsible for reporting in CFS Online 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.
- (kkk) **FIXED GUIDEWAY SYSTEM** means a system of public transit electric vehicles that can operate only on its own guideway (directly operated), or through overhead or underground electricity supply constructed specifically for that purpose, such as light rail, heavy rail, cable car, street car, and trolley bus.
- (lll) **FOSSIL CNG** means CNG that is derived solely from petroleum or fossil sources, such as oil fields and coal beds.
- (mmm) **FOSSIL LNG** means LNG that is derived solely from petroleum or fossil sources, such as oil fields and coal beds.
- (nnn) **FOSSIL L-CNG** means L-CNG that is derived solely from petroleum or fossil sources, such as oil fields and coal beds.
- (ooo) **FUEL PATHWAY** means, for a particular finished fuel, the collective set of processes, operations, parameters, conditions, locations, and technologies throughout all stages that the Agency considers appropriate to account for in the system boundary of a complete well-to-wheel analysis of that fuel's life cycle greenhouse gas emissions.
- (ppp) **FUEL PATHWAY APPLICANT** refers to an entity that has registered in the Alternative Fuel Portal and has submitted an application including all required documents in support of the application requesting a certified fuel pathway.
- (qqq) **FUEL PATHWAY CODE** means the identifier in CFS Online that applies to a specific certified fuel pathway.
- (rrr) **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.
- (sss) **FUEL PRODUCTION FACILITY** means a facility at which fuel is produced, however, with respect to biomethane-to-vehicle fuel pathways, it can mean a

facility at which fuel is upgraded, purified, or processed to meet standards for injection to a natural gas common carrier pipeline or for use in natural gas vehicles.

- (ttt) **FUEL REPORTING ENTITY** means an entity that is required to report fuel transactions in CFS Online. 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.
- (uuu) **FULL FUEL CYCLE** means accounting for the efficiency and environmental impact of fuel consumption from the point of fuel production or extraction to its final end use.
- (vvv) **FULL FUEL-CYCLE CARBON INTENSITY** means the measure of carbon intensity consumed in the following processes: energy feedstock (or primary energy) production; feedstock transportation and storage; fuel production; fuel transportation, storage, and distribution; and vehicle operations that involve fuel combustion or other chemical conversions.
- (www) **GASOLINE** means a fuel suitable for spark ignition engines and conforming to the specifications of ASTM D4814.
- (xxx) **GREENHOUSE GAS** means a gaseous compound that absorbs infrared radiation, traps heat in the atmosphere, and contributes to the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.
- (yyy) **HARBOR VESSEL** means any commercial or government vessel including, but not limited to, passenger ferries, excursion vessels, tugboats, ocean-going tugboats, towboats, push-boats, crew and supply vessels, work boats, pilot vessels, supply boats, fishing vessels, research vessels, hovercraft, emergency response harbor craft, and barge vessels that do not otherwise meet the definition of ocean-going vessels or recreational vessels.
- (zzz) **HEAVY-DUTY VEHICLE** means a vehicle that is rated at or greater than 14,001 pounds gross vehicle weight rating (GVWR).
- (aaaa) **HIGHLY IMPACTED COMMUNITIES** means communities defined by the Washington Clean Energy Transformation Act (CETA; Engrossed Second Substitute Senate Bill 5116, 2019) or identified using the Washington Environmental Health Disparities Map.
- (bbbb) **IMPORTER** means the entity that owns the transportation fuel or blendstock, in the transportation equipment that held or carried the product, at the point the fuel entered the Agency's jurisdiction. For purposes of this definition, "transportation equipment" includes, but is not limited to, rail cars, cargo tanker trucks, and pipelines.
- (cccc) **INDIRECT LAND USE CHANGE** means the average life cycle greenhouse gas emissions caused by an increase in land area used to grow crops that is

caused by increased use of crop-based transportation fuels, and expressed as grams of carbon dioxide equivalent per megajoule of energy provided (gCO₂e/MJ). Land use change is calculated using the protocol developed by the California Air Resources Board.

- (dddd) **LIFE CYCLE GREENHOUSE GAS EMISSIONS** means the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions, such as significant emissions from land use changes), as determined by the Agency, related to the full fuel life cycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.
- (eeee) **LIGHT-DUTY VEHICLE** means a vehicle that is rated at 8,500 pounds or less GVWR.
- (ffff) **LIQUEFIED COMPRESSED NATRURAL GAS (L-CNG)** means LNG that has been liquefied and transported to a dispensing station where it was then re gasified and compressed to a pressure greater than ambient pressure.
- (gggg) **LIQUEFIED NATURAL GAS (LNG)** means natural gas that has been liquefied.
- (hhhh) **LIQUEFIED PETROLEUM GAS** means any material which is composed predominantly of any of the following hydrocarbons, or mixtures of them: propane, propylene, butanes (normal butane or iso-butane), and butylenes, and conforms to the specifications of ASTM D1835.
- (iiii) **MEDIUM-DUTY VEHICLE** means a vehicle that is rated between 8,501 and 14,000 pounds GVWR.
- (jjjj) **METERED ELECTRIC VEHICLE FUELING SUPPLY EQUIPMENT (EV-FSE)** means electric vehicle charging equipment that is powered through a dedicated electric utility-owned meter, where such meter does not supply power to any equipment not used to charge vehicles.
- (kkkk) **MOTOR VEHICLE** has the same meaning as defined in RCW 46.04.320.
- (llll) **MULTI-FUEL VEHICLE** means a vehicle that uses two or more distinct fuels for its operation. A multi-fuel 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.
- (mmmm) **MULTI-FAMILY RESIDENCE** means a structure or facility established primarily to provide housing that provides two or more living units, and where

the individual parking spaces that an electric vehicle FSE serves, and the FSE itself, are not deeded to or owned by a single resident.

- (nnnn) **NATURAL GAS** means a mixture of gaseous hydrocarbons and other compounds, with at least 80 percent methane (by volume), and typically sold or distributed by utilities.
- (oooo) **OCEAN-GOING VESSEL** means a commercial, government, or military vessel meeting any one of the following criteria:
- (1) A vessel greater than or equal to 400 feet in length overall (LOA) as defined in 50 Code of Federal Regulations (CFR) § 679.2, as adopted June 19, 1996;
 - (2) A vessel greater than or equal to 10,000 gross tons (GT ITC) pursuant to the convention measurement (international system) as defined in 46 CFR § 69.51-.61, as adopted September 12, 1989;
 - (3) A vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (pppp) **ON-ROAD** means a vehicle that is designed to be driven on public highways and roadways and that is registered or is capable of being registered by the Washington Department of Licensing (DOL) or DOL's equivalent in another state, province, or country; or the International Registration Plan.
- (qqqq) **OPT-IN FUEL REPORTING ENTITY** means an entity that meets the requirements of Section 5.02 and voluntarily opts in to be a fuel reporting entity and is therefore subject to the requirements set forth in this regulation.
- (rrrr) **OPT-IN PROJECT** means a project approved for generating CFS credits by the Agency pursuant to Section 7.05.
- (ssss) **PLUG-IN HYBRID ELECTRIC VEHICLE (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.
- (tttt) **PRODUCER** means, with respect to any fuel, the entity that made or prepared the fuel.
- (uuuu) **PRODUCT TRANSFER DOCUMENT (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, agreements, meter tickets, rail inventory sheets, Renewable Fuels Standard (RFS) product transfer documents, etc.
- (vvvv) **PROJECT OPERATOR** means an entity that registers an opt-in project in the Alternative Fuel Portal and has it approved for generating CFS credits.

- (wwwww) **PROPANE** means a heavy flammable gaseous alkane C_3H_8 found in crude petroleum and natural gas and used especially as a transportation fuel. Also known as liquefied petroleum gas.
- (xxxxx) **PROVISIONAL FUEL PATHWAY** means a Tier 1 or Tier 2 fuel pathway for a fuel production facility that has been in full commercial production for at least 90 days but less than 24 months, per Section 6.01(d)(5).
- (yyyyy) **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 non-bulk transfer. Also called “at the rack”.
- (zzzzz) **REASONABLE ASSURANCE** means a high degree of confidence that submitted data and statements are valid.
- (aaaaa) **REGISTERED ENTITY** means an entity that has registered in CFS Online.
- (bbbbb) **RENEWABLE ENERGY CERTIFICATES (RECs)** are a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.
- (cccc) **REGULATED ENTITY** means an entity subject to any requirement pursuant to this regulation, including fuel reporting entities, credit generators and aggregators.
- (dddd) **RENEWABLE FUEL STANDARD** means the program administered by the United States Environmental Protection Agency under 40 CFR Part 80: Regulation of Fuels and Fuel Additives, Subparts K and M.
- (eeee) **RENEWABLE DIESEL** and **RENEWABLE HYDROCARBON DIESEL** mean a diesel fuel substitute produced from nonpetroleum renewable sources, including vegetable oils and animal fats, that meets the registration requirements for fuels and fuel additives established by the federal environmental protection agency in 40 C.F.R. Part 79 (2008) and conforms to the specifications of ASTM D975.
- (ffff) **RENEWABLE HYDROGEN** means hydrogen derived from (1) electrolysis of water or aqueous solutions using renewable electricity; (2) catalytic cracking or steam methane reforming of biomethane; or (3) thermochemical conversion of biomass, including the organic portion of municipal solid waste (MSW).
- (gggg) **RENEWABLE PROPANE** means liquefied petroleum gas (LPG or propane) that is produced from non-petroleum renewable resources.
- (hhhh) **REPORTING TOOL** and **CREDIT BANK AND TRANSFER SYSTEM (RT-CBTS)** means the component of CFS Online that is designed to support fuel transaction reporting, compliance demonstration, credit generation, banking, and transfers.

- (iiii) **SHORE POWER** means an off-vessel electric energy source that cannot be connected or coupled to the vessel in any manner while the vessel is underway.
- (jjjj) **SINGLE-FAMILY RESIDENCE** means a structure maintained and used as a single dwelling unit. Notwithstanding that a dwelling unit shares one or more walls with another dwelling unit, it shall be deemed a single-family residence if it has direct access to a street and shares neither heating facilities nor hot water equipment, nor any other essential facility or service, with any other dwelling unit (RCW 59.18.030). This definition includes duplexes.
- (kkkkk) **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 feedstock. 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.
- (llll) **SPECIFIED SOURCE FEEDSTOCKS** means feedstocks that require the chain of custody evidence to be eligible for a reduced CI associated with the use of a waste, residue, by-product or similar material.
- (mmmmm) **SUBSTITUTE PATHWAY** means a liquid fuel, other than gasoline or diesel, suitable for use as engine fuel.
- (nnnnn) **TEMPORARY FUEL PATHWAY** means a fuel pathway for a fuel purchased with an indeterminate carbon intensity per Section 6.01(d)(7). Such pathways may be used for up to two calendar quarters, subject to approval by the Agency. “Tier 1 Simplified CI Calculator” means a calculator available on CFS Online that provides automated calculations using factors from WA-GREET 3.0 for most first-generation fuels that are commonly produced.
- (ooooo) **TOTAL OBLIGATED AMOUNT (TOA)** means the quantity of fuel for which the fuel reporting entity is the eligible credit or deficit generator. The CFS Online calculates the TOA for each fuel pathway code. TOA is calculated as the difference between the fuel reported using transaction types that increase the net quantity of fuel that generates credits or deficits in CFS Online and the fuel reported using transaction types that decrease the net quantity of fuel that generates credits or deficits in CFS Online.
- (ppppp) **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 CFS Online and fuel reported using transaction type that decrease the net fuel quantity reported in CFS Online.
- (qqqqq) **TRANSACTION DATE** means the title transfer date as shown on the Product Transfer Document.

- (rrrrr) **TRANSACTION QUANTITY** means the amount of fuel reported in a transaction. A Transaction Quantity must be reported in units in CFS Online.
- (sssss) **TRANSACTION TYPE** means the nature of a fuel-based transaction as defined below:
- (1) **eCHE FUELING** means providing fuel to electric cargo handling equipment.
 - (2) **eHV FUELING** means providing shore power to a harbor vessel at-berth.
 - (3) **eOGV FUELING** means providing shore power to an ocean-going vessel at-berth.
 - (4) **eTRU FUELING** means providing fuel to electric transport refrigeration units.
 - (5) **EV CHARGING – UTILITY NAME** means providing electricity to recharge EVs using the utility specific fuel pathway code for a given year.
 - (6) **EXPORT** means any fuel reported in CFS Online that is subsequently delivered outside of the Agency’s jurisdiction and is not used for transportation in the Agency’s jurisdiction.
 - (7) **FIXED GUIDEWAY ELECTRICITY FUELING** means fueling light rail, heavy rail, cable car, street car, and trolley bus, or exclusive right-of-way bus operations with electricity.
 - (8) **FORKLIFT ELECTRICITY FUELING** means providing fuel to electric forklifts.
 - (9) **FORKLIFT HYDROGEN FUELING** means providing fuel to hydrogen forklifts.
 - (10) **FUEL CELL VEHICLE (FCV) FUELING** means the dispensing of hydrogen at a fueling station designed for fueling hydrogen fuel cell electric vehicles.
 - (11) **GAIN OF INVENTORY** means the fuel entered the Agency jurisdiction’s fuel pool due to a volume gain.
 - (12) **IMPORT** means the transportation fuel was produced outside of the Agency’s jurisdiction and later brought by any entity other than its producer into the Agency’s jurisdiction for use in transportation.
 - (13) **LOSS OF INVENTORY** means the fuel entered the Agency jurisdiction’s fuel pool but was not used due to volume loss.
 - (14) **NGV FUELING** means the dispensing of natural gas at a fueling station designed for fueling natural gas vehicles.
 - (15) **NOT USED FOR TRANSPORTATION** means a transportation fuel was reported with compliance obligation under the CFS but was later not used

for transportation purposes in the Agency’s jurisdiction or otherwise determined to be exempt.

- (16) **PRODUCTION FOR IMPORT** means the transportation fuel was produced outside of the Agency’s jurisdiction and imported into the Agency’s jurisdiction for use in transportation.
- (17) **PROPANE FUELING** means the dispensing of propane at a fueling station designed for fueling propane vehicles.
- (18) **PURCHASED WITH OBLIGATION** means the transportation fuel was purchased from a separate fuel reporting entity with the obligation to claim credits or deficits in CFS Online.
- (19) **PURCHASED WITHOUT OBLIGATION** means the transportation fuel was purchased from a separate fuel reporting entity without obligation to claim credits or deficits in CFS Online.
- (20) **SOLD WITH OBLIGATION** means the transportation fuel was sold by a fuel reporting entity with the obligation to claim credits or deficits in CFS Online.
- (21) **SOLD WITHOUT OBLIGATION** means the transportation fuel was sold by a fuel reporting entity without obligation to claim credits or deficits in CFS Online.
- (ttttt) **TRANSPORTATION FUEL** means any fuel used or intended for use as a motor vehicle fuel or for transportation purposes in a non-vehicular source.
- (uuuuu) **USED COOKING OIL (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 Agency to confirm that it is “unprocessed UCO.”
- (vvvvv) **WA-GREET 3.0** means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) model developed by ICF, based on CA-GREET 3.0 with modifications to adapt for Washington State.

SECTION 2.02 Acronyms for Purposes of the CFS

- (a) **ASTM** means ASTM International (formerly the American Society for Testing and Materials).
- (b) **AFP** means Alternative Fuel Portal.
- (c) **BEV** means battery electric vehicles.
- (d) **CARB** means the California Air Resources Board.
- (e) **CCM** means Credit Clearance Market.

- (f) **CETA** means the Washington Clean Energy Transformation Act, also known as Engrossed Second Substitute Senate Bill 5116, 2019.
- (g) **CFR** means Code of Federal Regulations.
- (h) **CFS** means Clean Fuel Standard.
- (i) **CI** means carbon intensity.
- (j) **CNG** means compressed natural gas.
- (k) **CO₂e** means carbon dioxide equivalent.
- (l) **DOL** means the Washington State Department of Licensing.
- (m) **eCHE** means Electric Cargo Handling Equipment.
- (n) **EER** means energy economy ratio.
- (o) **eHV** means electric power for Harbor Vessel.
- (p) **eOGV** means Electric Power for Ocean-going Vessel.
- (q) **eTRU** means electric transport refrigeration unit.
- (r) **EV** means electric vehicle.
- (s) **FCV** means fuel cell vehicle.
- (t) **FEIN** means Federal Employer Identification Number.
- (u) **FPC** means fuel pathway code.
- (v) **FSE** means fueling supply equipment.
- (w) **gCO₂e/MJ** means grams of carbon dioxide equivalent per megajoule.
- (x) **GVWR** means gross vehicle weight rating.
- (y) **H₂** means hydrogen.
- (z) **HDV** means heavy-duty vehicles.
- (aa) **HDV-CIE** means a heavy-duty vehicle compression-ignition engine.
- (bb) **HDV-SIE** means a heavy-duty vehicle spark-ignition engine.
- (cc) **HHV** means higher heating value.
- (dd) **ICEV** means internal combustion engine vehicle.
- (ee) **ILUC** means indirect land use change.
- (ff) **kWh** means kilowatt hours.
- (gg) **LDV** means light-duty vehicles.
- (hh) **L-CNG** means liquefied compressed natural gas.
- (ii) **LNG** means liquefied natural gas.
- (jj) **LPG** means liquefied petroleum gas.

- (kk) **MCON** means marketable crude oil name.
- (ll) **MDV** means medium-duty vehicles.
- (mm) **MJ** means megajoules.
- (nn) **MT** means metric tons of carbon dioxide equivalent.
- (oo) **NG** means natural gas.
- (pp) **NGV** means a natural gas vehicle.
- (qq) **ODEQ** means the Oregon Department of Environmental Quality.
- (rr) **OEM** means original equipment manufacturer.
- (ss) **PHEV** means plug-in hybrid vehicles.
- (tt) **REC** means Renewable Energy Certificate.
- (uu) **RFS** means the Renewable Fuel Standard.
- (vv) **RNG** means renewable natural gas or biomethane.
- (ww) **RT-CBTS** means Reporting Tool and Credit Bank and Transfer System.
- (xx) **SMR** means steam methane reformation.
- (yy) **UCO** means used cooking oil.
- (zz) **U.S. EPA** means the United States Environmental Protection Agency.

Article 3: Carbon Intensity Reduction Benchmarks and Compliance Schedules

SECTION 3.01 Transportation Fuel Pool Reduction Benchmarks

For the purpose of reducing GHG emissions and preventing air pollution, the full fuel-cycle carbon intensity of the transportation fuel pool used in the Agency’s jurisdiction will be reduced by 25 percent below 2016 levels by 2030. To achieve this reduction, annual carbon intensity reduction benchmarks and compliance schedules required for gasoline, diesel, and fuels used as their substitutes, as well as reduction benchmarks for Alternative Jet Fuel, are as follows:

(a) Reduction Benchmarks for Gasoline and Fuels used as a Substitute for Gasoline.

Table 1. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 for Gasoline and Fuels Used as a Substitute for Gasoline

Year	Average Carbon Intensity (gCO₂e/MJ)	Percent Reduction
2021	100.73	Reporting Only
2022	99.47	1.25
2023	98.21	2.5
2024	96.95	3.75
2025	94.43	6.25
2026	91.92	8.75
2027	88.14	12.5
2028	84.36	16.25
2029	80.58	20
2030 and beyond	75.55	25

(b) Reduction Benchmarks for Diesel Fuel and Fuels used as a Substitute for Diesel Fuel.

Table 2. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 for Diesel Fuel and Fuels Used as a Substitute for Diesel Fuel

Year	Average Carbon Intensity (gCO₂e/MJ)	Percent Reduction
2021	99.76	Reporting Only
2022	98.51	1.25
2023	97.27	2.5
2024	96.02	3.75
2025	93.53	6.25
2026	91.03	8.75
2027	87.29	12.5
2028	83.55	16.25
2029	79.81	20
2030 and beyond	74.82	25

(c) Reduction Benchmarks for Alternative Jet Fuel

Table 3. CFS Carbon Intensity Reduction Benchmarks and Compliance Schedule for 2021 to 2030 and beyond for Alternative Jet Fuel

Year	Average Carbon Intensity (gCO₂e/MJ)
2021	Reporting Only
2022	90.28
2023	90.28
2024	90.28
2025	90.28
2026	90.28
2027	87.47
2028	83.72
2029	79.97
2030 and beyond	74.97

(d) Carbon Intensity Reduction Benchmarks for an Alternative Fuel Other Than a Biomass-Based Diesel Fuel Intended for Use in a Vehicle.

- (1) The Agency will use the reduction benchmarks for gasoline set forth in Section 3.01(a) for credit and deficit calculations for any alternative fuel, other than biomass-based diesel fuel, if the alternative fuel is used or intended to be used in any single-fuel light- or medium-duty vehicle.
 - (2) The Agency will use the reduction benchmarks for diesel fuel set forth in Section 3.01(b) for credit and deficit calculations for any alternative fuel, other than biomass-based diesel fuel, that is used or intended to be used in any single-fuel application not identified in Section 3.01(d)(1).
- (e) Carbon Intensity Reduction Benchmarks for Biomass-Based Diesel Fuel. The reduction benchmark for diesel fuel, set forth in Section 3.01(b) applies to biomass-based diesel fuel used or intended to be used in any:
- (1) light-, medium-, or heavy-duty vehicle;
 - (2) off-road transportation application;
 - (3) off-road equipment application;
 - (4) intrastate locomotive or commercial harbor craft application; or
 - (5) non-stationary source application not otherwise specified in Sections 3.01(e)(1) through (4).
- (f) Carbon Intensity Reduction Benchmarks for Transportation Fuels Intended for Use in Multi-Fuel Vehicles.
- (1) The Agency's credit and deficit calculations involving alternative fuel provided for use in a multi-fueled vehicle use:
 - (A) The reduction benchmarks for gasoline set forth in Section 3.01(a) if one of the fuels used in the multi-fuel vehicle is gasoline; or
 - (B) The reduction benchmarks for diesel fuel set forth in Section 3.01(b) if one of the fuels used in the multi-fuel vehicle is diesel fuel.

Article 4: Applicable and Opt-In Fuels and Exemptions

SECTION 4.01 Applicability of a Clean Fuel Standard for Transportation Fuels

Except as provided in Section 4.04, the CFS applies to any transportation fuel, as defined in Section 2.01, that is sold, supplied, or offered for sale in the Agency's jurisdiction. The CFS also applies to any fuel reporting entity, as defined in Section 2.01, that is responsible for reporting a transportation fuel in a compliance year.

SECTION 4.02 Applicable Transportation Fuels

The transportation fuels to which the CFS applies include:

- (a) Gasoline used as a transportation fuel;
- (b) Diesel fuel used as a transportation fuel;
- (c) Ethanol used as a transportation fuel;
- (d) Biodiesel used as a transportation fuel;
- (e) Renewable hydrocarbon diesel used as a transportation fuel;
- (f) Fossil compressed natural gas ("Fossil CNG"), fossil liquefied natural gas ("Fossil LNG"), or fossil liquefied compressed natural gas ("Fossil L CNG) used as a transportation fuel;
- (g) Liquefied petroleum gas used as a transportation fuel;
- (h) Any blend of the above fuels; and
- (i) Any other liquid or non-liquid fuel not listed in section 4.02 used as a transportation fuel.

SECTION 4.03 Opt-In Transportation Fuels

Each of the following opt-in fuels is presumed to have a full fuel life cycle carbon intensity that meets the compliance schedules set forth in Section 3.01. A fuel provider for an alternative fuel listed below may generate CFS credits for that fuel only by electing to opt into the CFS as an opt-in fuel reporting entity pursuant to Section 5.02 and meeting the requirements of this regulation:

- (a) Electricity used as a transportation fuel;
- (b) Bio-CNG used as a transportation fuel;
- (c) Bio-LNG used as a transportation fuel;
- (d) Hydrogen used as a transportation fuel;
- (e) Alternative Jet Fuel used as a transportation fuel; and
- (f) Renewable Propane used as a transportation fuel.

SECTION 4.04 Exemptions for Specific Fuel Applications

The CFS does not apply to any transportation fuel used in the following applications:

- (a) Inter-state locomotives;
- (b) Ocean-going vessels, as defined in Section 2.01;
- (c) Aircraft;
- (d) Military tactical vehicles and tactical support equipment;
- (e) Small volume fuel producers. A transportation fuel supplied for use in the Agency's jurisdiction if the producer documents that:
 - (1) The producer has an annual production volume of less than 10,000 gallons of liquid fuel per year; or
 - (2) The producer uses the entire volume of fuel produced in motor vehicles used by the producer directly and has an annual production volume of less than 50,000 gallons of liquid fuel; or
 - (3) The producer is a research, development or demonstration facility.
- (f) Fuels used in small volumes. A single type of transportation fuel supplied for use in the Agency's region if the producer or importer documents that all providers supply an aggregate volume of less than 360,000 gallons of liquid fuel per year.

Article 5: Regulated and Opt-in Entities

SECTION 5.01 Fuel Reporting Entities

The purpose of this section is to identify the fuel reporting entities and the credit or deficit generator for each type of transportation fuel. The first fuel reporting entity is responsible for initiating reporting within CFS Online for a given quantity of fuel and, by default, also holds the status as first credit or deficit generator for the reported fuel quantity. The fuel reporting entities identified in this section are subject to the reporting requirements pursuant to Sections 8.01 through 8.04 and to any other requirement applicable to a fuel reporting entity and credit or deficit generator under this section.

- (a) For Liquid Fuels. Liquid fuels refer to fossil fuels (including gasoline, diesel, and conventional jet fuel), liquid alternative fuels (including ethanol, biomass-based diesel, and alternative jet fuels), and blends of liquid alternative and fossil fuels.
- (1) Designation of First Fuel Reporting Entities for Liquid Fuels. The first fuel reporting entity for liquid fuels is the producer or importer of the liquid fuel. For liquid fuels that are a blend of liquid alternative fuel components and a fossil fuel, the first fuel reporting entity is the following:
- (A) With respect to the alternative fuel component, the producer or importer of the alternative fuel component.
- (B) With respect to the fossil fuel component, the producer or importer of the fossil fuel component.
- (C) Specifics for Alternative Jet Fuel. For an alternative jet fuel or the alternative fuel portion of a blend with conventional jet fuel, the first fuel reporting entity is the producer or importer of the alternative jet fuel, which is delivered to a storage facility where fuel is stored before it is uploaded to an aircraft in the Agency's jurisdiction. Conventional jet fuel, including the conventional jet fuel portion of a blend, is not subject to the CFS and does not need to be reported.
- (2) In the Case of Transfer of Fuel Ownership. An entity transferring ownership of fuel is the "transferor" and an entity acquiring ownership of fuel is the "recipient." An entity can retain its status as a credit or deficit generator for a given amount of liquid fuel, while transferring the ownership of the fuel, if the conditions set forth in Sections 5.01(a)(2)(A) and (B) are met by the time ownership of fuel is transferred, and if the two entities indicate by written agreement that the recipient accepts all CFS responsibilities of a fuel reporting entity and the transferor retains the responsibilities as a fuel reporting entity and credit or deficit generator. An entity can voluntarily transfer its status as a credit or deficit generator for a given amount of liquid fuel, with the ownership of the fuel, if the conditions set forth in Sections 5.01(a)(2)(A) through (D) are met by the time ownership of fuel is transferred, and if the two entities indicate by written agreement that the recipient accepts all CFS responsibilities of a fuel reporting entity and credit or deficit generator. If such a transfer occurs, the recipient also becomes the fuel reporting entity for the fuel

while the transferor is still subject to reporting requirements pursuant to Section 8.02 and to any other requirement applicable to a fuel reporting entity under this section.

- (A) The transferor must provide the recipient a product transfer document that prominently states the information specified in Section 8.04(b).
 - (B) An entity acquiring ownership of fuel below the rack is not required to report the fuel transaction in CFS Online unless it is a fuel exporter pursuant to Section 5.01(a)(4).
 - (C) In the case of a deficit generating fuel, the transferor and recipient of deficit generating fuels must meet the requirements specified in Sections 7.01 through 7.07.
 - (D) The credit or deficit generator status cannot be passed to a downstream entity acquiring ownership of liquid fuel below the rack.
- (3) **Transfer Period.** For all liquid fuels, the 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. This means that, for example, if an entity receives title to a fuel along with credit or deficit generator status in the first calendar quarter, the status as credit or deficit generator for that amount of fuel can be transferred to another entity no later than the end of the third calendar quarter. After this period is over, the credit and deficit generator status for that amount of fuel cannot be transferred.
- (4) **Designation of Fuel Exporter.** Entities responsible for reporting exports of fuel that has been previously reported in CFS Online are identified in Section 5.01(a)(4)(A) through (C):
- (A) When the fuel is sold or delivered above the rack for export, the entity holding title to the fuel as it crosses the Agency jurisdiction's border on its way toward the first point of sale/delivery is responsible for reporting the export in CFS Online.
 - (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 the export in CFS Online.
 - (C) When the fuel is diverted out of the Agency's jurisdiction below the rack, the entity holding title to the fuel, as it crosses the Agency jurisdiction's border, is responsible for reporting the export in CFS Online.
- (b) **For Gaseous Fuels.** Gaseous fuels refer to natural gas fuels (including CNG, LNG and L-CNG), propane, and hydrogen.
- (1) **Designation of First Fuel Reporting Entities for Gaseous Fuels.** The first fuel reporting entity for different gaseous fuels is identified in Sections 5.01(b)(1)(A) through (D). For gaseous fuels, Section 5.01(b)(2) provides entities the ability to

contractually designate another entity as the first fuel reporting entity for a given amount of gaseous fuel.

- (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. For bio-LNG, 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, and L-CNG and Propane. 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.
- (2) Sections 5.01(b)(1)(A) through (D) notwithstanding, an entity may elect not to be the first fuel reporting entity for a given gaseous fuel, provided another entity has contractually agreed to be the first fuel reporting entity for the fuel on its behalf. In such cases the two entities must agree in writing that:
- (A) The original first fuel reporting entity per Sections 5.01(b)(1)(A) through (D) will not generate credits or deficits in the CFS and will instead provide the amount of fuel dispensed, and other required information pursuant to Sections 5.01, 5.02, and 8.02 to the contractually designated entity for the purpose of CFS reporting and credit or deficit generation.
 - (B) The contractually designated entity accepts all responsibilities and obligations of compliance with the CFS as the first fuel reporting entity and as a credit or deficit generator, as applicable.

SECTION 5.02 Opt-in Entities

- (a) Eligibility. An entity that meets one or more of the following criteria, and complies with registration and reporting criteria in Sections 8.01 through 8.04, may opt into the CFS program, thereby becoming a credit generator.
- (1) Opt-in Fuel Reporting Entity. A qualified fuel reporting entity that provides a fuel specified in Section 4.03 and meets the requirements of this section wherever applicable;
 - (2) Project Operators. An entity that has a project approved for crediting or is applying for approval by the Agency under Section 7.05 will apply to opt into the CFS program as a credit generator.

- (b) **Opting in Procedure.** The procedure for opting into CFS for such an entity is set forth as follows:
- (1) **Opting into the CFS program** becomes effective when the opt-in entity establishes an account in CFS Online, pursuant to Section 8.01, with the exception of the effective date for electric utilities per Section 5.02(e)(1)(B). 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.
 - (2) **Establishing an account in CFS Online** under Section 5.02(b)(1) means that the entity understands the requirements of the CFS and has agreed to be subject to all the requirements and provisions of the CFS.
- (c) **Opting Out Procedure.** An opt-in entity may opt out of the CFS program.
- (1) **To opt out**, an entity must complete all actions specified in Sections 5.02(c)(1)(A) through (C):
 - (A) **Provide to the Agency** a notice of intent to opt out and a proposed effective opt-out date 90 days prior to the proposed opt-out date.
 - (B) **Submit in the CFS Online** any outstanding quarterly fuel transactions or project reports up to the quarter in which the effective opt-out date falls and a final annual compliance report (covering the calendar year through the opt-out date); and
 - (C) **Identify in the notice of intent** of any actions to be taken to eliminate any remaining deficits by the effective opt-out date.
 - (2) **Opt-Out Approval.** The Agency will notify the opt-in entity of the final “approval” status of the opt-out request. Any credits that remain in the opt-in entity’s account at the time of the effective opt-out date will be forfeited and placed in the buffer account, and the opt-in entity’s account in CFS Online will be closed.
- (d) **Hydrogen.** The credit generator for hydrogen is the entity that owns the fueling supply equipment (“hydrogen station owner”) through which hydrogen fuel is dispensed to motor vehicles for transportation use, except for hydrogen used to power forklifts.
- (1) **For hydrogen used to power forklifts**, the forklift fleet owner may generate the credits. If the fleet owner chooses to not opt-in, the fleet operator may opt-in as the credit generator.
- (e) **For Electricity Used as a Transportation Fuel.**
- (1) **Residential EV Charging.** For electricity used to charge an electric vehicle at single-family and multi-family residences, with the exception of metered EV FSEs at multi-family residences that are registered in CFS Online, electric utilities (utility hereafter) can opt-in as the credit generator. In order to generate credits for the following year, a utility must register in CFS Online by October 1 of the

current year as a credit generator. Sections 5.02(e)(1)(A) through (C) determine the requirements of how credits are utilized by the utility.

- (A) Credit revenue must be utilized to achieve additional benefits beyond those required by any other statute, regulation, or legal requirement.
 - (B) Scope of Work and Annual Compliance Report. The utility must provide a detailed scope of work by October 1 of the year prior to credit generation for the portion of credits detailed in Section 5.02(e)(1)(C)(vi). The Agency will consider input by a Community Advisory Group prior to making a final decision on whether to approve the scope of work. The final decision on the proposed scope of work will be issued in accordance with Section 9.01 procedures. The Utility must also include in its annual compliance report a description, per Agency specifications, of how credit revenue was utilized for the calendar year per Section 5.02(e)(1)(C).
 - (C) The utility must utilize credit revenue through the mechanisms in Sections 5.02(e)(1)(C)(i) through (vi) with a focus on benefiting current or future electric vehicle drivers and highly impacted communities, maximizing co-benefits, and transitioning utility customers to electric transportation options. The utility has the option to achieve these requirements through cooperative agreements with other utilities, nonprofit organizations, or the Equity Credit Aggregator.
 - (i) Increase and improve electric transportation charging infrastructure, including increases in grid capacity and related technology and infrastructure necessary for this purpose; or
 - (ii) Implement distribution planning and demand side management to support transportation electrification; or
 - (iii) Increase awareness of the basics and benefits of electric transportation through outreach, education, and marketing campaigns; or
 - (iv) Provide time of sale or time of lease rebates for used and new battery plug-in electric vehicles; or
 - (v) Any combination of Sections (i) through (iv).
 - (vi) At least 35 percent of credit revenue must be spent by the utility on any combination of Sections (i) through (iv) within highly impacted communities in its service area.
 - (D) Community Advisory Group. A Community Advisory Group will consist of representatives appointed by the Agency to represent the needs and interests of highly impacted communities within a utility's service area.
- (2) For non-residential charging. For electricity used to charge an electric vehicle at non-residential locations, such as in public, for a fleet, or at a workplace, Section 5.02(e)(2)(A) determines the entity that is eligible to generate credits.

- (A) The owner of the electric FSE may opt-in and generate the credits. If the electric FSE owner does not opt-in, they may designate another entity to be the credit generator, if the two entities agree in writing that:
 - (i) The electric FSE owner will not generate credits and will instead provide the electricity data to the designated entity for CFS Online reporting.
 - (ii) The designated entity accepts all CFS reporting responsibilities as the fuel reporting entity and credit generator.
- (3) Public Transit. For electricity used to power electric buses or fixed guideway vehicles such as light rail systems, streetcars, and aerial trams, a transit agency may generate the credits based on metered kilowatt hours. The transit agency must have an active registration approved by the Agency under Section 8.01.
 - (A) If the transit agency does not opt-in to generate the credits, then the electric utility that is providing the electricity is eligible to generate the credits.
 - (B) At least 35 percent of credit revenue must be spent by the transit agency on increasing availability of electric transit options within highly impacted communities.
- (4) Electric Forklifts. For electricity used to power forklifts, the forklift fleet owner may generate the credits. If the fleet owner chooses to not opt-in, the fleet operator may opt-in as the credit generator.
- (5) Electric Transportation Refrigeration Units (eTRU). For eTRUs, the terminal operator may generate the credits. If the terminal operator chooses to not opt-in, they may designate another entity to opt-in as the credit generator.
- (6) Electric Cargo Handling Equipment (eCHE). For eCHEs, the terminal operator may generate the credits. If the terminal operator chooses to not opt-in, they may designate another entity to opt-in as the credit generator.
- (7) Electric Power for Ocean Going Vessels (eOGV) and Harbor Vessels (eHV). For eOGVs and eHVs, the owner of the charging infrastructure for shore power may generate the credits. If the owner of the charging infrastructure chooses to not opt-in, they may designate another entity to opt-in as the credit generator.
- (8) Equity Credit Aggregator. The Equity Credit Aggregator serves as the credit generator of electricity credits that have not been claimed under Sections 5.02(e)(1) through (7).
 - (A) To qualify to submit an application to be the Equity Credit Aggregator, an organization must:
 - (i) Be an organization exempt from federal taxation under Section 501(c)(3) of the U.S. Internal Revenue Code;
 - (ii) Have a mission and operations aligned with the purpose of the Clean Fuel Standard.

- (B) An entity that wishes to be the Equity Credit Aggregator must submit an application with the Agency in response to an Agency competitive process. The Equity Advisory Committee will provide input on the selection of the Equity Credit Aggregator and on the annual Scope of Work.
 - (i) An Equity Advisory Committee will consist of representatives appointed by the Agency to represent equity and environmental justice needs and interests of the Agency's jurisdiction.
- (C) The Agency will designate an Equity Credit Aggregator for a term of three years. Upon the expiration of the three-year term, the Agency may hold a new selection process to appoint an Equity Credit Aggregator for future years.

Article 6: Establishing Fuel Pathways

SECTION 6.01 Establishing Carbon Intensity for Gasoline, Diesel, and Substitute Pathways

- (a) Regulated parties, credit generators and aggregators must use the carbon intensities listed in Table 4 for the following fuels:
 - (1) Clear gasoline or the gasoline blendstock of a blended gasoline fuel;
 - (2) Clear diesel or the diesel blendstock of a blended diesel fuel;
 - (3) Fossil CNG;
 - (4) Fossil LNG; and
 - (5) LPG.
- (b) Except as provided in Sections 6.01(a) and (c), regulated entities, credit generators, and aggregators may use a carbon intensity that:
 - (1) CARB has certified for use in the California Low Carbon Fuel Standard program, or that ODEQ has certified in the Oregon Clean Fuels Program, as adjusted for fuel transportation distances and indirect land use change (see Table 5), and that has been reviewed and approved by the Agency as being consistent with WA-GREET 3.0; or
 - (2) Matches the description of a fuel pathway listed in the Carbon Intensity Lookup Table (Table 4). Entities seeking to generate credits under the fuel pathways in the Lookup Table do not need to submit a fuel pathway application.
 - (A) For hydrogen produced using biomethane or renewable power, the producer of the hydrogen must demonstrate to the Agency that the lookup table value is appropriate for its production facility and must submit attestations on an annual basis that the renewable power and biomethane attributes, as applicable, were not claimed in any other program except for the federal RFS.
- (c) WA-GREET 3.0. Carbon intensities for fuels must be calculated using WA-GREET 3.0 or a model approved by the Agency, except as provided in Section 6.01(b). If an entity wishes to use a modified or different life cycle carbon intensity model, the model must be approved by the Agency in advance of an application. The final

decision on the proposed model will be issued in accordance with Section 9.01 procedures.

- (1) Primary alternative fuel pathway classifications utilizing a specified source feedstock. If it is not possible to identify an applicable carbon intensity under either Section 6.01(b) or Table 4 then the regulated entity, credit generator, or aggregator has the option to develop its own fuel pathway and apply for it to be certified under this section. Applicants must maintain chain-of-custody evidence detailed in Section 6.01(c)(2). Fuel pathway applications utilizing specified source feedstocks fall into one of two tiers:
 - (A) Tier 1. Conventionally-produced alternative fuels of a type that has been well-evaluated in the California Low Carbon Fuel Standard. Tier 1 fuels include:
 - (i) Starch, cellulosic, and sugar-based ethanol;
 - (ii) Biodiesel produced from conventional feedstocks (plant oils, corn/sorghum fiber, 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) Fossil 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. All fuels not included in Tier 1 including but not limited to:
 - (i) Cellulosic alcohols;
 - (ii) Biomethane from other sources;
 - (iii) Hydrogen pathways not found in the Lookup Table;
 - (iv) Electricity pathways not found in the Lookup Table;
 - (v) Renewable hydrocarbons other than renewable diesel produced from conventional feedstocks;
 - (vi) Renewable biogenic feedstocks co-processed at a petroleum refinery
 - (vii) Alternative Jet Fuel;
 - (viii) Renewable propane; and
 - (ix) Tier 1 fuels produced using innovative methods, or a process that cannot be accurately modeled using a Tier 1 Simplified CI Calculator.
- (2) Chain-of-custody Evidence. Fuel pathway applicants using specified source feedstocks must maintain either (1) delivery records that show shipments of feedstock type and quantity directly from the point of origin to the fuel production facility, or (2) 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. Chain-of-custody evidence is used to demonstrate proper characterization and accurate quantity. Chain-of-custody evidence must be provided to the Agency upon request. Joint Applicants may assume responsibility for different portions of the chain-of-custody evidence but each such entity must meet the following requirements to be eligible for a pathway that utilizes a specified source feedstock:

- (A) Maintain records of the type and quantity of feedstock obtained from each supplier, including Feedstock transaction records, Feedstock Transfer Documents, weighbridge tickets, bills of lading or other documentation for all incoming and outgoing feedstocks.
- (B) Maintain records used for material balance and energy balance calculations.
- (C) Ensure Agency staff access to audit feedstock suppliers to demonstrate proper accounting of attributes and conformance with certified CI data.

(d) Obtaining a Carbon Intensity.

Fuel producers can apply to obtain a carbon intensity by following the applicable process below:

- (1) Applicants seeking approval to use a carbon intensity that is currently certified by CARB or ODEQ must submit to the Agency in CFS Online:
 - (A) The application package submitted to CARB or ODEQ;
 - (B) The CARB or ODEQ-approved Tier 1 or Tier 2 current GREET calculator, and the WA-GREET 3.0 equivalent with the fuel transportation and distribution cells modified for that fuel's pathway to the Agency's jurisdiction, with a list of all modifications;
 - (C) The CARB or ODEQ pathway summary for the certified fuel pathway;
 - (D) Any other supporting materials relating to the pathway, as requested by the Agency; and
 - (E) If the applicant is seeking to use a provisional pathway certified by CARB or ODEQ, then the applicant must submit to the Agency in CFS Online documentation it provides to CARB or ODEQ, and as required in this section the applicant must provide the Agency within fourteen days:
 - (i) Any additional documentation it has submitted to CARB or ODEQ; and
 - (ii) A notification of any changes to the status of its CARB or ODEQ-certified provisional pathway.
- (2) Applicants seeking to obtain a carbon intensity using either the Tier 1 or Tier 2 calculator must submit to the Agency in CFS Online the following information:
 - (A) Entity name and full mailing address.

- (B) Entity contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website address.
 - (C) Fuel Production 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) U.S. EPA Facility ID for facilities covered by the RFS program.
 - (F) Facility geographical coordinates using latitude/longitude in the WGS 1984 coordinate system (for each facility covered by the application). The coordinates must be in decimal degree format.
 - (G) Facility contact person's contact information including the name, title or position, phone number, mobile phone number, and email address.
 - (H) Facility nameplate production capacity in million gasoline gallon equivalents per year (for each facility covered by the application).
 - (I) Consultant's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website URL.
 - (J) Declaration whether the applicant is applying for a carbon intensity for a Tier 1 or Tier 2 fuel.
- (3) In addition to the items required in this section, applicants seeking to obtain a carbon intensity for a Tier 1 application using a Tier 1 simplified CI calculator must submit to the Agency in CFS Online the following:
- (A) The applicable simplified calculator with all necessary inputs completed, following the instructions in the applicable manual for that calculator;
 - (B) The invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, along with a summary of those invoices and receipts; and
 - (C) The most recent RFS third party engineering report, if one has been conducted for the facility.
- (4) In addition to the items required in Section 6.01(d)(2), applicants seeking to obtain a carbon intensity for a Tier 2 fuel using the full WA-GREET 3.0 model must submit to the Agency in CFS Online the following:
- (A) The invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, and a summary of those invoices and receipts;

- (B) A completed Tier 2 model;
 - (C) Process flow diagrams that depict the complete fuel production process;
 - (D) Applicable air permits issued for the facility;
 - (E) A copy of the RFS third party engineering report, if available;
 - (F) A copy of the RFS fuel producer co-products report; and
 - (G) A life cycle analysis report that describes the fuel pathway and describes in detail the calculation of carbon intensity for the fuel. The report must contain sufficient detail to allow the Agency 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.
- (5) Applicants seeking a provisional carbon intensity. Application requirements for a provisional carbon intensity are the same as for a Tier 1 or Tier 2 pathway application. 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. If the Agency determines that the provisional carbon intensity is higher or lower than the actual operational carbon intensity, per Sections 6.01(d)(5)(B) through (D), the Agency will provide the fuel pathway holder with written notice of its decision in accordance with Section 9.01 procedures.
- (A) The applicant must submit to the Agency in CFS Online operating records covering all periods of full commercial operation in accordance with this section.
 - (B) At any time before the facility reaches a full 24 months of full commercial production, the Agency may revise as appropriate the operational carbon intensity based on the required ongoing submittals or other information it learns.
 - (C) If, after a facility 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, the Agency will replace the certified carbon intensity with the operational carbon intensity in CFS Online and adjust the credit balance accordingly.
 - (D) If, after a facility has been in full commercial production for more than 24 months, the facility's operational carbon intensity is lower than the certified carbon intensity, the Agency may re-certify at the lower carbon intensity. The new carbon intensity will be used from the date of the re-certification forward but will not retroactively generate credits.
- (6) Applicants employing co-processing at a petroleum refinery. Applicants employing co-processing of biogenic feedstocks at a petroleum refinery, that are not seeking approval to use a carbon intensity that is currently certified by CARB or ODEQ, must submit to the Agency in CFS Online all information required under Sections 6.01(d)(2) and (4). If the Agency determines that a modification

is required per Section 6.01(d)(6)(B) or a carbon intensity adjustment is required per Section 6.01(d)(6)(C), the Agency will provide the fuel pathway holder with written notice of its decision in accordance with Section 9.01 procedures.

- (A) For the renewable diesel or renewable gasoline portion of the fuel, the applicant must also submit:
 - (i) The planned proportions of biogenic feedstocks to be processed;
 - (ii) A detailed methodology for the attribution of biogenic feedstocks to the renewable products; and
 - (iii) The corresponding carbon intensities from each biogenic feedstock, as determined by WA-GREET 3.0.
 - (B) The attribution methodology must be approved by the Agency prior to its use and may be modified at the Agency's discretion based on ongoing quarterly reporting of production data at the refinery.
 - (C) The Agency may adjust the carbon intensities applied for under this section as it determines is appropriate.
- (7) Temporary Fuel Pathway Codes for Fuels with Indeterminate Carbon Intensities. A regulated entity or credit generator that has purchased a fuel without a carbon intensity must submit a request to the Agency for permission to use a temporary fuel pathway code found in Table 6.
- (A) The request must:
 - (i) Be submitted within 45 calendar days of 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 certified fuel pathway code.
 - (B) Temporary fuel pathway codes may be used for up to two calendar quarters. If more time is needed to obtain a carbon intensity, the entity that obtained the temporary fuel pathway must submit an additional request to the Agency for an extension of the authorization to use a temporary fuel pathway code.
 - (C) If the Agency grants a request to use a temporary fuel pathway code through issuance of an Administrative Order specified in Section 9.01, credits and deficits may be generated subject to the quarterly reporting provisions in 8.01 and 8.02.
- (8) Approval process to use carbon intensities for fuels other than electricity.
- (A) For applications proposing to use CARB or ODEQ-certified fuel pathways, including provisional pathways, the Agency will:
 - (i) Confirm that the proposed fuel pathway is consistent with WA-GREET 3.0; and

- (ii) Review the materials submitted under this section.
- (B) For applications proposing to use the Tier 1 or Tier 2 calculators, the Agency may approve the application if it can:
 - (i) Replicate the calculator outputs; and
 - (ii) Verify the energy consumption and other inputs.
- (C) If the Agency has approved or denied the application for a carbon intensity, the Agency will notify the applicant of its determination, in accordance with Section 9.01 procedures.
- (D) The Agency may impose conditions in its certification of the carbon intensity. Conditions may include specific limitations, recordkeeping or reporting requirements, adherence to protocols to assure carbon reduction claims, or operational conditions that the Agency determines should apply to assure the ongoing accuracy of the certified carbon intensity. Failure to meet those conditions may result in the carbon intensity certification being revoked.
 - (i) For applicants seeking a provisional pathway:
 - (I) The Agency will specify the conditions used to establish the pathway.
 - (II) The applicant must submit to the Agency in CFS Online copies of receipts for all energy purchases each calendar quarter, per requirements in Sections 8.02(b)(1) and (2) until two full calendar years of commercial production receipts are submitted; and
 - (III) The applicant may generate credits by submitting quarterly transaction reports, per reporting requirements in Sections 8.02(b)(1) and (2).
 - (ii) For applicants employing co-processing at a petroleum refinery:
 - (I) The Agency will specify the conditions regarding the quantities of biogenic feedstocks and the amount of energy and hydrogen used to establish the pathway; and
 - (II) The applicant must submit to the Agency in CFS Online the quantities of biogenic feedstocks and the amount of energy and hydrogen used in each calendar quarter per reporting requirements in Sections 8.02(b)(1) and (2).
 - (iii) For a CARB or ODEQ-certified fuel pathway that the Agency has approved for use in the Agency's jurisdiction, if at any time the pathway's certification is revoked by CARB or ODEQ then the fuel pathway holder must inform the Agency within 7 calendar days of the revocation and provide the Agency with documentation related to that decision. Upon Agency request, the fuel pathway holder must provide to the Agency additional documentation. The Agency may at its discretion revoke its

approval of the pathway's use in the Agency's jurisdiction at any time. If CARB or ODEQ modifies its certification of the pathway then the fuel pathway holder must notify the Agency of the modification not later than 14 days after CARB or ODEQ's modification and must provide to the Agency any accompanying documentation the fuel pathway holder received from CARB or ODEQ. Based on the underlying facts that led to CARB or ODEQ's modification of the pathway's status, the Agency may modify its certification, take no action, or revoke its certification and will provide the fuel pathway holder with written notice of its decision, in accordance with Section 9.01 procedures.

- (E) The producer of any fuel that has received a carbon intensity under Section 6.01 must register with CFS Online.
 - (F) If the Agency determines the application for the carbon intensity has not met the criteria in this section, the Agency will notify the applicant that the application is denied and identify the basis for the denial, in accordance with Section 9.01 procedures.
- (9) Completeness determination process.
- (A) For Tier 1 or Tier 2 applications, the Agency will determine whether the application is complete after receiving a registration application.
 - (B) If the Agency determines the application is complete, the Agency will notify the applicant in writing of the completeness determination, in accordance with Section 9.01 procedures.
 - (C) If the Agency determines the application is incomplete, the Agency will notify the applicant of the deficiencies, in accordance with Section 9.01 procedures.

Table 4. Carbon Intensity Look-Up Table

Fuel	Pathway Code	Pathway Description	Total Life Cycle Carbon Intensity (gCO₂e/MJ)
Gasoline	PSGAS001	Clear gasoline, based on a weighted average of gasoline supplied to the Puget Sound.	101.60
	PSGAS002	Blended gasoline (E10) – 90% clear gasoline & 10% ethanol with a CI (88.9 gCO ₂ e/MJ) from CA LUT for Midwest sorghum.	100.73
Diesel	PSULSD001	Clear diesel, based on a weighted average of clear diesel fuel supplied to the Puget Sound.	99.96
	PSULSD002	Clear diesel blended with current level of biodiesel, 0.5%, with a CI (58.28 gCO ₂ e/MJ) from OR LUT for Midwest soybean biodiesel.	99.76
Compressed Natural Gas	PSCNG001	North American NG delivered via pipeline; compressed in the Puget Sound	79.98
Liquefied Natural Gas	PSLNG001	North American NG delivered via pipeline; liquefied in the Puget Sound using liquefaction with 80% efficiency	86.88
Liquefied Petroleum Gas	PSLPG001	Liquefied petroleum gas	80.88
Electricity	PSELEC100	Solar power produced at or directly connected to the site of the charging station in the Puget Sound.	0
	PSELEC101	Wind power, produced at or directly connected to the site of the charging station in the Puget Sound.	0
Hydrogen	PSHYF	Compressed H ₂ produced in the Puget Sound from central steam methane reformation of North American fossil-based NG	120.68
	PSHYFL	Liquefied H ₂ produced in the Puget Sound from central steam methane reformation of North American fossil-based NG	157.29
	PSHYB	Compressed H ₂ produced in the Puget Sound from central steam methane reformation of biomethane (renewable feedstock) from North American landfills	116.76
	PSHYBL	Liquefied H ₂ produced in the Puget Sound from central steam methane reformation of biomethane (renewable feedstock) from North American landfills	149.70
	PSHYER	Compressed H ₂ produced in the Puget Sound from electrolysis using solely solar- or wind-generated electricity	13.11

Table 5. Indirect Land Use Change Values for Use in CI Determination

Biofuel	iLUC (gCO₂e/MJ)
Corn Ethanol	19.8
Sugarcane Ethanol	11.8
Soy Biomass-Based Diesel	29.1
Canola Biomass-Based Diesel	14.5
Grain Sorghum Ethanol	19.4
Palm Biomass-Based Diesel	71.4

Table 6. Temporary and Indeterminate Fuel Pathway Code Lookup Table

Fuel	Feedstock	Process Energy	Pathway Code	CI (gCO₂e/MJ)
Ethanol	Corn	Grid electricity, natural gas, and/or renewables	PSETH100T	90.00
	Sorghum	Grid electricity, natural gas, and/or renewables	PSETH101T	95.00
	Sugarcane and Molasses	Bagasse and straw only, no grid electricity	PSETH102T	57.09
	Any starch or sugar feedstock	Any	PSETH103T	100.14
	Any Cellulosic Biomass	Grid electricity, natural gas, and/or renewables	PSETH104T	50.00
Biodiesel	Any feedstock derived from animal fats, corn oil, or a waste stream	Grid electricity, natural gas, and/or renewables	PSBIOD200T	47.30
	Any feedstock derived from plant oils except for Palm-derived oils	Grid electricity, natural gas, and/or renewables	PSBIOD201T	65.03
	Any other feedstock	Any	PSBIOD202T	99.96
Renewable Diesel	Any feedstock derived from animal fats, corn oil, or a waste stream	Grid electricity, natural gas, and/or renewables	PSRNWD300T	39.26
	Any feedstock derived from plant oils except for Palm-derived oils	Grid electricity, natural gas, and/or renewables	PSRNWD301T	56.55
	Any other feedstock	Any	PSRNWD302T	99.96
Biomethane CNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	PSCNG500T	70
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	PSCNG501T	50
Biomethane LNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	PSLNG501T	85
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	PSLNG502T	65
Biomethane L-CNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	PSLCNG502T	90

Fuel	Feedstock	Process Energy	Pathway Code	CI (gCO ₂ e/MJ)
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	PSLCNG503T	70
Biomethane CNG, LNG, L-CNG	Dairy Manure	Grid electricity, natural gas, and/or parasitic load	PSLCNG504T	-150
Electricity	Coal, Natural Gas, Hydro-electric Dams, Wind Mills, etc.	Washington	PSELEC600T	150.47
Any Gasoline Substitute Feedstock-Fuel Combination Not Included Above	Any	Any	PSSG800T	101.6
Any Diesel Substitute Feedstock-Fuel Combination Not Included Above	Any	Any	PSSD801T	99.96

SECTION 6.02 Establishing Carbon Intensity for Electricity Pathways

- (a) Utility-specific carbon intensity. The Agency will establish a utility-specific carbon intensity that reflects the average carbon intensity of electricity served in that utility district.
- (1) The carbon intensity will be calculated using the average carbon intensity of electricity served in the utility’s district over each of the most recent three years and determining the average of the three values.
 - (2) Once the Agency has calculated a utility-specific carbon intensity, the Agency will propose the carbon intensity to the utility. If the utility contests the Agency’s carbon intensity, it must contest the determination in writing within thirty calendar days of receiving the Agency’s proposal. The utility must provide a detailed explanation of why it believes the Agency’s carbon intensity determination is not accurate. The Agency will notify the utility in writing of its determination, in accordance with Section 9.01 procedures.
- (b) For on-site generation of electricity using renewable generation systems such as solar or wind:
- (1) Applicants must document that the renewable generation system is directly supplying electricity used for transportation;
 - (2) The fuel pathway codes listed in Table 4 for solar-generated or wind-generated electricity can only be used for the portion of the electricity used for transportation that is generated by that dedicated renewable energy system;

- (3) Any grid electricity dispensed for transportation must be reported separately using the utility-specific fuel pathway code; and
- (4) Renewable Energy Certificates (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 CFS Online from that facility must be retired in the REC tracking system. Evidence of REC retirements is required.

Article 7: Credits and Deficits

SECTION 7.01 Credit and Deficit Basics

(a) Carbon intensities

- (1) When calculating credits or deficits, regulated entities, credit generators, and aggregators must use a carbon intensity certified by the Agency under Section 6.01 or 6.02.
- (2) If a regulated entity, credit generator, or aggregator has a provisional carbon intensity certified under Section 6.01(d)(5), the regulated entity, credit generator, or aggregator must use the Agency-certified provisional carbon intensity.
- (3) If a regulated entity, credit generator, or aggregator has a certified temporary carbon intensity under Section 6.01(d)(7), the regulated entity, credit generator, or aggregator must use the temporary carbon intensity for the period which it has been certified, unless the Agency has subsequently certified a final carbon intensity for that fuel.
- (4) If a registered entity purchases a blended finished fuel for which the seller does not provide carbon intensity information, and that fuel is exported, not used for transportation, or used in an exempt fuel use, the registered entity must use the applicable substitute fuel pathway code in Table 4. If the finished fuel blend is not listed in Table 4, the registered entity must report the volume using the applicable lookup table fuel pathway code for the fossil fuel component in Table 4 and the applicable substitute fuel pathway code for the biofuel component(s) in Table 6.

(b) Fuel quantities. Regulated entities, credit generators, and aggregators must express fuel quantities in the established unit for each fuel (Table 7).

(c) Compliance period. The annual compliance period is January 1 through December 31 of each year.

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

(e) Deficit and credit generation.

- (1) Credit generation. A credit is generated on the basis of fuel sold, supplied, or offered for sale in the Agency's jurisdiction, as applicable, if the carbon intensity of the fuel certified for use under Sections 6.01 and 6.02 is less than the carbon intensity reduction benchmarks identified in Section 3.01 for gasoline and

gasoline substitutes in Table 1, for diesel fuel and diesel substitutes in Table 2, or for alternative jet fuel in Table 3. Credits are generated when a valid and accurate quarterly report is submitted in CFS Online.

- (2) Deficit generation. A deficit is generated on the basis of fuel sold, supplied, or offered for sale in the Agency's jurisdiction, as applicable, if the carbon intensity of the fuel certified for use under Sections 6.01 or 6.02 is greater than the carbon intensity reduction benchmarks identified in Section 3.01 for gasoline and gasoline substitutes in Table 1 or for diesel fuel and diesel substitutes in Table 2. Deficits are generated when a valid and accurate quarterly report is submitted in CFS Online.
 - (3) 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.
- (f) Mandatory retirement of credits. When filing the annual report at the end of a compliance period, a registered entity that possesses credits must retire a sufficient number of credits such that:
- (1) Enough credits are retired to completely meet the registered entity's compliance obligation for that compliance period, or
 - (2) If the total number of the registered entity's credits is less than the total number of the regulated entity's deficits, the registered entity must retire all of its credits.
- (g) Buffer Account. The Agency may create a Buffer Account under the control of the Agency. In this account, the Agency may place:
- (1) An equivalent number of credits for any CFS credits that could have been claimed (or deficits that could have been eliminated) if reported on time, if not for the prohibition on retroactive credit claims in Section 7.01(h).
 - (2) An equivalent number of credits representing the difference between the reported CI and the verified operational CI from annual Fuel Pathway Reports.
 - (3) All net credits remaining in any deactivated RT-CBTS accounts.
- (h) No Retroactive Credit Claim. Unless expressly provided elsewhere in this subarticle, no regulated entity may generate or claim credits or eliminate deficits retroactively for a period for which the reporting deadline has passed.

SECTION 7.02 Transacting Credits

- (a) General.
- (1) Credits are a regulatory instrument pursuant to the CFS and do not constitute personal property, instruments, securities or any other form of property.
 - (2) For purposes of the CFS, regulated entities, credit generators, and aggregators may:

- (A) Retain credits without expiration within CFS Online in compliance with the Agency; and
- (B) Acquire or transfer credits from or to other regulated entities, credit generators, and aggregators that are registered under Section 8.01.
- (3) For purposes of the CFS, regulated entities, credit generators, and aggregators may not:
 - (A) Borrow or use anticipated credits from future projected or planned carbon intensity reductions.
- (b) Credit transfers between registered entities.
 - (1) “Credit seller,” as used in this regulation, means a registered entity that sells or transfers credits.
 - (2) “Credit buyer,” as used in this regulation, means a registered entity that acquires credits.
 - (3) A credit seller and a credit buyer may enter into an agreement to transfer credits.
 - (4) A credit seller may only transfer credits up to the number of credits in the credit seller’s CFS Online account on the date of the transfer.
- (c) Credit seller requirements. When entities wish to transfer credits, the credit seller must initiate an online “Credit Transfer Form” provided in CFS Online and must include the following:
 - (1) The date on which the credit buyer and credit seller reached their agreement;
 - (2) The names and FEINs of the credit seller and credit buyer;
 - (3) The first and last names and contact information of the persons who performed the transaction on behalf of the credit seller and credit buyer;
 - (4) The number of credits proposed to be transferred; and
 - (5) The price or equivalent value of the consideration (in US dollars) to be paid per credit proposed for transfer, excluding any fees.
- (d) Credit buyer requirements. Within 10 days of receiving the “Credit Transfer Form” from the credit seller in CFS Online, the credit buyer must confirm the accuracy of the information therein and may accept the credit transfer by signing and dating the form using CFS Online.
- (e) If the credit seller and credit buyer have not fulfilled the requirements of Sections 7.02(c) and (d) within 20 days of the seller initiating the credit transfer, the transaction is void. If a transaction has been voided, the credit buyer and credit seller may initiate a new credit transfer.
- (f) Aggregator. An aggregator may only act as a credit seller or credit buyer if that aggregator:
 - (1) Has an approved and active registration under Section 8.01; and

- (2) Has an approved Aggregator Designation Form from a regulated entity or credit generator for whom the aggregator is acting in any given transaction.
- (g) Invalid credits.
- (1) A registered entity must report accurately when it submits information into CFS Online. 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 Sections 7.01 through 7.05, or an entity's submission otherwise causes credits to be generated in violation of the regulations of the Agency, those credits are invalid. If the Agency determines that one or more credits that an entity has generated are invalid:
 - (A) If the registered entity that generated the invalid credits still holds them in its account, the Agency will cancel those credits;
 - (B) If the registered entity that generated the invalid credits has retired those credits to meet its own compliance requirement or if it has transferred them to another entity, the entity that generated the invalid credits must retire a valid credit to replace each invalid credit; and
 - (C) The entity that generated the invalid credits is also subject to enforcement for the violation of the Agency's regulation.
 - (2) Acquisition of invalid credits. If the initial generator of the invalid credits has not retired approved credits in place of the invalid credits, the entity that has acquired such credits may have those credits canceled by the Agency if the entity still holds the credits in its account. If the entity has used such invalid credits to meet its own compliance requirement, then the Agency may require the entity to retire an approved credit to replace each such invalid credit that it retired to meet its compliance obligation.
- (h) Prohibited credit transfers.
- (1) 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) 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 entity or by the Agency.

SECTION 7.03 Fuels to Include in Credit and Deficit Calculation

- (a) Fuels included. Regulated entities and credit generators must calculate credits and deficits for all applicable fuels and opt-in fuels, as described in Sections 4.02 and 4.03, except for electricity used in residential charging of electric vehicles.

- (b) Fuels exempted. Except as provided in Section 4.03, credits and deficits may not be calculated for fuels exempted under Section 4.04.
- (c) Fuels that are exported from Agency’s jurisdiction. Any bulk quantity fuel that is exported must be reported by the entity that holds title to the fuel when it is exported. Exported fuels will not incur compliance obligations or generate credits, unless the exporter has purchased the fuel without the compliance obligation, or the credits or deficits have already been generated and separated from the fuel such as through a transfer without obligation, or if the fuel was imported in one quarter and exported in the next. In those cases, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits detached from the fuel.
- (d) Alternative jet fuel. Alternative jet fuel may be reported by the producer or importer of the fuel and any registered entities that hold title to it, so long as the fuel is loaded into planes in the Agency’s jurisdiction. If alternative jet fuel that has been reported as imported or produced is later exported, lost, or otherwise not used for transportation it will be reported as such.

SECTION 7.04 Calculating Credits and Deficits

- (a) Regulated entities and credit generators will calculate credits and deficits for all fuels included in Section 7.03:

- (1) Using credit and deficit basics as directed in Section 7.01;
- (2) Calculating the Fuel Energy (FE) in megajoules (MJ) by multiplying the amount of fuel by the energy density of the fuel in Table 7;

$$FE(MJ) = \text{fuel amount (units)} \times \text{fuel energy density (MJ/unit of fuel)}$$

Where the fuel amount units are gallons, therms, kilograms, or kilowatt hours.

- (3) Calculating the Fuel Adjusted Energy (FAE) in megajoules by multiplying the Fuel Energy (FE) in megajoules from Section 7.04(a)(2) by the Energy Economy Ratio (EER) of the fuel listed in Table 8, as applicable;

$$FAE(MJ) = FE (MJ) \times \text{Fuel EER}$$

- (4) Calculating the Carbon Intensity Difference (CID) by subtracting the fuel’s carbon intensity, pursuant to Section 6.01 or 6.02, that has been adjusted for the fuel application’s EER listed in Table 8 as applicable, from the applicable carbon intensity (CI) reduction benchmark for gasoline or gasoline substitutes listed in Table 1, diesel fuel and diesel substitutes listed in Table 2, or alternative jet fuel listed in Table 3, as applicable;

$$CID \left(\frac{gCO_2e}{MJ} \right) = CI \text{ Standard}_{\text{year}} \left(\frac{gCO_2e}{MJ} \right) - \left(\text{Fuel CI} \left(\frac{gCO_2e}{MJ} \right) / \text{Fuel EER} \right)$$

- (5) Calculating the grams of carbon dioxide equivalent (gCO₂e) by multiplying the Fuel Adjusted Energy (FAE) in megajoules from Section 7.04(a)(3) by the Carbon Intensity Difference (CID) from Section 7.04(a)(4);

$$\text{gCO}_2\text{e} = \text{FAE (MJ)} \times \text{CID} \left(\frac{\text{gCO}_2\text{e}}{\text{MJ}} \right)$$

- (6) Calculating the metric tons of carbon dioxide equivalent (MTCO₂e) by dividing the grams of carbon dioxide equivalent calculated in Section 7.04(a)(5) by 1,000,000;

$$\text{MTCO}_2\text{e} = \text{gCO}_2\text{e} / 1,000,000$$

and

- (7) Per Section 7.01(e), if the result calculated in Section 7.04(a)(6) is a positive number, credits are generated; if the result is a negative number, deficits are generated.
- (b) For electricity used in residential charging of electric vehicles, credit calculations will be based on the total electricity dispensed (in kilowatt hours) to vehicles.
- (1) The Agency quarterly will calculate the total electricity dispensed as a transportation fuel by multiplying the total number of BEVs and PHEVs in a utility's service territory based on Washington State Department of Licensing records, or another data source identified by the Agency, by an estimate of the average amount of electricity consumed by BEVs and PHEVs, per vehicle, at residential chargers, based on regional or national data.
 - (2) A credit generator or aggregator may propose an alternative method, separate from the method described in Section 7.04(b)(1), for the calculation of credits for residential electric vehicle charging. The proposal is subject to the approval of the Agency, as specified in Section 9.01.
 - (3) If the Agency determines after the issuance of credits for residential electric vehicle charging that the estimate under Section 7.04(b)(1) 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 quarter's generation of residential electric vehicle credits.
 - (4) Credits generated under Section 7.04(b)(1) will be issued quarterly into the CFS Online account of the utility or the Equity Credit Aggregator if the utility does not opt-in.

Table 7. Energy Density of Fuels

Fuel (established unit)	MJ/unit
Gasoline (gallon)	122.48 (MJ/gallon)
Diesel fuel (gallon)	134.48 (MJ/gallon)
Compressed natural gas (therm)	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)

Table 8. Energy Economy Ratio (EER) for Fuels Used in Light, Medium, and Heavy Duty Applications

<i>Light/Medium-Duty Applications</i> <i>(Fuels used as gasoline replacement)</i>		<i>Heavy-Duty/Off-Road Applications</i> <i>(Fuels used as diesel replacement)</i>		<i>Aviation Applications</i> <i>(Fuels used as jet fuel replacement)</i>	
<i>Fuel/Vehicle Combination</i>	<i>EER Relative to Gasoline</i>	<i>Fuel/Vehicle Combination</i>	<i>EER Relative to Diesel</i>	<i>Fuel/ Vehicle Combination</i>	<i>EER Relative to Conventional Jet</i>
Gasoline (incl. E6 and E10) Or E85 (and other ethanol blends)	1	Diesel fuel Or Biomass-based diesel blends	1	Alternative Jet Fuel	1
CNG/ICEV	1	CNG or LNG (Spark-Ignition Engines)	0.9		
		CNG or LNG (Compression-Ignition Engines)	1		
Electricity/BEV, or PHEV	3.4	Electricity/BEV or PHEV* Truck or Bus	5.0		
		Electricity/Fixed Guideway, Heavy Rail	4.6		
On-Road Electric Motorcycle	4.4	Electricity/Fixed Guideway, Light Rail	3.3		
		Electricity/Trolley Bus, Cable Car, Street Car	3.1		
		Electricity Forklifts	3.8		
		eTRU	3.4		
		eCHE	2.7		
		eOGV	2.6		
H2/FCV	2.5	H2/FCV	1.9		
		H2 Fuel Cell Forklifts	2.1		
Propane	1.0	Propane	0.9		

SECTION 7.05 Project Based Credits

- (a) Refinery Investment Credit Program. A refinery may receive credit for reducing greenhouse gas emissions from its facility. Any such credits will be based on fuel volumes sold, supplied, or offered for sale in the Agency’s jurisdiction as set forth below:
- (1) General Requirements.
 - (A) A “refinery investment credit project” must occur within the boundaries of the refinery.
 - (B) The applicant must demonstrate that any net increases in criteria air pollutant or toxic air contaminant emissions from the refinery investment credit project are mitigated in accordance with all local, state, and federal environmental and health and safety regulations.
 - (C) The following project types are eligible for the refinery investment project credits:
 - (i) Use of lower-CI process energy from sources such as biomethane, renewable propane, and renewable coke, to displace fossil fuel;
 - (ii) Electrification at refineries that involves substitution of high carbon fossil energy input with grid electricity.
 - (iii) Process improvement projects that deliver a reduction in baseline refinery-wide greenhouse gas emissions as outlined in this section. Greenhouse gas emissions reductions due to curtailment, simple maintenance; and crude oil switching that results in greenhouse gas reductions in the project system boundary without improvements in the processing units or equipment involved are not eligible. For the purposes of this section, curtailment is defined as an intentional operational and/or physical change exclusively for the reduction or cessation of total gasoline and gasoline blendstocks and diesel production at the refinery. Curtailment does not include the coincidental rate reduction or shutdown of associated emitting equipment as part of a process improvement project or projects aimed primarily at optimizing refinery efficiency.
 - (D) Credits will be pro-rated for years when the units within a refinery investment credit project system boundary were non-operational. This pro-rating will consider the calendar days of operation relative to non-operation.
 - (E) Credits generated pursuant to Section 7.05(a)(1)(C)(iii) are subject to the following limitations:
 - (i) Credits may not be used to meet more than 10 percent of any entity’s annual compliance obligation.

- (ii) Each project must generate at least 10,000 credits or one percent of the facility's annual pre-project emissions, whichever is less.
- (iii) Crediting is limited to 15 years from the end of the calendar year in which the Agency approves the project's application, per Section 7.05(a)(3).

(2) Calculation of Credits.

- (A) For refinery investment credit projects, the credit generator must determine the credit as follows:
 - (i) Establish a project system boundary. The project system boundary should include direct impacts and at least first order indirect impacts;
 - (ii) Determine the credit for the refinery investment credit project by calculating pre-project life cycle greenhouse gas emissions and project life cycle greenhouse gas emissions within the project system boundary;

$$Credit_{RIP} = (GHG_{pre-project} - GHG_{post-project}) \times \frac{Volume^{XD}}{Volume^{Total}}$$

where:

$Credit_{RIP}$ is the annual credit for the refinery investment credit project in metric tons per year;

$GHG_{pre-project}$ is the annual life cycle greenhouse gas emissions from the use of fuels, electricity, steam/heat and hydrogen in the project system boundary prior to project implementation in metric tons per year corrected for downtime;

$GHG_{post-project}$ is the annual life cycle greenhouse gas emissions from the use of fuels, electricity, steam/heat and hydrogen in the project system boundary due to project implementation in metric tons per year corrected for downtime;

$Volume^{XD}$ is the volume of gasoline, gasoline blendstocks, and diesel in gallons per quarter or per year produced at the refinery and sold, supplied, or offered for sale in the Agency's jurisdiction by the refinery involved in the Refinery Investment Credit Program; and

$Volume^{Total}$ is the total volume of gasoline, gasoline blendstocks, and diesel in gallons produced at the refinery for the same time period used for $Volume^{XD}$.

- (3) Application Contents and Submittal. Unless otherwise noted, an application submitted to the Agency for refinery investment credits must comply with the following requirements:

- (A) Except as provided in Section 7.05(a)(3)(F), an application must contain the following summary material:
 - (i) A complete description of the refinery investment credit project and how emissions are reduced;
 - (ii) An engineering drawing(s) and/or process flow diagram(s) that illustrates the project and clearly identifies the system boundaries, relevant process equipment, mass flows, and energy flows necessary to calculate the refinery investment credits, including any directly affected or indirectly affected processing units (at least first order indirect impacts), and a whole refinery diagram if requested; and
 - (iii) A preliminary estimate of the refinery investment credit including descriptions and copies of any available production and operational data including energy use and other technical documentation utilized in support of the calculation. The application must contain process-specific data showing that the reductions are part of the transportation fuel pathway.
 - (iv) Supporting documents demonstrating that second or higher order indirect impacts are not significant beyond the identified project system boundary.
 - (B) An application must include a list of references covering all information sources used in the calculation of refinery investment credit.
 - (C) An application must include all relevant documentation identifying any changes, including decreases or increases, in criteria air pollutant or toxic air contaminant emissions based on local air permits and supporting permit documentation from the refinery investment credit project.
 - (D) An application, supporting documents, and all other relevant data, calculations, and other documentation must be submitted electronically via CFS Online unless the Agency has approved or requested another format.
 - (E) Applications for process improvement projects pursuant to Section 7.05(a)(1)(C)(iii) will be submitted on or before December 31, 2025.
 - (F) Applicants seeking credits for a project that is currently certified by CARB must provide a copy of the entire approved application package submitted to CARB.
- (4) Application Approval Process. Before the refinery investment credit project can generate credits under the CFS, an application must be approved by the Agency.
- (A) After receipt of an application, the Agency will advise the applicant in writing either that:
 - (i) The project system boundary is appropriate and the application is complete, or

- (ii) The application is incomplete, in which case the Agency will identify which requirements have not been met. The applicant may submit additional information to correct deficiencies identified by the Agency.
- (B) The Agency may prescribe conditions of approval that contain special limitations, recordkeeping and reporting requirements, and operational conditions that the Agency determines should apply to the project. If the Agency finds that an application does not meet the requirements of Sections 7.05(a)(3)(A) through (E), the application will not be approved, and the applicant will be notified in writing, and the basis for the disapproval will be identified. Final determination on the application will be issued in accordance with Section 9.01.
- (5) Credit Review and Issuance. Credits for refinery investment projects may be generated quarterly in a calendar year or annually, at the discretion of the credit generator.
- (6) Recordkeeping. For each approved refinery investment credit project the refinery must compile and retain records pursuant to Section 8.04 showing compliance with all limitation and recordkeeping requirements.

SECTION 7.06 Demonstrating Compliance

- (a) Compliance demonstration. Each regulated entity must meet its compliance obligations 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.
- (b) Calculation of compliance obligation. A regulated entity’s compliance obligation is the sum of deficits generated in the compliance period plus deficits carried over from the prior compliance period, represented in the following equation:

$$\text{Compliance Obligation} = \text{Deficits Generated} + \text{Deficits Carried Over}$$

- (c) Calculation of credit balance.
 - (1) A regulated entity’s credit balance is calculated using the following equation:

$$\text{Credit Balance} = (\text{Credits Generated} + \text{Credits Acquired} + \text{Credits Carried Over}) - (\text{Credits Retired} + \text{Credits Sold} + \text{Credits on Hold})$$
- (d) Extended credit acquisition period. A regulated entity may acquire carryback credits between January 1st and March 31st to be used for meeting its compliance obligation for the prior compliance period. A regulated entity must complete all carryback credit transfers in CFS Online prior to submitting its annual report, but no later than April 30, in order for the credits to be valid for meeting the compliance obligation for that annual report’s compliance period.

- (e) Regulated entities that do not demonstrate compliance under this section may demonstrate compliance through participation in the Credit Clearance Market under Section 7.07.

SECTION 7.07 Credit Clearance Market

- (a) If a regulated entity does not retire sufficient credits to meet its year end compliance obligation under Section 7.06, that entity must purchase its pro-rata share of credits in the Credit Clearance Market, if one occurs. Each year, the Agency will determine if a Credit Clearance Market is necessary.
 - (1) The credit clearance market is separate from the normal year-round market opportunities for entities to engage in credit transactions.
 - (2) A regulated entity is in compliance with Section 7.06(e) if the entity:
 - (A) Retires all credits in its CFS Online account.
 - (B) Acquires its pro-rata obligation in the credit clearance market and retires that number of credits by July 31st of the year subsequent to the compliance year in question; and
 - (C) Retires the remaining balance of its annual obligation, with interest, within five years.
 - (3) If no Credit Clearance Market occurs, the Agency will record any entity's unmet compliance obligation, and the fuel reporting entity will be deemed in compliance for that year, provided that it has retired all credits in its account, and retires credits equivalent to the Accumulated Deficits, with interest as explained in Section 7.07(e), within five years.
- (b) Acquisition of Clearance Market Credits to Meet an Annual Compliance Obligation.
 - (1) Clearance Market Period. From June 1st to July 31st, a fuel reporting entity subject to Section 7.07(a) must acquire credits pledged into the Credit Clearance Market to be retired toward compliance in the previous compliance year. Credits acquired for this purpose are defined as "Clearance Market" credits.
 - (2) Use of Clearance Market Credits. A Clearance Market credit can only be used for the purpose of meeting the fuel reporting entity's compliance obligation from an immediate prior year.
- (c) Procedure for Selling in the Clearance Market.
 - (1) Pledging Credits for Sale into the Clearance Market. Regulated entities pledging credits for sale into the Clearance Market will report to the Agency in the annual compliance report (on or before April 30th) the number of credits they are pledging for sale.

- (2) Calculation of the Maximum Price for Credits in the Clearance Market. The maximum price for credits acquired, purchased or transferred via the Credit Clearance Market will be set by the following formula:
- (A) \$200/credit (MT CO₂e) in 2022.
 - (B) This per credit price will be adjusted annually by the rate of inflation as measured by the most recently available twelve months of the Consumer Price Index for All Urban Consumers.
- (3) Eligibility to Sell. Only regulated entities that demonstrated compliance pursuant to Section 7.06 for the prior year can pledge credits for sale into the Clearance Market. Regulated entities that have an Accumulated Deficit obligation cannot pledge credits for sale into the Clearance Market.
- (4) Selling in the Clearance Market. By pledging credits for sale in the Clearance Market, entities agree to the following provisions:
- (A) Entities pledging credits agree to withhold those credits from sale in the ongoing CFS credit market until the Agency determines whether a Clearance Market will occur and, if a Clearance Market will occur, until August 1st.
 - (B) The Agency will announce whether a Clearance Market will occur by May 15.
 - (C) If the Agency announces that a Clearance Market will not be held that year, entities that have pledged credits to the Clearance Market will be released from their agreement to withhold those credits from sale in the ongoing CFS credit market.
 - (D) If a Clearance Market does occur, entities will sell or transfer credits at or below the Maximum Price for the pertinent year, until the Clearance Market closes on July 31st.
 - (E) Entities that have pledged credits to sell into the Clearance Market cannot reject an offer to purchase pledged credits at the Maximum Price, provided they have not sold or contractually agreed to sell those pledged credits.
- (d) Clearance Market Operation. The Agency will inform each regulated entity that failed to meet the Annual Compliance obligation under Section 7.06 of its pro-rata share of credits available into the Clearance Market by June 1st.
- (1) Calculation of Pro-Rata Shares. Each regulated entity's pro-rata share of credits available in the Clearance Market will be calculated by the following formula:

Entity A's pro-rata share =

$$\left[\frac{(A's\ deficit)}{(total\ deficits)} \right] \times [less\ of: (pledged\ credits)\ or\ (total\ deficits)]$$

where:

deficit is entity A's obligation for the compliance year that has not been met pursuant to Section 7.06.

total deficits is the sum of all entities' obligations for the compliance year that have not been met pursuant to Section 7.06 and

pledged credits is the sum of all credits pledged pursuant to Section 7.07(c).

- (2) Publishing a List of Entities Participating in the Clearance Market. The Agency may post the following information on CFS Online:
 - (A) The name of each entity that did not demonstrate compliance pursuant to Section 7.06 and the number of credits that each entity is obligated to acquire as its pro-rata share; and
 - (B) The name of each entity that has pledged to provide credits for sale in the credit clearance market and the number of credits that each entity has agreed to provide.
 - (3) Clearance Market Operation Period. If the Agency has determined that the Clearance Market will occur, the Clearance Market will operate from June 1st through July 31st.
 - (4) Submission of Amended Annual Compliance Reports. Regulated entities that purchased credits in the Clearance Market will submit to the Agency an amended annual compliance report by August 31st that accounts for the acquisition and retirement of their pro-rata share of Clearance Market credits, and for all deficits carried over as Accumulated Deficits.
 - (5) Accumulated Deficits. If, after purchasing its pro-rata share of credits and retiring those credits, a regulated entity retains an unmet compliance obligation, the Agency will record remaining deficits from that compliance year in the entity's account.
- (e) Rules Governing Accumulated Deficits.
- (1) Compound Interest on Accumulated Deficits. Regulated entities with an Accumulated Deficit, as defined in Section 7.07(d)(5), will be charged interest to be applied annually to all deficits in a fuel reporting entity's account. Interest will be applied on Accumulated Deficits from previous compliance years in terms of additional deficits that will be retired at a rate of 5 percent annually, applied on each September 1st.
 - (2) Repayment of Accumulated Deficits. Regulated entities that participate in the Credit Clearance Market in order to meet their compliance obligations, and have accumulated deficits as defined in Section 7.07(d)(5), must repay all deficits, plus interest no later than five years from the end of the compliance period in which any such deficit was incurred.
 - (3) Restrictions on the Repayment of Accumulated Deficits. Regulated entities may repay Accumulated Deficits as part of a subsequent annual report. However, no

repayment of any Accumulated Deficits is allowed unless the regulated entity meets 100 percent of its current compliance obligation.

- (4) Prohibitions on Credit Transfers. Regulated entities that have an Accumulated Deficit obligation cannot transfer or sell credits to another fuel reporting entity.

Article 8: Registration and Reporting Procedures

SECTION 8.01 CFS Online Registration

CFS Online refers to all the online systems responsible for CFS data management and program implementation. CFS Online comprises two interactive and secured web-based systems: Alternative Fuel Portal (AFP) and the CFS Reporting Tool and Credit Bank and Transfer System (RT-CBTS).

- (a) Alternative Fuel Portal (AFP). The AFP supports fuel pathway applications and certifications. It also handles the registration of fuel production facilities and opt-in projects.
 - (1) Eligibility. Any entity that intends to be a fuel pathway applicant or an opt-in project operator can request to establish an account in the AFP.
 - (2) Requirements to Establish an Account in AFP. To establish an account in the AFP, an entity must complete and submit the online AFP account registration form and provide the following:
 - (A) Organization name, address, state and country, Organization Federal Employer Identification Number (FEIN), entity U.S. EPA ID, if available, facility location(s)
 - (B) A letter on entity letterhead stating the basis for qualifying for an account pursuant to Section 8.01(a)(1). This letter must be signed by the entity owner, a president, a managing partner, or a corporate officer. An electronic copy of the signed letter must be uploaded in the AFP.
 - (C) The registrant must designate a primary account representative and at least one alternate account representative. The account representative must have the authority to bind the entity.
 - (D) For each account representative, name, title, relationship to the organization, business phone, e-mail address, username, and password.
 - (E) The account representatives can be changed by following the steps set forth in Sections 8.01(a)(2)(B) through (D). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous account representatives prior to the time and date when the Agency receives the superseding information will be binding on the entity.
 - (3) Account Approval.

- (A) The account is established when the Agency approves the application.
 - (B) An account registration application may be denied if any false, misleading, or missing information is supplied or submitted in the application.
- (4) Account Management Roles and Duties.
- (A) The account representative is responsible for making any changes to the entity profile within AFP.
 - (B) The account representative may designate users within the entity who can access and manage the account.
 - (C) If any information required by Section 8.01(a)(2)(A) changes, the entity holding the account must update the account to reflect the changes within 30 calendar days.
- (b) CFS Reporting Tool and Credit Bank & Transfer System (RT-CBTS). The RT-CBTS is designed to support fuel transaction reporting, compliance demonstration, credit generation, banking, and transfers.
- (1) Eligibility. The following entities can request to establish an account in the RT-CBTS:
- (A) A fuel reporting entity;
 - (B) An entity opting into CFS, pursuant to Section 5.02; or
 - (C) A CFS aggregator.
- (2) Deadline to Establish an RT-CBTS Account.
- (A) An entity responsible for reporting any transportation fuels pursuant to Section 5.01 must complete registration at least 30 days prior to the date for filing any required report.
 - (B) An opt-in entity can register anytime during a calendar year, except for utilities, which must register by October 1 of the year prior to generating credits. All quarterly and annual reporting is then required, beginning with the quarter in which registration was approved, and continuing until an opt-out is completed.
 - (C) Any aggregator must register in RT-CBTS prior to facilitating any CFS credit trades.
- (3) Requirements to Establish an Account in RT-CBTS. An entity owner, a president, a managing partner, or a corporate officer with legal binding authority must complete and submit the online RT-CBTS account registration form and provide the following:
- (A) Organization name, address, state and country, Organization Federal Employer Identification Number (FEIN), date and place of incorporation.
 - (B) A letter on entity letterhead stating the basis for qualifying for an account pursuant to Section 8.01(b)(1). This letter must be signed by the entity

owner, a president, a managing partner, or a corporate officer. An electronic copy of the signed letter must be uploaded in the RT-CBTS to complete the application process.

- (C) The online RT-CBTS registration form must designate a primary account representative and at least one alternate account representative. The account representative must have the authority to bind the entity.
 - (D) For each representative, name, title, relationship to the organization, business and mobile phone, e-mail address, username, and password.
 - (E) The account representatives can be changed by following steps set forth in Sections 8.01(b)(3)(B) through (D). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous account representatives prior to the time and date when the Agency receives the superseding information will be binding on the entity.
 - (F) A designated fuel reporting entity pursuant to Section 5.01(a)(2) or 5.01(b)(2) must also provide a written agreement for each entity from which it acquired the first fuel reporting entity status, demonstrating that such status was acquired from such entity.
- (4) CFS Credit Aggregator. An aggregator may represent other RT-CBTS account holders in CFS credit transfers. To register an aggregator account, the aggregator must provide the following:
- (A) Aggregator's organization name, address, state and country, Organization Federal Employer Identification Number (FEIN), date, and place of incorporation, if applicable.
 - (B) Aggregator's name, business and mobile phone, e-mail address, username, and password.
- (5) Account Approval.
- (A) The account is established when the Agency approves the application.
 - (B) Accounts may be invalidated by the Agency at any time if they contain false, misleading or incomplete information.
- (6) Account Management Roles and Duties.
- (A) The account representative is responsible for making any changes to the entity profile within RT-CBTS.
 - (B) The account representative may designate users within the entity who can access and manage the account.
 - (C) The account representative is responsible for meeting the reporting requirements as set forth in Section 8.02.

- (D) If any information required by Sections 8.01 through 8.03 changes, the entity holding the account must update the account to reflect the changes within 30 calendar days.
- (7) Account Closure.
- (A) An RT-CBTS account is subject to suspension or closure based on any of the following:
 - (i) The account holder is no longer eligible to establish an RT-CBTS account pursuant to this Section.
 - (ii) The account holder fails to comply with requirements of this section; and
 - (iii) The account holder notified the Agency of its intent to opt out pursuant to Section 5.02(c).
 - (B) The account holder must provide a notice of intent to the RT-CBTS Administrator to close the account within 90 days after any condition in Section 8.01(b)(7)(A). The entity must submit a final quarterly report for the quarter in which the notice was provided, submit a final annual report, and submit verification that any remaining deficits have been eliminated. The Agency will notify the entity of the final account closure. Any credits that remain in the entity's account at the time of the closure will be placed in the Buffer Account.
 - (C) Failure to provide notice pursuant to Section 8.01(b)(7)(B) will result in account closure and forfeiture of any credits that remain in the entity's account at the time of closure.
 - (D) If an entity requests to reopen an RT-CBTS account that was previously closed, the entity must follow the requirements as set forth in Section 8.01(b) to reopen the account.
- (8) Registration of Fueling Supply Equipment (FSE). After establishing an RT-CBTS account, fuel reporting entities for natural gas, metered electricity, propane, and hydrogen must register all fueling supply equipment in the RT-CBTS using the FSE registration template. The completed FSE registration template with supporting documents must be uploaded into the RT-CBTS. Upon FSE registration, the applicant will receive a unique CFS FSE ID that will be used for reporting fuel transactions in the RT-CBTS pursuant to Section 8.02. The following must be provided:
- (A) General Requirements. All FSE registrations must include:
 - (i) Federal Employer Identification Number (FEIN) for the entity registering, name of the facility at which FSE is situated, street address, and geographical coordinates using latitude/longitude in the

WGS 1984 coordinate system (in decimal degree format) of the FSE location.

- (ii) Name and address of the entity that owns the FSE, if different from the entity registering the FSE.

(B) Specific Requirements by Fuel Type.

- (i) 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 entity, and a copy of the most recent utility bill.
- (ii) 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.
- (iii) For non-residential EV charging, FSE refers to each piece of equipment capable of measuring the electricity dispensed for EV charging. Fuel reporting entities for non-residential EV charging for on-road 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.
- (iv) For electric forklifts, 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 it is optional to provide serial number assigned to each piece of equipment by the OEM and the name of OEM.
- (v) For hydrogen, FSE refers to a fueling station. A hydrogen station with multiple dispensers is considered a single FSE.
- (vi) For transportation applications not covered in Sections 8.01(b)(8)(B)(i) through (v), FSE refers to a fuel dispenser or transportation equipment with the capability to measure the dispensed fuel in that equipment.

SECTION 8.02 Fuel Transactions and Compliance Reporting

Regulated entities must submit to the Agency quarterly fuel transactions reports and annual compliance reports, as specified in this section.

- (a) **Online Reporting.** The annual compliance and quarterly fuel transactions reports must be submitted using CFS Online. Prior to use, a regulated entity must first register in CFS Online.

The regulated entity is solely responsible for ensuring that the Agency receives its quarterly fuel transactions reports and annual compliance reports by the deadlines specified in Section 8.02(b). A report is considered submitted when received by the Agency. The Agency is not responsible for the failure of electronically submitted reports to be transmitted to the Agency.

- (b) **Reporting Frequency and Deadlines.**

(1) **Quarterly Fuel Transactions Data:** The data for the quarterly fuel transactions report for each fuel type must be uploaded in CFS Online within the first 45 calendar days after the end of the quarter. During the subsequent 45 calendar days, regulated entities will use the reconciliation tools provided in CFS Online and in conjunction with business partners to complete any necessary report corrections.

(2) **Quarterly Fuel Transactions Reports.** Unless expressly provided elsewhere in this subarticle, quarterly fuel transactions reports must be submitted in CFS Online by:

June 30th – for the first calendar quarter covering January through March;

September 30th – for the second calendar quarter covering April through June;

December 31st – for the third calendar quarter covering July through September;
and

March 31st – for the fourth calendar quarter of the prior year covering October through December.

(3) **Annual Compliance Reports.** An annual compliance report for the prior calendar year must be submitted in CFS Online by April 30th of each year.

- (c) **General Reporting Requirements for Quarterly Fuel Transactions Reports.** For each of its transportation fuels, a regulated entity must submit a quarterly fuel transactions report that contains all of the information specified in 8.02(c)(1) and (2) and summarized in Table 9.

(1) All applicable transaction types for each fuel type listed in Section 8.02(d) and defined in Section 2.01.

(2) Organization FEIN, Reporting Period (year and quarter), FPC, Fuel Amount, Transaction Type, Transaction Date, Business Partner (if applicable), Aggregated

Transaction Indicator, Fuel Application, Production Entity ID and Facility ID (if applicable).

(d) Specific Reporting Requirements for Quarterly Fuel Transactions Reports. In addition to the requirements specified in Section 8.02(c), for each of its transportation fuels, a regulated entity must include in its quarterly fuel transactions report the information specified in sections 8.02(d)(1) through (5) and summarized in Table 9.

(1) Specific Quarterly Reporting Parameters for Liquid Fuels including Gasoline, Diesel, Diesel Fuel Blends, Alternative Fuels, and Alternative Jet Fuel.

(A) The applicable transaction types, defined in Section 2.01, are as follows: Production for Import, Import, Purchased with Obligation, Purchased without Obligation, Sold with Obligation, Sold without Obligation, Export, Loss of Inventory, Gain of Inventory, and Not Used for Transportation. The transaction type “Production for Import” is to be reported by out-of-jurisdiction producers that choose to be the first fuel reporting entity for fuel imported into the Agency’s jurisdiction. The transaction type “Import” is to be reported by non-producers that choose to be the first fuel reporting entity for out-of-jurisdiction fuel imported into Agency’s jurisdiction. The following information is to be reported:

- (i) Production Entity ID and Facility ID for each blendstock. Gasoline and diesel fuel are exempt from this requirement.
- (ii) The certified fuel pathway code (FPC) of each blendstock.
- (iii) The volume (in gallons) of each blendstock per reporting period. For purposes of this provision only, except as provided in Section 8.02(d)(1)(A)(iv), the fuel reporting entity may report the total volume of each blendstock aggregated for each distinct carbon intensity value (e.g., X gallons of blendstock with A gCO₂e/MJ, Y gallons of blendstock with B gCO₂e/MJ).
- (iv) A producer of gasoline or diesel fuel must report, for each of its refineries, the MCON or other crude oil name designation, volume (in gal), and Country (or State) of origin for each crude supplied to the refinery during the quarter.

(B) Temperature Correction. All liquid fuel volumes reported in CFS Online will be adjusted to standard temperature conditions of 60°F as follows:

(i) For ethanol, the following formula will be used:

$$V_{s,e} = V_{a,e} \times (-0.0006301 \times T + 1.0378)$$

where:

$V_{s,e}$ is the standardized volume of ethanol at 60°F, in gallons;

$V_{a,e}$ is the actual volume of ethanol, in gallons; and

T is the actual temperature of the batch, in °F.

(ii) For biodiesel, one of the following two methodologies will be used:

(I) $V_{s,b} = V_{a,b} \times (-0.00045767 \times T + 1.02746025)$

where:

$V_{s,b}$ is the standardized volume of biodiesel at 60°F, in gallons;

$V_{a,b}$ is the actual volume of biodiesel, in gallons; and

T is the actual temperature of the batch, in °F.

(II) The standardized volume of biodiesel at 60°F, in gallons, as calculated from the use of the American Petroleum Institute Refined Products Table 6B, as referenced in ASTM D1250-08 (Reapproved 2013), which is incorporated herein by reference, or by comparable means that can be demonstrated to the Agency to be consistent with these standard methods.

(iii) For other liquid fuels, the volume correction to standard conditions will be calculated by the methods described in the American Petroleum Institute (API) Manual of Petroleum Measurement Standards Chapter 11 – Physical Properties Data (May 2004), the ASTM Standard Guide for Use of the Petroleum Measurement Tables, ASTM D1250-08 (Reapproved 2013), or the API Technical Data Book – Petroleum Refining Chapter 6 – Density (Sixth Edition, April 1997), all three of which are incorporated herein by reference, or by comparable means that can be demonstrated to the Agency to be consistent with these standard methods.

(C) Fuel Pathway Allocation for Produced Fuel. If a fuel production facility simultaneously processes multiple feedstocks, the producer or regulated entity must associate each portion of the total fuel produced with processed feedstock during each reporting period (calendar quarter). Feedstock quantities must not be counted more than once for any fuel produced. The regulated entity must use one of the following methods to allocate feedstock to the quantities of produced fuel reported under each certified FPC.

(i) The quantity of fuel reported for a fuel pathway code will be determined using the following method:

$$Q_{Fuel\ i}^n = Y_{average\ yield} \times Q_{Feedstock\ i}^n$$

where:

$Q_{Fuel\ i}^n$ is the quantity of produced fuel with a fuel pathway i at a production facility during reporting period n ;

$Y_{average\ yield}$ is the facility's average production yield for all feedstocks as determined during pathway certification; and

$Q_{Feedstock\ i}^n$ is the quantity of feedstock counted as processed for a fuel pathway i at a production facility during reporting period n . The quantity of feedstock inventory associated with the fuel pathway i will be greater than or equal to zero at the end of each reporting period.

If the actual quantity of fuel produced during a reporting period is greater than the quantity calculated in Section 8.02 (d)(1)(C)(i) , and all feedstocks in inventory and received by the production facility during the reporting period were included in the fuel pathway application, the excess fuel must be reported under a fuel pathway with the highest CI among all pathways certified for the fuel production facility.

- (ii) Section 8.02(d)(1)(C)(i) notwithstanding, a different allocation methodology may be used with the Agency's approval. The methodology must be submitted to the Agency at the time of fuel pathway application.
 - (iii) Facilities with multiple certified fuel pathways that do not use feedstock inventory accounting must include chemical analysis data supporting the calculated yield (i.e. the converted fraction of measured feedstock) in annual Fuel Pathway Reports. The producer or regulated entity must use the yield calculated from the most recent prior analysis to determine the quantities of fuel to allocate to each FPC.
- (D) Exports. If fuel reported in CFS Online is subsequently exported out of the Agency's jurisdiction, the export must be reported in CFS Online by the entity responsible for reporting export.
- (i) Reporting Fuel Blends. When reporting export of fuel blends, the amount of each blendstock must be reported in CFS Online. If the accurate blend percentage of each blendstock is not known then default blend percentage values provided in CFS Online will be used for reporting the exports. Default blend percentage values are based on the latest complete data year.
 - (ii) Substitute Pathways. When an FPC is not available for reporting a fuel in CFS Online, a regulated entity must use the Substitute pathway corresponding to its fuel type.
- (2) Specific Quarterly Reporting Parameters for Natural Gas (including CNG, LNG, and L-CNG). For each fueling facility to which CNG, LNG, and L-CNG, is supplied as a transportation fuel:

- (A) The quantity of fuel dispensed must be reported per FSE with a certified FPC and with transaction type “NGV Fueling.” For CNG and L-CNG, the quantity of fuel dispensed (in Therms at Higher Heating Value (HHV)) per reporting period separately for all light/medium-duty vehicles (LDV & MDV), for heavy-duty vehicles with compression ignition engines (HDV-CIE), and for heavy-duty vehicles with spark ignition engines (HDV-SIE). For LNG, the volume of fuel dispensed (in gallons) per reporting period separately for all LDV/MDV, for HDV-CIE, and for HDV-SIE.
 - (B) For Bio-CNG, Bio-LNG, and Bio-L-CNG: Biomethane production Entity ID and Facility ID.
 - (C) The total quantity of fuel, summed across all FPCs, dispensed for transportation purpose through the FSE during the reporting period.
 - (D) 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 Quarterly Reporting Parameters for Electricity used as a Transportation Fuel.
- (A) For Residential EV charging.
 - (i) The Agency will use the method set forth in Section 7.04(b)(1) to calculate any credits generated for the quarter and place them into the Electric Utility’s CFS Online account.
 - (B) For Non-Residential EV Charging.
 - (i) For generating credits the quantity of electricity (in kWh) used for EV charging must be reported per FSE using the Electric Utility specific fuel pathway code and with transaction type “EV Charging – Utility Name.”
 - (ii) For Fixed Guideway Systems. The quantity of electricity used for transit propulsion (in kWh) must be reported per FSE with a certified FPC and with transaction type “Fixed Guideway Electricity Fueling.” FSE ID is assigned by system during the registration process.
 - (iii) For Electric Forklifts. The quantity of electricity used (in kWh) must be reported per FSE with a certified FPC and with transaction type “EV Forklifts Fueling.” The quantity of electricity used during a reporting period must be measured per FSE and with transaction type “Forklift Electricity Fueling”, in the case of an electric forklift fleet owner or its designee generating credits.

- (iv) For Electric Transport Refrigeration Unit. The quantity of electricity (in kWh) dispensed must be reported per FSE with a certified FPC and with transaction type “eTRU Fueling.”
 - (v) Electric Cargo Handling Equipment. The quantity of electricity (in kWh) dispensed must be reported per FSE with a certified FPC and with transaction type “eCHE Fueling.”
 - (vi) Electric Power for Ocean-going Vessel. The quantity of electricity (in kWh) dispensed must be reported per FSE with a certified FPC and with transaction type “eOGV Fueling.”
 - (vii) Electric Power for Harbor Vessels. The quantity of electricity (in kWh) dispensed must be reported per FSE with a certified FPC and with transaction type “eHV Fueling.”
 - (viii) Other Electric Transportation Applications. The quantity of electricity (in kWh) dispensed must be reported per FSE with a certified FPC and with transaction type made available by the Agency.
- (4) Specific Quarterly Reporting Parameters for Hydrogen Used as a Transportation Fuel.
- (A) The quantity (in kilograms) of hydrogen fuel dispensed per FSE with a certified FPC and with transaction type “FCV Fueling” by vehicle weight category: LDV & MDV and HDV.
 - (B) For hydrogen fuel cell forklifts, the amount of hydrogen fuel dispensed (in kg) per FSE with a certified FPC and with transaction type “Forklift Hydrogen Fueling.”
 - (C) Production Entity ID and Facility ID.
- (5) Specific Quarterly Reporting Parameters for Propane.
- (A) The quantity (in gallons) of propane dispensed per FSE, with a certified FPC and with transaction type “Propane Fueling.”
 - (B) For renewable propane, the Production Entity ID and Facility ID.
- (e) Reporting Requirements for Annual Compliance Reports. Regulated entities and project operators must submit an annual compliance report that aggregates the quarterly fuel transactions reports and provides the additional information as follows:
- (1) An annual summary, generated by CFS Online for each fuel reporting entity and project operator, that includes the following:
 - (A) The total credits and deficits generated by the regulated entity and project operator in the compliance period, calculated in CFS Online per Sections 7.04 and 7.05;
 - (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 entities;
 - (E) The total credits sold or otherwise transferred;
 - (F) The total credits retired within the CFS to meet compliance obligation per Section 7.06; and
 - (G) Total credits acquired from or pledged for sale into the CCM, if applicable;
 - (H) Total credits purchased as carryback credits; and
 - (I) Any credits on administrative hold.
- (2) A producer of gasoline or diesel fuel must report, for each of its refineries, the MCON or other crude oil name designation, amount (in gal), and Country (or State) of origin for each crude supplied to the refinery during the annual compliance period.
 - (3) At the time of submittal of the annual compliance report:
 - (A) If there is still a pending outgoing credit transfer, the credits will be taken from the account of the Seller that initiated the transfer and the annual compliance report will reflect the adjusted credit balance.
 - (B) If there is a pending incoming credit transfer, the Buyer's annual report will not reflect the balance until the transfer is completed. Upon completion, the annual compliance report will be reopened and resubmitted with the adjusted credit balance.
 - (4) Attestations Regarding Environmental Attributes for Biomethane. Entities reporting bio-CNG, bio-LNG, and bio-L-CNG must submit the environmental attribute attestation pursuant to Section 6.01(b)(2)(A), along with the annual compliance report in CFS Online.
 - (5) Electric Utilities must include in the annual compliance report an itemized summary of how the requirements detailed in Section 5.02(e)(1) are met and the costs associated with meeting the requirements.
- (f) Significant Figures. A regulated entity must report the following quantities as specified below:
- (1) Carbon intensity, expressed to the same number of significant figures as shown in Tables 1 and 2;
 - (2) Credits or deficits, expressed to the nearest whole metric ton CO₂ equivalent (MT CO₂e);
 - (3) Fuel amounts in units specified in Section 8.02(d), expressed to the nearest whole unit applicable for that quantity; and
 - (4) Any other quantity must be expressed to the nearest whole unit applicable for that quantity.

- (g) A regulated entity must maintain a non-negative value for Total Obligated Amount and Total Amount, as defined in Section 2.01, for each FPC as summed across all quarterly data in CFS Online.
- (h) Correcting a Previously Submitted Report. Upon discovery of an error, a regulated entity may request to have previously submitted quarterly reports for the current compliance period reopened for corrective edits and resubmittal by submitting a Correction Request Form online in CFS Online. The regulated entity is required to provide justification for the report corrections and indicate the specific corrections to be made to the report. Pursuant to Section 7.01(h) no credits may be claimed, and no deficits may be eliminated. Each submitted request is subject to Agency review and approval.

Table 9. Annual Compliance Calendar for Regulated and Opt-in Entities

Due Date	Activity/Deliverable
February 15	<ul style="list-style-type: none"> • Upload all Q4 fuel transactions data in CFS Online and begin any needed reconciliation with business partners
March 31	<ul style="list-style-type: none"> • Submit final Q4 fuel transactions report • Submit Q4 Crude Oil Reports (MCON Reports) • Submit Annual Fuel Pathway Reports
April 30	<ul style="list-style-type: none"> • Submit final Annual Compliance Report for preceding year • Voluntary pledge of credits for sale into Credit Clearance Market (CCM) • Submit Annual Crude Oil Reports (MCON Reports)
May 15	<ul style="list-style-type: none"> • Upload all Q1 fuel transactions data in CFS Online and begin any needed reconciliation with business partners • Agency will announce whether CCM will occur
June 1	<ul style="list-style-type: none"> • If CCM occurs, Agency will post list of buyers and sellers • CCM will be in effect for June and July
June 30	<ul style="list-style-type: none"> • Submit final Q1 fuel transactions report • Submit Q1 Crude Oil Reports (MCON Reports)
July 31	<ul style="list-style-type: none"> • CCM for prior year closes
August 14	<ul style="list-style-type: none"> • Upload all Q2 fuel transactions data in CFS Online and begin any needed reconciliation with business partners
August 31	<ul style="list-style-type: none"> • Entities that bought and sold credits in the CCM submit amended Annual Compliance Report
September 30	<ul style="list-style-type: none"> • Submit final Q2 fuel transactions report • Submit Q2 Crude Oil Reports (MCON Reports)
November 14	<ul style="list-style-type: none"> • Upload all Q3 fuel transactions data in CFS Online and begin any needed reconciliation with business partners
December 31	<ul style="list-style-type: none"> • Submit final Q3 fuel transactions report • Submit Q3 Crude Oil Reports (MCON Reports)

SECTION 8.03 Change of Ownership or Operational Control

If an entity or a facility registered in the RT-CBTS and/or the AFP undergoes a change of ownership or operational control, the following requirements apply. For any report submitted for the CFS, a report is considered submitted when received by the Agency. The Agency is not responsible for the failure of electronically submitted reports to be transmitted to the Agency.

- (a) Agency Notifications. No later than 30 calendar days after the change of ownership or operational control:
 - (1) The previous owner or operator of the regulated entity or facility must provide in writing to the Agency:
 - (A) The name of the new owner or operator and the date of the ownership or operational control change.
 - (2) The new owner or operator must provide in writing to the Agency the following information:
 - (A) Previous owner or operator;
 - (B) New owner or operator;
 - (C) Date of ownership or operator change;
 - (D) Name of new account representatives for the affected entity's account in CFS Online.
 - (3) The previous owner will give the Agency direction regarding the disposition of net credits in the previous owner's RT-CBTS account and the certified fuel pathways associated with the previous owner's AFP account.
- (b) Reporting Responsibilities. The owner or operator of record at the time of a reporting deadline specified in Table 9 has the responsibility for complying with the requirements of Section 8.02, including submitting quarterly and annual reports, and certifying that the reports are accurate and complete.
 - (1) Reported data must not be split or subdivided for a reporting period, based on ownership. A single reporting period data report must be submitted for the entity by the current owner or operator. This report must represent required data for the entire reporting period.
 - (2) Previous owners or operators are required to provide to new owners or operators data and records that are necessary and required for preparing quarterly and annual reports required by Section 8.02.
- (c) New Owner Responsible for Net Deficits. The new owner, when filing the annual report, is responsible for demonstrating compliance pursuant to 7.06.
- (d) Bankruptcy. As determined by federal law, deficits constitute regulatory obligations under the CFS.
- (e) Fate of Credits and Deficits After an Entity Dissolves.

- (1) The Agency will place into the Buffer Account any net credits in the account of an entity that dissolves or otherwise ceases to exist without notifying the Agency pursuant to this section.
- (2) Prior to dissolution, a fuel reporting entity is responsible for retiring credits equal to any net deficits in its RT-CBTS account and fulfill account closure requirements as set forth in Section 8.01(b)(7).

SECTION 8.04 Recordkeeping and Auditing

- (a) Record Retention. Any record required to be maintained by fuel reporting entities, fuel pathway holders, and applicants under this section must be retained for ten years. All data and calculations submitted by a regulated entity for demonstrating compliance, or generating credits or deficits are subject to inspection by the Agency and will be made available within 20 calendar days upon request of the Agency.
 - (1) Record Retention for Fuel Reporting Entities. Fuel reporting entities must maintain all records and calculations relied upon for data reported in the CFS Online. These records include, but are not limited to:
 - (A) Product transfer documents;
 - (B) Copies of all data reports submitted to the Agency;
 - (C) Records related to each fuel transaction;
 - (D) Records used for each credit transaction;
 - (E) Records related to FSE registration;
 - (F) Chain of custody evidence for produced fuel imported into the Agency's jurisdiction; and
 - (G) Records used for compliance or credit and deficit calculations.
 - (2) Record Retention for Fuel Pathway Holders and Applicants. Fuel pathway holders and applicants must maintain all records relied upon in producing fuel pathway applications and annual Fuel Pathway Reports. The retained documents, including CI input source data and supplemental documentation, must be sufficient to allow for verification of each CI calculation. These records include but are not limited to:
 - (A) The quantity of fuel produced and subsequently sold in the Agency's jurisdiction under the certified fuel pathway. Sales invoices, agreements, and bills of lading for those fuel sales must be retained.
 - (B) The quantity of feedstocks purchased to produce the fuel specified in Section 8.04(a)(2)(A). Invoices from the sellers and purchase agreements must be retained. Records to support material balance and energy balance calculations for facilities processing multiple feedstocks.

- (C) The quantity of all forms of energy consumed to produce the fuel covered in Section 8.04(a)(2)(A). All invoices for the purchase of process fuel, and all receipts for the sale of the fuel pathway applicant’s finished fuel must be maintained.
 - (D) The quantity of all products co-produced with the fuel covered by certified CFS pathway. Copies of invoices, agreements, and bills of lading covering those sales must be retained. In addition, copies of the federal RFS Fuel Producer Co-products Report must be retained, if applicable. If the amount of co-product produced exceeds the amount sold by five percent or more, full documentation of the fate of the unsold fractions must be maintained.
 - (E) Evidence demonstrating chain of custody from the point of origin along the supply chain to the fuel production facility is required for any feedstock defined as a specified source feedstock pursuant to Section 6.01(c)(2).
 - (F) Any additional records that the Agency requests during pathway certification and records that demonstrate compliance with all special limitations and operating conditions issued at the time of certification.
- (b) Documenting Fuel Transfers Reported in the CFS Online. A product transfer document provided by a fuel reporting entity pursuant to Section 5.01(a)(2)(A) must prominently state the information specified:
- (1) For transfers where a CFS obligation to act as a credit or deficit generator is being passed to the recipient:
 - (A) Transferor Entity Name, Address and Contact Information;
 - (B) Recipient Entity Name, Address and Contact Information;
 - (C) Transaction Date: Date of Title Transfer for Fuel;
 - (D) Fuel Pathway Code (FPC) and Carbon Intensity (CI);
 - (E) Fuel Quantity and Units;
 - (F) A statement identifying whether the CFS obligation to act as a credit or deficit generator is passed to the recipient; and
 - (G) Fuel Production Entity ID and Facility ID as registered with RFS program or CFS program. This does not apply to Gasoline, Diesel Fuel or Fossil Natural Gas.
 - (2) For transfers where the CFS obligation to act as a credit or deficit generator was retained by the transferor, the following is to be provided to the recipient and passed along to any subsequent owner or supplier:
 - (A) All information identified in Sections 8.04(b)(1) (A) through (G);
 - (B) The following notice reading as follows:
 - “This transportation fuel has been reported to the CFS Program by <Insert

name of Fuel Reporting Entity holding CFS obligation to act as a credit or deficit generator> for intended use in the Agency’s jurisdiction. If **<Insert name of recipient>** exports this fuel from the Agency’s jurisdiction **<Insert name of recipient>** will report to the Agency.”

Article 9: Enforcement and Other Provisions

SECTION 9.01 Administrative Orders

- (a) **Purpose.** The Control Officer, or a duly authorized representative, may issue such administrative orders to establish approvals and to deny requested approvals for entities subject to this regulation. The control officer, or a duly authorized representative, may also issue administrative orders to implement provisions of Section 9.03. These orders are issued as provided by the applicable provisions of chapter 70.94 RCW and the regulations adopted thereunder.
- (b) **Process.** When the Control Officer, or a duly authorized representative, issues an administrative order under this regulation, the order will include the following:
- (1) Identification of the entity receiving the administrative order;
 - (2) Identification of the determination (including approval or denial) made through the administrative order, including a reference to the specific provision in this regulation that the order is implementing; and
 - (3) If applicable, identification of any conditions necessary to support the approval and compliance with this regulation.
 - (4) If applicable, identification of any corrective action necessary to support compliance with this regulation.
 - (5) Any administrative order denying a requested approval that is included in this regulation shall also include the reason for the denial, along with the supporting facts or documentation for that conclusion attached or included.
 - (6) Any administrative order issued for decisions identified in Section 9.03 may include conditions as necessary to implement the decision. Information identified in Section 9.01(b)(1) to (5) will be included, as necessary.
- (c) **Appeals.** Administrative orders issued pursuant to this section are effective the day the Control Officer or duly authorized representative approves the order and may be appealed to the Pollution Control Hearings Board pursuant to Agency Regulation I, Section 3.17 and RCW 43.21B.310.

SECTION 9.02 Violations and Civil Penalties

- (a) **Violations.** For any violations of provisions of this regulation, or orders issued pursuant to this regulation, the Agency will follow the procedures provided in Regulation I, Section 3.09.

- (b) Civil Penalties. Any entity that violates any provisions of this regulation or orders issued pursuant to this regulation may incur a civil penalty per the Agency's Regulation I, Section 3.11.

SECTION 9.03 Authority to Suspend, Revoke, Modify, or Invalidate

- (a) If the Agency determines that any basis for invalidation set forth in Section 9.03(b)(1) occurred, in addition to taking any enforcement action, the Agency may: suspend, restrict, modify, or revoke a CFS Online account; modify or delete a Certified CI; restrict, suspend, or invalidate credits; or recalculate the deficits in a CFS Online account. For purposes of this section, "Certified CI" includes any determination relating to carbon intensity made pursuant to Section 6.01 or 6.02, or relating to a credit-generating activity approved under Sections 7.04 and 7.05.
- (b) Determination that a Credit, Deficit Calculation, or Certified CI is Invalid.
 - (1) Basis for Invalidating. The Agency may modify or delete a Certified CI and invalidate credits or recalculate deficits based on any of the following:
 - (A) Any of the information used to generate or support the Certified CI was incorrect for reasons including the omission of material information or changes to the process following submission;
 - (B) Any material information submitted in connection with any Certified CI or 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 pursuant to Section 6.01 or 6.02;
 - (D) Fuel transaction or other data reported into CFS Online and used in calculating credits and deficits was incorrect or omitted material information;
 - (E) Credits or deficits were generated or transferred in violation of any provision of this subarticle or in violation of other laws, statutes or regulations; or
 - (F) An entity obligated to provide records under this subarticle refused to provide such records or failed to produce them within the required time.
 - (G) For purposes of this section, "material information" means:
 - (i) Information that would affect by any amount the Agency's determination of a carbon intensity score, expressed on a gCO₂e/MJ basis to two decimal places, or
 - (ii) Information that would affect by any whole integer the number of credits or deficits generated under Sections 7.01 through 7.05 or

resulting from any transaction or other activity reported in the CFS Online.

- (2) Notice. Upon making an initial determination that a credit (other than a provisional credit), deficit calculation, or Certified CI (other than a provisionally-certified CI) may be subject to modification, deletion, recalculation, or invalidation under Section 9.03(b)(1), the Agency will provide written notice, pursuant to Section 9.01, to all potentially affected entities, including those that hold or generate credits or deficits based on a Certified CI that may be invalid, and may notify any linked program. The notice will state the reason for the initial determination. Any entity receiving such notice may submit, within 20 days, any information that it wants the Agency to consider. The Agency may request information or documentation from any entity likely to have information or records relevant to the validity of a credit, deficit calculation, or Certified CI. Within 20 days of any such request, a regulated entity will make records and personnel available to assist the Agency in determining the validity of the credit, deficit calculation, or Certified CI.
- (3) Interim Account Suspension. When the Agency makes an initial determination pursuant to Section 9.03(b)(1), the Agency may immediately take steps to suspend an account or a Certified CI as needed to prevent additional accrual of credits or deficits under the Certified CI and to prevent transfer of potentially invalid credits or deficits. Suspension of an account may include locking an account within the CFS Online to prevent credit transfers or report alteration.
- (4) Final Determination. After making an initial determination and issuing a notice under Sections 9.03(b)(1) and (2), the Agency will make a final determination based on available information whether, in its judgment, any of the bases listed in Section 9.03(b)(1) exists, and notify affected entities and any linked program, pursuant to Section 9.01. If the final determination invalidates credits or deficit calculations, the corresponding credits and deficits will be added to or subtracted from the appropriate CFS Online accounts. Where such action creates a deficit in a past compliance period, 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 by the Agency.
- (5) Adjustment of Invalidated Credits or Miscalculated Deficits. To address any invalid credits or miscalculated deficits in the program, the Agency may:
 - (A) Remove the invalid credits from or add miscalculated deficits to the account of the credit or deficit generator, or other entity deemed responsible for the invalidation or miscalculation in the final determination pursuant to Section 7.04. The entity is responsible for returning its account to compliance; or
 - (B) Choose to retire credits from the Buffer Account to address invalidated credits or uncovered deficits.

- (C) After exercising options in Sections 9.03(b)(5)(A) and (B), the Agency may remove remaining invalid credits from an entity's account that holds or previously held invalid credits. The entity is responsible for returning its account to compliance.

SECTION 9.04 Confidentiality

- (a) Any emissions-related data submitted to the Agency under the CFS are public information and must not be designated as confidential.
- (b) Any proprietary or confidential information exempt from disclosure when reported to the Washington State Department of Licensing that the Agency obtains directly from that Department will remain exempt from disclosure.
- (c) Information considered confidential by the U.S. EPA is not considered confidential by the Agency unless it also meets the conditions established in Sections 9.04(b) or (d).
- (d) Any person submitting information to the Agency under CFS may request that the Agency keep information that is not emissions-related data confidential as proprietary information under RCW 70.94.205 or because it is otherwise exempt from public disclosure under the Washington Public Records Act (chapter 42.56 RCW). All such requests for confidentiality must meet the requirements of RCW 70.94.205 and the Agency's Regulation I, Article 14.
- (e) The Agency's determinations of the verification status of any report submitted for the CFS are public information. Confidential data used in the verification process will remain confidential if the data meets requirements of Sections 9.04(b) or (d).

SECTION 9.05 Program Review

Program review. The Agency will periodically review the CFS. The review will include, but is not limited to, an analysis and summary of: progress compared to carbon intensity reduction benchmarks, fuels and actions used to meet compliance, overall credit market, issues as identified by staff, and will consider input provided from the Equity Advisory Committee.

Article 10: Severability

Each provision of this regulation or its application to any person or circumstance will be deemed severable, and in the event that any provision in this regulation or its application to any person or circumstance is held to be invalid, the remainder of this regulation will continue in effect.