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7	IN THE SUPERIOR COURT OF	THE STATE OF WASHINGTON
8	FOR THURST	
9	ASSOCIATION OF WASHINGTON BUSINESS, INDUSTRIAL CUSTOMERS OF	No.
10	NORTHWEST UTILITIES, NORTHWEST FOOD PROCESSORS ASSOCIATION,	
11	NORTHWEST INDUSTRIAL GAS USERS, NORTHWEST PULP AND PAPER	PETITION FOR JUDICIAL REVIEW AND DECLARATORY
12	ASSOCIATION, WASHINGTON FARM BUREAU, WASHINGTON TRUCKING	JUDGMENT
13	ASSOCIATIONS, and WESTERN STATES PETROLEUM ASSOCIATION	
14	Petitioner,	
15	v.	
<ul><li>16</li><li>17</li></ul>	WASHINGTON STATE DEPARTMENT OF ECOLOGY,	
18	Respondent.	
19	I. INTRO	DUCTION
20	1. The Association of Washington	Business, Industrial Customers of Northwest
21	Utilities, Northwest Food Processors Association	on, Northwest Industrial Gas Users, Northwest
22	Pulp and Paper Industry Association, Wash	nington Farm Bureau, Washington Trucking
23	Associations, and Western States Petroleum	Association (collectively "Petitioners") hereby
24	petition for judicial review of new regulations	promulgated by the Washington Department of
25	Ecology ("WDOE") at WAC Ch. 173-442, g	generally referred to as the "Clean Air Rule"
26		

1 ("CAR"), and associated amendments to WAC Ch. 173-441 (collectively, the "Rules"). The

2 purpose of the Rules is to fulfill Governor Inslee's instruction to WDOE to establish a new and

expansive regulatory program to address emissions of greenhouse gases ("GHGs") in

Washington. The CAR seeks to reduce carbon emissions by imposing GHG emission reduction

requirements on stationary sources that emit GHGs, as well as certain oil and gas producers,

6 importers, and distributors that buy or sell products but do not themselves combust those

products or otherwise have any emissions from those products. The CAR requires these entities,

whether or not they emit GHGs, to buy so-called "emission reduction units" if they cannot meet

imposed reduction levels.

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The issues raised in this Petition do not ask this Court to determine whether the

enactment of a new GHG regulatory program in Washington is a good or bad policy for the

environment or for the citizens of Washington. Rather, the most fundamental and ultimately

fatal flaw with the Rules is that the legislature has not delegated to WDOE by statute the

authority to establish this new GHG regulatory program in the first place. Indeed, it is this very

circumstance – the Governor was previously unsuccessful in persuading the legislature to enact

statutory authority for such a program - that motivated Governor Inslee to direct WDOE to

promulgate the Rules by executive fiat. However, the Governor's order is no substitute for

legislative approval, and the CAR should be vacated for this reason alone.

19 3. In addition to this fatal flaw, the CAR is unlawful, in whole or in part, on

numerous additional grounds. The CAR was hurriedly enacted by WDOE in violation of

fundamental procedural protections required by the State Environmental Policy Act ("SEPA"),

22 the Regulatory Fairness Act ("RFA"), and the Administrative Procedure Act ("APA").

Moreover, basic elements of the CAR are otherwise arbitrary and capricious in violation of the

APA, and also violate the limits on taxation in Article VII, § 5 of the Washington Constitution.

4. Under the APA, a reviewing court "shall declare [a] rule invalid" if it finds that

"[t]he rule violates constitutional provisions; the rule exceeds the statutory authority of the

agency; the rule was adopted without compliance with statutory rule-making procedures; or the

2 rule is arbitrary and capricious." RCW 34.05.570(2)(c). The CAR fails on each one of these

independent criteria. Petitioners therefore respectfully requests that this Court declare the Rules

unlawful, and enter an order vacating WAC Ch. 173-442 and amendments to WAC Ch. 173-441,

as promulgated by WDOE on September 15, 2016.

#### 6 II. PARTIES

5. Petitioner the **Association of Washington Business** ("AWB") is Washington's oldest and largest statewide business association, and includes nearly 8,000 members representing 700,000 employees. AWB serves as both the state's chamber of commerce and a

manufacturing and technology association. AWB's principal office is located at 1414 Cherry

Street SE, Olympia, WA 98501. Its mailing address is P.O. Box 658, Olympia, WA 98507-

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6. AWB's members include the principal business stakeholders that are directly

regulated under and affected by the Rules, including stationary sources, petroleum product

producers and importers, and natural gas distributors. These large and small Washington

businesses are directly, substantially, and prejudicially affected by the Rules through unlawful

governmental regulation, increased costs, lost or foreclosed business and opportunities, and

numerous other procedural, substantive, economic, and environmental burdens.

7. Petitioner the **Industrial Customers of Northwest Utilities** ("ICNU") is a non-

profit organization composed of the largest, most innovative, and trusted employers in the

Northwest. Since 1981, ICNU members have provided tens of thousands of highly paid

technical jobs and consumed millions of kWh each month. ICNU has a large and diversified

base of members that represent industries such as agriculture, aeronautics, paper processing,

timber, food processing, information technology, mineral development, building supplies,

healthcare, and more. ICNU's members are directly and materially impacted by the increased

energy prices that will result from the CAR. ICNU's address is 818 SW 3rd Avenue, Suite 266,

2 Portland, OR 97204.

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8. Petitioner the Northwest Food Processors Association ("NWFPA") supports the

4 needs of the Pacific Northwest food processing industry in Idaho, Oregon, and Washington.

NWFPA's membership includes some of the foremost brand names in the food industry in the

United States, key producers of private label and institutional products, and locally run family

businesses. NWFPA is one of the nation's largest food processing trade associations, with more

than 500 member companies including 150 food processors and 350 suppliers. NWFPA's

members operating in Washington will be directly and negatively impacted by increased energy

prices associated with the CAR. NWFPA members include energy-intensive and trade-exposed

food manufacturers. Many NWFPA members are located in Washington, and several are

potential covered parties as stationary sources. Other members deliver products to Washington

or transport products through Washington, and will be impacted by increased fuel prices caused

by the CAR. NWFPA's address is 8338 NE Alderwood Road, Suite 160, Portland, OR 97220.

9. Petitioner the **Northwest Industrial Gas Users** ("NWIGU") is a non-profit trade

association composed of approximately 38 end-users of natural gas with major facilities in the

States of Oregon, Washington, and Idaho. NWIGU members include diverse end-user

businesses, including food processing, pulp and paper, wood products, aluminum, steel,

chemicals, electronics, electric generation, and aerospace. NWIGU's members include large

users of natural gas that are immediately and directly regulated by the CAR and others that will

be regulated in the future as thresholds for regulation decrease over time. In addition, members

that are smaller natural gas users will be impacted when they purchase sales service from natural

gas local distribution companies ("LDCs") that will experience higher natural gas costs in the

form of CAR compliance costs that are then passed through by the LDCs to customers in their

purchased gas commodity rates. NWIGU's address is 545 Grandview Drive, Ashland, OR

26 97520.

PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 4

1	10. Petitioner the Northwest Pulp and Paper Association ("NWPPA") is a 60-year-
2	old regional trade association with 13 member companies and 16 pulp and paper mills in
3	Washington, Oregon, and Idaho. These pulp and paper mills are stationary sources that use large
4	amounts of energy to make commodity products sold locally, nationally, and internationally
5	Washington's pulp and paper mills are energy-intensive and trade-exposed. Some NWPPA
6	members will be directly regulated under the CAR as stationary sources. The CAR will increase
7	production costs in Washington and thereby put these operations at risk to foreign competition
8	without similar carbon controls. NWPPA's address is 212 Union Avenue SE, Suite 103,

- 11. Petitioner the **Washington Farm Bureau** is an independent, non-governmental, and voluntary organization governed by and representing farm and ranch families united for the purpose of analyzing their problems and formulating action to achieve educational improvement, economic opportunity, and social advancement and, thereby, to promote the national well-being. Washington Farm Bureau has more than 46,000 member families. Fuel is a major input at nearly every step of the agricultural process. Washington Farm Bureau member families will be directly and negatively impacted by increased energy prices associated with the CAR, which will increase costs of agricultural production in Washington. Specifically, the CAR will lead to increased fuel, transportation, and processing costs, which will result in increased (and less competitive) prices for Washington State agricultural products on global markets. The Washington Farm Bureau's address is 975 Carpenter Road NE, Suite 301, Lacey, WA 98516.
- 12. Petitioner the **Washington Trucking Associations** ("WTA") is a non-profit corporation established in 1922 by a group of truck owners for the purpose of protecting and promoting the interests of all segments of Washington's trucking industry. WTA members operate tens of thousands of trucks, and consume millions of gallons of fuel each year hauling freight within and outside Washington. One third of a truckload carrier's operating cost is fuel. WTA's members will be directly and negatively impacted by increased fuel prices associated

PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 5

Olympia, WA 98501-1302.

1 with the CAR, as CAR-regulated suppliers of petroleum	products pass through CAR compliance
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2 costs in the form of higher fuel prices. WTA's address is 2102 Carriage Drive SW, Building F,

3 Olympia, WA 98502.

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4 13. Petitioner the Western States Petroleum Association ("WSPA") is a non-profit

5 trade association representing companies that explore for, produce, refine, transport, and market

6 petroleum and petroleum products and other energy supplies in five western states, including

Washington. WSPA's members are directly regulated by the CAR including regulation as

stationary sources, and petroleum products producers and importers. WSPA's address is 975

Carpenter Road NE, Suite 106, Lacey, WA 98516.

- 10 14. Because of the direct and significant interests of Petitioners and their members,
- 11 Petitioners have been an active participant in the CAR rulemaking process, including the

submission of detailed written comments by several of the Petitioners in response to WDOE's

proposed rules. A judgment in Petitioners' favor would substantially and directly redress the

prejudice caused to them and to their members by promulgation of the Rules.

15. Respondent WDOE is an administrative regulatory agency of the State of

Washington. The Director of WDOE is Maia Bellon. WDOE is generally responsible for

administering environmental regulatory programs in Washington pursuant to delegated statutory

authority and implementing regulations. WDOE headquarters is located at 300 Desmond Drive

SE, Lacey, WA 98503. Its mailing address is P.O. Box 47600, Olympia, WA 98504-7600.

16. At the direction of Governor Inslee, on September 15, 2016, WDOE promulgated

the Rules, which are the subject of this Petition.

#### III. JURISDICTION

23 17. This Court has jurisdiction under RCW 34.05.570.

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IV. VENUE

18. Venue is proper under RCW 34.05.570(2)(b). Petitioners seek a declaratory judgment that the Rules interfere with and impair, or immediately threaten to interfere with or impair, the legal rights or privileges of Petitioners' members.

#### V. FACTUAL BACKGROUND - THE RULES

- 19. The CAR establishes "emission standards for GHG emissions from certain stationary sources located in Washington State, petroleum product producers and importers, and natural gas distributors." Rule-Making Order, Wash. St. Reg. 16-19-047 (Sept. 15, 2016). Specifically, for parties covered under the regulation, the CAR mandates increasingly stringent GHG emission reductions over a course of years, beginning in 2017 for most parties, subject to enforcement penalties for each metric ton of GHG emitted beyond mandated levels, with each excess ton treated as a separate violation. WAC 173-442-020, -030, -060, -070, -340.
- 20. Under the CAR, covered parties can comply with their emission reduction requirements by reducing GHG emissions at their facilities (as reported to WDOE under WAC Ch. 173-441); by acquiring and "submitting" to WDOE credits called "emission reduction units" ("ERUs"); or through some combination of these two methods. WAC 173-442-200(4). An ERU is defined as "an accounting unit representing the emission reduction of one metric ton of CO<sub>2</sub>e." WAC 173-442-020(n). ERUs can be generated through voluntary GHG emission reductions beyond required levels; through emission reduction projects and programs in Washington; and through the purchase and retirement of "allowances" (emission credits) from multi-sector GHG emission reduction programs (outside Washington). WAC 173-442-110, -170. ERUs can be bought, sold, and banked (via recordation in a registry). WAC 173-442-130, -140. ERUs "must originate from GHG emission reductions occurring within Washington," unless derived from allowances. WAC 173-442-100(2). The CAR reduces the ability to use allowances for compliance over time. By 2035, a covered party may only use allowances to meet up to 5% of its compliance obligation. WAC 173-442-170.

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21. The amendments to WAC Ch. 173-441 introduce new GHG emission reporting
requirements under WAC 173-441-120, among other changes. Previously, a defined class of
fuel suppliers in Washington had to report GHG emissions data to WDOE based on data, from
fuel sales at the distribution "rack," provided to the Department of Licensing ("DOL") for
taxation purposes. The amendments add new reporting requirements for fuel suppliers, requiring
data - in addition to that provided to the DOL - based on products entering or leaving the
refinery gate (i.e., upstream in the distribution network), and requiring knowledge of which
products are ultimately distributed and combusted in Washington State (and, therefore, subject to
the CAR) or distributed outside the state (and, therefore, not subject to the CAR). WAC 173-
441-120(h).

VI. CLAIMS FOR RELIEF

## FIRST CLAIM FOR RELIEF: NO STATUTORY AUTHORITY TO ADOPT THE CAR

- 22. Petitioners incorporate by reference all preceding paragraphs of this Petition.
- 23. Washington administrative agencies are limited to the power and authority granted to them by the legislature. Accordingly, under the APA, a rule is invalid if it exceeds the statutory authority of the agency that promulgated it.
- 24. WDOE purports to have promulgated the CAR under authority of RCW Chs. 70.235 and 70.94. However, RCW Ch. 70.235, enacted in 2008, provides no new authority for WDOE to establish a GHG emissions reduction program, and instead directs the agency to submit a GHG emission reduction plan to the legislature for its consideration. Moreover, WDOE's authority to adopt "emission standards" under RCW Ch. 70.94 reaches only emissions sources, not petroleum product producers/importers or natural gas distributors. Petroleum product producers/importers and natural gas distributors only sell commodities into the economy. WDOE's authority to issue "emission standards" under RCW Ch. 70.94 does not authorize such

1	producers, importers, and distributors of products to be treated as "emission sources" subject to	
2	"emission s	tandards" when it is their customers that combust the commodity in the marketplace.
3	25.	WDOE has not relied upon, and does not have authority to promulgate the CAR
4	under, any o	other statute.
5	26.	Because WDOE lacks statutory authority to promulgate the CAR, Respondent has
6	violated the	APA.
7 8	·	SECOND CLAIM FOR RELIEF: NO STATUTORY AUTHORITY FOR EMISSION CREDITS
9	27.	Petitioners incorporate by reference all preceding paragraphs of this Petition.
10	28.	In the CAR, WDOE has established a new use for emission credits referred to as
11	ERUs.	
12	29.	The Washington legislature has authorized the use of emission credits to meet
13	emission co	ntrol requirements in two specific programs: the credit banking program in RCW
14	70.94.850, a	and the power plant carbon dioxide mitigation program in RCW Ch. 80.70 and RCW
15	70.94.892.	In each case, the legislature both specifically authorized the use of credits and
16	expressly de	efined the functions that credits can perform. The statutes that authorize use of
17	emission cre	edits limit their use to transactions other than reducing GHG emissions from existing
18	sources.	
19	30.	WDOE has not relied upon, and does not have authority to use ERUs in the CAR
20	under, any o	ther statute.
21	31.	Because WDOE lacks statutory authority to use ERUs in satisfaction of emission
22	control requ	irements under the CAR, Respondent has violated the APA.
23	FAI	THIRD CLAIM FOR RELIEF: LURE TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT
24	22	
25	32.	Petitioners incorporate by reference all preceding paragraphs of this Petition.
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1 33. Under SEPA, an Environmental Impact Statement ("EIS") must be prepared for

"major actions having a probable significant, adverse environmental impact." RCW

3 43.21C.031(1).

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WDOE declined to produce an EIS for the CAR. Instead, on May 31, 2016,

WDOE concluded that this new, major regulatory program does "not have a probable significant

adverse impact on the environment," and issued a determination of non-significance pursuant to

WAC 197-11-340.

8 35. WDOE's determination of non-significance is clear error. The CAR will have

unintended probable significant adverse environmental impacts that require analysis through the

preparation of an EIS under SEPA, including but not limited to the following:

11 a. The CAR will shift manufacturing to other areas with less stringent GHG

regulations (commonly referred to as "leakage"). Washington manufacturers typically achieve

better energy efficiency and lower GHG emission rates per unit of output than their foreign

competitors, but commodity businesses operate on very low margins. The CAR increases GHG

emissions by displacing production from energy-efficient Washington companies with

commodities produced less efficiently outside of Washington (including in China). The

environmental effects will include more GHG emissions to produce the commodities currently

made in Washington and additional adverse environmental impacts associated with the delivery

of those commodities to the United States.

b. The CAR will increase the use of out-of-state electricity generation by

facilities with significantly greater emissions. Utilities in 14 western states and two Canadian

provinces coordinate the dispatching of their generating resources to provide the least costly

electricity to their customers. By imposing GHG offset costs on efficient combined-cycle natural

gas-fired turbine electric generating plants in Washington, the CAR will displace production

from those plants with electricity from higher-emitting generating plants in other states. In

addition, by shifting electric power production to less efficient resources in other states that emit

1 higher rates of GHGs and other pollutants, the CAR is likely to prolong the life of coal-fired

2 generating units in states like Montana and Wyoming. The probable significant adverse

environmental impacts of these consequences of the CAR paradoxically include both higher

GHG emissions and higher emission rates of criteria and toxic pollutants.

5 c. The only way for natural gas LDCs to meet their CAR compliance

6 burdens is by purchasing increasing quantities of ERUs. To meet these obligations, LDCs will

need to raise their rates to residential and commercial customers. As an option for heating

homes, natural gas competes with other sources of fuel (such as wood) that have higher levels of

fine particulates and toxic pollutants. Further, the adverse impacts of increased wood

combustion are highest in the winter, when several Washington communities verge on exceeding

National Ambient Air Quality Standards for fine particulate matter. The CAR will cause

increased emissions from consumers responding to higher natural gas prices by switching back

to wood or electricity to heat their homes and businesses.

d. After the public comment period, WDOE identified a list of reasonably

foreseeable projects that may be implemented for purposes of complying with the CAR. This list

is arbitrary and inadequate in failing to include other reasonably foreseeable compliance actions,

including relocation of businesses out of state, transfer of power generation out of state, and fuel

switching. Moreover, although WDOE has acknowledged that the projects it has identified will

have direct and indirect environmental impacts, some of which have been summarily listed by

WDOE, the agency has conducted no analysis and provided no explanation as to whether the

direct, indirect, and cumulative environmental impacts of these projects are likely to be

significant. Instead, WDOE has arbitrarily asserted that this "new information" does not result in

any new significant adverse environmental impacts.

36. In addition, WDOE has unlawfully supplemented the record with, and now

purports to rely on, post hoc studies and analyses that were generated after WDOE made its

determination of non-significance. These post hoc materials neither formed the basis for

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1	WDOE's decision nor were available for public review and comment. Moreover, these post hoc
2	studies cannot supplant preparation of an EIS as a means of analyzing the probable
3	environmental effects of promulgating the Rules.
4	37. In light of the probable significant adverse environmental impacts, and for the
5	additional reasons alleged above, Respondent was required to prepare an EIS before
6	promulgating the CAR. WDOE's finding that preparation of an EIS was not required, and its
7	related failure to prepare an EIS, is arbitrary, is clearly erroneous, and violated SEPA and the
8	APA.
9	FOURTH CLAIM FOR RELIEF:
10	VIOLATION OF THE APA THROUGH ARBITRARY TREATMENT OF ENERGY INTENSIVE INDUSTRIES
11	38. Petitioners incorporate by reference all preceding paragraphs of this Petition.
12	39. In developing the CAR, WDOE recognized that certain Energy Intensive, Trade
13	Exposed ("EITE") industries would be disproportionately burdened by the CAR. The EITE
14	industries face significant increases in production costs when energy prices increase, and face
15	acute pressure from out-of-state or out-of-country competitors that are not subject to the burden's
16	imposed by the CAR. Such competition can result in leakage that shifts industrial production out
17	of state, thereby impacting Washington's economy and resulting in net increases in GHG
18	emissions.
19	40. Accordingly, the CAR, like other GHG control programs, provides certain
20	protections for EITE industries, intended to lessen the impact.
21	41. The CAR's EITE provisions, however, are arbitrary and capricious in their
22	application and scope. Principally, WDOE arbitrarily included certain facility types and
23	excluded others from the definition of an EITE on the basis of industrial classification numbers
24	without evaluating the degree of trade exposure for each facility type. In addition, WDOE

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1	premised the application of the EITE protections on the acquisition of (out-of-state) confidential	
2	business information, such as production data, that is not practicably available.	
3	42. Because WDOE failed to rationally analyze and explain the grounds for	
4	including and excluding facility types from the definition of and protections afforded to EITE	
5	industries, Respondent violated the APA.	
6 7	FIFTH CLAIM FOR RELIEF: VIOLATION OF THE APA THROUGH ARBITRARY COST-BENEFIT ANALYSIS	
8	43. Petitioners incorporate by reference all preceding paragraphs of this Petition.	
9	44. The CAR is a "significant legislative rule" as that term is defined under the APA	
10	at RCW 34.05.328(5)(c)(iii). Under the APA, before adopting a significant legislative rule, an	
11	agency must prepare a preliminary cost-benefit analysis. Based on that analysis, the agency must	
12	determine that the probable benefits of the rule exceed the probable costs, taking into account	
13	both the qualitative and quantitative benefits and costs and the specific directives of the statute	
14	being implemented. An agency must provide a final cost-benefit analysis when the rule is	
15	adopted. RCW 34.05.328(1)(c)-(d).	
16	45. The cost-benefit analysis performed by WDOE is inadequate and arbitrary.	
17	Among other flaws, WDOE violated RCW 34.05.328(1)(d) by comparing local costs with global	
18	benefits; WDOE misapplied the federal social cost of carbon metric to grossly overstate the	
19	benefits of the CAR; WDOE's estimate of benefits is overstated; and WDOE severely	
20	understated the costs of the CAR. Furthermore WDOE failed to conduct any analysis to	
21	determine whether the ERUs required by the Rules will be available in sufficient quantities to	

23 46. Because the cost-benefit analysis prepared by WDOE is arbitrary and inadequate, 24 Respondent has violated the APA.

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allow regulated entities to comply with the CAR.

1	SIXTH CLAIM FOR RELIEF:
	VIOLATION OF THE APA THROUGH ARBITRARY LEAST-BURDENSOME
2.	ALTERNATIVE ANALYSIS

- 47. Petitioners incorporate by reference all preceding paragraphs of this Petition.
- 48. The CAR is a "significant legislative rule" as that term is defined under the APA at RCW 34.05.328(5)(c)(iii). Under the APA, before adopting a significant legislative rule, an agency must determine, after considering alternative versions of the rule and the cost-benefit analysis described above, that the rule is the "least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives" of the statute that the rule implements. RCW 34.05.328(1)(e).
  - 49. WDOE prepared a perfunctory, inadequate, and arbitrary "Least Burdensome Alternative Analysis." Among other flaws, WDOE's pre-conceived analysis identifies and then summarily rejects conceptual alternatives without consideration of reasonable alternatives and without conducting an adequate study.
  - 50. Because WDOE failed to conduct the least-burdensome alternative analysis required by statute, and failed to adequately explain the analysis it did conduct, Respondent violated the APA.

#### SEVENTH CLAIM FOR RELIEF: VIOLATION OF THE RFA THROUGH ARBITRARY SBEIS

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- 51. Petitioners incorporate by reference all preceding paragraphs of this Petition.
- 52. Under the RFA, an agency must prepare a small business economic impact statement ("SBEIS") for proposed rules that "will impose more than minor costs on businesses in an industry." RCW 19.85.030(1)(a). Among other requirements for the SBEIS, an agency must determine "whether compliance with the rule will cause businesses to lose sales or revenue." RCW 19.85.040(1).
- 25 53. WDOE's SBEIS for the CAR concludes that the "proposed rule inherently is not likely to impose disproportionate costs on small businesses," because the only businesses

PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 14 directly affected by the CAR are large energy producers and importers. WDOE recognized that

2 the CAR could impact fuel prices in the state, but declined to evaluate whether those declines

would impact small businesses because it could not identify specific businesses that would be

4 impacted.

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5 54. WDOE's SBEIS for the CAR is perfunctory, arbitrary, and otherwise inadequate

for numerous reasons, including but not limited to the following:

7 a. WDOE's finding that uncertainties about the compliance strategies

covered parties will follow to implement the CAR make it impossible to quantify the degree to

which sales quantities would be impacted by the CAR is arbitrary and false.

b. Notwithstanding the uncertainties, WDOE arbitrarily and falsely

concluded that the CAR and amendments to WAC Ch. 173-441 "do not impose costs on small

businesses."

c. WDOE's assumption that there will be no new reporting costs for entities

already reporting GHG emissions under WAC Ch. 173-441 is arbitrary and false because WAC

173-441-120 imposes a new costly reporting scheme for fuel producers, importers, and exporters

in addition to the previous reporting scheme.

17 55. In addition, WDOE's contention that it was not required to address impacts to

small businesses associated with higher fuel costs (or to mitigate for those impacts) because the

RFA only applies to direct compliance costs, not the indirect costs imposed on small businesses,

is arbitrary and circular. In the CAR, WDOE has decided not to regulate the source of GHG

emissions (including small business users) at the point of combustion, but instead to regulate

GHGs by imposing new regulatory costs in the form of ERUs on upstream suppliers that do not

consume fuel. This structure is intended to ensure that these same regulatory costs will be

imposed downstream, thereby increasing the costs incurred by fuel consumers, including small

businesses. WDOE may not manipulate the CAR so as to evade the RFA and its obligations to

26 small businesses.

PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 15

1 56. Because WDOE's SBEIS fails to meet the requirements of the RFA, Respondent 2 has violated the APA.

## EIGHTH CLAIM FOR RELIEF: AMENDMENTS TO WAC CH. 173-441 VIOLATE RCW 70.94.151

- 5 Petitioners incorporate by reference all preceding paragraphs of this Petition.
  - 58. The 2010 legislature directed WDOE to base GHG emissions reporting by fuel suppliers exclusively on data reported to the DOL for tax purposes. Specifically, the 2010 law states that WDOE "shall not require suppliers [of particular fuels listed and defined by statute] to use additional data to calculate greenhouse gas emissions other than the data the suppliers report to the department of licensing." Laws of 2010, Ch. 146, § 2(5)(a)(iii), codified at RCW 70.94.151(5)(a)(iii).
    - 59. WAC 173-441-130 (Calculation methods for suppliers) was previously promulgated to implement RCW 70.94.151(5)(a)(iii), and it adheres to the statutory requirement described above by requiring fuel suppliers to report GHG emissions based on data, from sales at a distribution terminal (often referred to as "the rack"), provided to the DOL.
    - 60. WDOE's amendments to WAC 173-441-120 create a new reporting system for fuel suppliers in addition to WAC 173-441-130, which remains in place. WDOE's amendments increase both the number of entities that must report (extending the requirement to "suppliers of petroleum products" as defined by EPA) and the data that must be reported (extending the requirements to importers and import data).
    - 61. WDOE's new reporting scheme for fuel suppliers conflicts with RCW 70.94.151(5) in at least the following ways: it ignores the statutory mandate described above to base reporting for fuel suppliers exclusively on the DOL reporting system; it defines terms in ways that deviate from the RCW 70.94.151 definitions of those terms; it moves reporting upstream from the fuel distributors that report fuel sales "at the rack" under the DOL system to refiners and importers that engage in frequent wholesale transactions that are not reported to

PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 16

1	DOL; it requires reporting on products that are not subject to reporting under the DOL system; is
2	will result in double-counting some emissions and counting CAR-exempt emissions; and in
3	requires fuel suppliers (including refiners) to know the final destination of their products, which
4	is information they often do not have and cannot obtain.
5	62. Accordingly, in promulgating amendments to WAC Ch. 173-441, WDOE
6	violated RCW 70.94.151 and violated the APA by exceeding its statutory authority.
7 8	NINTH CLAIM FOR RELIEF: VIOLATION OF ARTICLE VII, SECTION 5 OF THE WASHINGTON CONSTITUTION
9	63. Petitioners incorporate by reference all preceding paragraphs of this Petition.
10	64. A charge is a tax when its primary purpose is to accomplish desired public
11	benefits that cost money. Forcing regulated entities to do things that cost money to achieve
12	public benefits can constitute "a tax in kind," even in the absence of a direct payment of money
13	to the government.
14	65. Under Article VII, § 5 of the Washington Constitution, a new tax burden can be
15	created only by law that states such a purpose.
16	66. The CAR's ERU reserve provisions in WAC 173-442-240 violate Article VII, § 5
17	of the Washington Constitution by assessing a tax on covered parties to fund projects selected by
18 19	WDOE or by an Environmental Justice Advisory Committee. Because the primary purpose of
20	some if not all of the CAR's reserve provisions is to accomplish desired public benefits that cost
21	money, the ERU surcharge levied against covered parties to fund the reserve account constitutes
22	a tax under Washington law. Because the CAR forces regulated entities to do things (i.e., submit
23	ERUs) that cost money in order to achieve public benefits, the CAR constitutes a tax in kind,
24	even in the absence of a direct payment of money to the government.
25	

1	67. WDOE cannot shift the social costs of desired public benefits onto a subset of th
2	population under the guise of a regulation. This cost-shifting is a tax, and absent specifi
3	legislative pronouncement, the tax is impermissible and invalid.
4	68. No statute authorizes WDOE to assess a tax against covered parties to fund th
5	ERU reserve to enable programs or projects selected by WDOE or by an Environmental Justic
6	Advisory Committee.
7	69. Because the CAR provisions that assess a surcharge against all covered partie
8	with an emission reduction obligation constitute a tax, and because this tax burden was no
9	created by a law stating such a purpose, these provisions constitute an invalid tax under the
10	Washington Constitution. Because the reserve provisions violate the Washington Constitution
11	Respondent has violated the APA.
12	VII. RELIEF REQUESTED
13	1. Pursuant to RCW 34.05.574, Petitioners respectfully request that the Cour
14	declare unlawful and vacate in their entirety WAC Ch. 173-442 and the amendments to WAC
15	Ch. 173-441 promulgated by WDOE on September 15, 2016.
16	2. In the alternative, Petitioners request that the Court declare unlawful and set aside
17	all aspects of the promulgated Rules that are in excess of statutory authority, arbitrary and
18	capricious, contrary to the state constitution, or otherwise unlawful.
19	3. Petitioners also request costs and fees, including reasonable attorneys' fees, to the
20	extent allowed by law, and such further and additional relief as may be deemed just and prope
<ul><li>21</li><li>22</li></ul>	by the Court.
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1	DATED: September 27, 2016.	
2	BillEB. Septemoet 27, 2010.	STOEL RIVES LLP
3		
4		La T.M. WGDA NI 20246
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1	<u>CERTIFICATE OF SERVICE</u>
2	I, Sharman D. Loomis, certify and declare:
3	I am over the age of 18 years, make this Declaration based upon personal knowledge, and
4 5	am competent to testify regarding the facts contained herein.
6	On September 27, 2016, I served a true and correct copy of the foregoing <i>Petition for</i>
7	Judicial Review and Declaratory Judgment on the following person and in the manner listed
8	below:
9	Maia Bellon
10	Director □ U. S. Mail Washington State Department of Ecology □ Legal Messenger
11	ATTN: Appeals Processing Desk 300 Desmond Drive S.E. Lacey, WA 98503
12	I certify under penalty of perjury pursuant to the laws of the State of Washington that the
13	
14	foregoing is true and correct.
15	DATED: September 27, 2016 at Seattle, Washington.
16	STOEL RIVES, LLP
17 18	Sharman D. Loomis, Practice Assistant
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PETITION FOR JUDICIAL REVIEW AND DECLARATORY JUDGMENT - 20

# ATTACHMENT A

### Chapter 173-442 WAC CLEAN AIR RULE

#### SECTION 1 - OVERVIEW

#### NEW SECTION

WAC 173-442-010 Scope. This rule establishes GHG emissions standards starting in 2017 for:

- Certain stationary sources.
- Petroleum product producers and importers.
- Natural gas distributors.

#### NEW SECTION

WAC 173-442-020 Definitions. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

- (1) Definitions.
- (a) "Actual emissions" means GHG emissions reported under chapter 173-441 WAC except for emissions exempted under WAC 173-442-040.
- (b) "Allowance" means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent that is issued or otherwise distributed by a GHG emission reduction program established by a jurisdiction other than the state of Washington. Offset credits from the same program are not considered allowances.
- (c) "Baseline GHG emissions value" means a value defined by WAC 173-442-050.
  - (d) "Calendar year" means January 1 through December 31.
- (e) "Carbon dioxide equivalent" or "CO<sub>2</sub> equivalent" or "CO<sub>2</sub>e" means a metric measure used to compare the emissions from various GHGs based upon their global warming potential. Ecology uses the global warming potential values listed in WAC 173-441-040 to determine the CO<sub>2</sub> equivalent of emissions.
- (f) "Compliance obligation" means the value calculated using WAC 173-442-200(3).
- (g) "Compliance period" means a consecutive three-year period beginning in 2017 (2017 through 2019), and continuing forward (2020 through 2022; 2023 through 2025; etc.).
- (h) "Compliance report" means the report required by WAC 173-442-210.
- (i) "Compliance threshold" means the emission levels in WAC 173-442-030(3).

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- (j) "Covered GHG emissions" means any of the following:
- (i) "Covered stationary source GHG emissions" means GHG emissions from source categories listed in WAC 173-441-120. This includes emissions voluntarily reported under chapter 173-441 WAC using methods established in WAC 173-441-120.
- (ii) "Covered petroleum product producer or importer GHG emissions" means CO<sub>2</sub> emissions that result from the complete combustion or oxidation of products covered under the Suppliers of Petroleum Products, 40 C.F.R. Part 98, Subpart MM, source category listed in WAC 173-441-120. This includes emissions voluntarily reported under chapter 173-441 WAC using methods established in WAC 173-441-120.
- (iii) "Covered natural gas distributor GHG emissions" means  ${\rm CO_2}$  emissions that result from the complete combustion or oxidation of products covered under WAC 173-441-120. This includes:
- (A) Natural gas and natural gas liquids listed under 40 C.F.R. Part 98, Subpart NN; and
  - (B) Emissions voluntarily reported under chapter 173-441 WAC.
  - (iv) Exemptions are listed in WAC 173-442-040.
  - (k) "Covered party" means the owner or operator of a:
  - (i) Stationary source located in Washington;
- (ii) Petroleum product producer in Washington or importer to Washington; or
  - (iii) Natural gas distributor in Washington.
- (1) "Curtailment" means the cessation of production at a stationary source greater than four consecutive months in a calendar year. Curtailment does not include the following activities:
  - (i) Cessation of production to:
  - (A) Perform routine maintenance;
  - (B) Perform nonroutine maintenance;
  - (C) Make capital improvements to the covered party's facility; or
  - (D) Perform facility life extension projects.
  - (ii) Electric generating units are ineligible for this provision.
  - (m) "EITE covered party" means a covered party that:
- (i) Has a primary North American Industry Classification System (NAICS) code included in the following list:
  - (A) 311411: Frozen fruit, juice, and vegetable manufacturing;
  - (B) 311423: Dried and dehydrated food manufacturing;
  - (C) 311611: Animal (except poultry) slaughtering;
  - (D) 322110: Pulp mills;
  - (E) 322121: Paper (except newsprint) mills;
  - (F) 322122: Newsprint mills;
  - (G) 322130: Paperboard mills;
  - (H) 325188: All other basic inorganic chemical manufacturing;
  - (I) 325199: All other basic organic chemical manufacturing;
  - (J) 325311: Nitrogenous fertilizer manufacturing;
  - (K) 327211: Flat glass manufacturing;
  - (L) 327213: Glass container manufacturing;
  - (M) 327310: Cement manufacturing;
  - (N) 327410: Lime manufacturing;
  - (0) 327420: Gypsum product manufacturing;
  - (P) 327992: Ultra high purity silicon manufacturing;
  - (Q) 331111: Iron and steel mills;
  - (R) 331312: Primary aluminum production;
  - (S) 331315: Aluminum sheet, plate, and foil manufacturing;
- (T) 331419: Primary smelting and refining of nonferrous metal (except copper and aluminum);

- (U) 334413: Semiconductor and related device manufacturing;
- (V) 336411: Aircraft manufacturing;
- (W) 336413: Other aircraft parts and auxiliary equipment manufacturing.
- (ii) A covered party with a primary NAICS code in (m)(i) of this subsection can choose not to be treated as an EITE covered party under this rule. This decision cannot be reversed, even if there is a change in the operational control of the covered party. A covered party choosing not to be treated as an EITE covered party must notify ecology of the decision no later than:
- (A) A covered party with covered GHG emissions averaging greater than or equal to 70,000 MT  $CO_2e$  per year during calendar years 2012 through 2016 must notify ecology by January 1, 2017.
- (B) All other covered parties must notify ecology by January 1 of the first year in their baseline period as established under WAC  $173-442-050\,(4)$ .
- (n) "Emission reduction unit" or "ERU" is an accounting unit representing the emission reduction of one metric ton of  $\rm CO_2e$ . An emission reduction unit is composed of any GHG listed in WAC 173-441-040, or, for the purposes of using WAC 173-442-160 (6)(b), destroyed chlorofluorocarbons or hydrochlorofluorocarbons.
- (o) "Emission reduction pathway" means the annual reduction requirement established in WAC 173-442-060 and 173-442-070.
- (p) "Emission reduction requirement" means a covered party's limit in MT  $CO_2$ e for a compliance period based on the sum of the GHG emission reduction pathways for that period.
- (q) "Independent qualified organization" means an organization identified by the energy facility site evaluation council as meeting the requirements of RCW 80.70.050.
- (r) "Renewable energy credit" means a tradable certificate of proof of an eligible renewable resource that is verified by the renewable energy credit tracking system identified in WAC 194-37-210(1) and which includes all of the nonpower attributes associated with that electricity as identified in RCW 19.285.030.
- (s) "Reserve" means an account established by ecology to ensure consistency with an aggregate emission cap for the program and for purposes consistent with this chapter.
- (t) "Vintage year" means the calendar year in which an ERU is first recorded, or, in the case of an allowance, the year designated as the vintage year for that allowance by the GHG emission reduction program supplying the allowance.
- (2) **Definitions from chapter 173-441 WAC.** If subsection (1) of this section provides no definition, the definition found in chapter 173-441 WAC applies.
- (3) **Definitions from chapter 173-400 WAC.** If subsections (1) and (2) of this section provide no definition, the definition found in chapter 173-400 WAC applies.
  - (4) Acronym list.
  - CO2 means carbon dioxide.
  - CO2e means carbon dioxide equivalent.
  - EITE means energy intensive and trade exposed.
  - ERU means an emission reduction unit.
  - GHG means greenhouse gas.
  - MT means metric ton.
  - MT CO2e means metric ton of carbon dioxide equivalent.
  - REC means Renewable Energy Credit.

#### SECTION 2 - APPLICABILITY REQUIREMENTS

#### NEW SECTION

#### WAC 173-442-030 Applicability. Who does this rule apply to?

- (1) Emission reduction requirements apply to a covered party when their three calendar year rolling average, beginning with calendar year 2012, covered GHG emissions are greater than or equal to the compliance threshold in the corresponding compliance period in Table 1 of this section.
- (2) Exception. Applicability to this chapter begins no earlier than 2020 for EITE covered parties and petroleum product importers.
- (3) Compliance threshold. A covered party with covered GHG emissions that have a three calendar year rolling average, beginning with calendar year 2012, greater than or equal to the compliance threshold in Table 1 must comply with their compliance obligation under WAC 173-442-200.

Table 1
Compliance Threshold

Compliance Threshold (MT CO <sub>2</sub> e/Year)	First Compliance Period (Calendar Year)	
100,000	2017-19*	
95,000	2020-22	
90,000	2023-25	
85,000	2026-28	
80,000	2029-31	
75,000	2032-34	
70,000	2035 and beyond	

- \* The 100,000 MT CO<sub>2</sub>e/Year threshold is used for the three calendar year rolling average applicability determination beginning in 2012.
- (4) Whenever there is any change that affects covered GHG emissions, a covered party must reevaluate whether this chapter applies. Changes include, but are not limited to:
  - (a) Revised emissions calculations or other calculations;
  - (b) Process modifications;
  - (c) Changes in operating hours;
  - (d) Changes in production;
  - (e) Changes in fuel or raw material use;
  - (f) Addition of equipment;
  - (g) Source expansion;
  - (h) Changes in the compliance threshold; and
  - (i) Changes to this chapter.
- (5) A covered party is not subject to the requirements in this section:
- (a) After three consecutive years of covered GHG emissions less than 50,000 MT  $CO_2e$ ; and

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- (b) Compliance with the requirements in WAC 173-442-210(7).
- (6) Voluntary participation.
- (a) An entity with covered GHG emissions below the compliance threshold during a compliance period can choose to participate voluntarily in this chapter. A voluntary participant must comply with the requirements for a covered party except that a voluntary participant does not have a GHG emission reduction requirement.
  - (b) Opt-out.
- (i) A voluntary party who elected to become a covered party by voluntarily participating in this chapter may decide later to return to exempt status.
- (ii) For a voluntary party to opt-out of this chapter and for it to be effective, the voluntary party must complete all actions specified below.
- (A) The actions must be completed and documentation submitted in a format specified by ecology.
- (B) A voluntary covered party that wishes to opt-out of this program must apply to ecology by September 1 of the last year of a compliance period.
  - (iii) Notification requirements.
- (A) Provide a ninety-day notice of intent to opt-out and a proposed effective date for the completion of the opt-out process; and
  - (B) Submit a final compliance report.

- WAC 173-442-040 Exemptions. (1) Covered GHG emissions do not include:
- (a) The following subparts referenced in Table 120-1 in WAC 173-441-120;
  - (i) Manure Management: Subpart JJ;
  - (ii) Suppliers of Coal-Based Liquid Fuels: Subpart LL;
  - (iii) Suppliers of Industrial Greenhouse Gases: Subpart 00;
- (iv) Importers and Exporters of Fluorinated Greenhouse Gases Contained in Pre-Charged Equipment or Closed-Cell Foams: Subpart QQ.
- (b)  $CO_2$  from industrial combustion of biomass in the form of fuel wood, wood waste, wood by-products, and wood residuals, as provided in RCW 70.235.020(3);
- (c)  ${\rm CO}_2$  that is converted into mineral form and that is not emitted into the atmosphere; and
- (d) Emissions from a coal-fired baseload electric generation facility in Washington that emitted more than one million tons of GHGs in any calendar year prior to 2008, as provided in RCW 80.80.040(3).
- (2) Covered GHG emissions from petroleum product producer or importer do not include:
- (a)  $CO_2$  emissions that would result from the complete combustion or oxidation of the following products as specified in 40 C.F.R. Part 98, Table MM-1, as adopted by May 1, 2016:
  - (i) Kerosene-type jet fuel;
  - (ii) Residual fuel oil No. 5 (navy special);
  - (iii) Residual fuel oil No. 6 (a.k.a. bunker C);
  - (iv) Petrochemical feedstocks: Naphthas (< 401 °F);
  - (v) Petrochemical feedstocks: Other oils (> 401 °F);

- (vi) Lubricants;
- (vii) Waxes; and
- (viii) Asphalt and road oil.
- (b)  ${\rm CO}_2$  emissions that result from the complete combustion or oxidation of products when all of the following occur:
  - (i) The products are exported from Washington;
- (ii) Final destination of the product is outside of Washington; and
- (iii) The GHG emissions associated with exported petroleum products are voluntarily reported in compliance with chapter 173-441 WAC.
- (3) Covered GHG emissions for a natural gas distributor do not include:
- (a) Emissions from the combustion, oxidation, or other use of products supplied to a covered party or voluntary party that has an emission reduction requirement; or
- (b) Units or processes exempted in subsection (4) of this section.
- (4) Stationary sources included in the Clean Power Plan (40 C.F.R. Part 60 Subpart UUUU) will be considered to comply with the requirements of this chapter at the beginning of the first compliance period of the Clean Power Plan provided that:
- (a) EPA has approved Washington's implementation plan for the Clean Power Plan;
- (b) The approved implementation plan requires greater GHG emissions reduction than required under 40 C.F.R. Part 60, Subpart UUUU; and
- (c) When a unit within a covered party's facility is subject to the Clean Power Plan, then only the GHG emissions from that unit(s) are covered under this subsection.

- WAC 173-442-050 Baseline GHG emissions value for non-EITE covered parties. (1) Ecology must assign a baseline GHG emissions value to each non-EITE covered party. Covered parties fall into two categories:
- (a) **Category 1.** A covered party with covered GHG emissions averaging greater than or equal to 70,000 MT  $CO_2$ e per year during calendar years 2012 through 2016; or
  - (b) Category 2. A covered party which:
- (i) Is a voluntary participant who chooses to participate in the program;
  - (ii) Did not operate between calendar years 2012 through 2016;
- (iii) Had average covered GHG emissions less than 70,000 MT  $\rm CO_{2}e$  per year during calendar years 2012 through 2016; or
- (iv) Is a petroleum product importer. This only applies to covered GHG emissions associated with imported petroleum products.
- (c) Ecology may adjust the baseline GHG emissions value for Category 1 or 2 covered parties based on:
- (i) Reported GHG emissions data when the calculation methodology approved under chapter 173-441 WAC changes.
- (ii) Updated annual GHG reports or an assigned emissions level under WAC 173-441-086.

Table 2
Baseline GHG Emissions Value Determination for Non-EITE Covered Parties

Covered Party	Operated 2012 – 2016 (at least 3 calendar years)	Average GHG Emissions (MT CO <sub>2</sub> e/year)	Ecology Action
Category 1	Yes	≥ 70,000	Assign baseline Refer to subsections (1), (2) and (3) of this section
Category 2	Yes		Assign baseline when emissions reach 70,000 MT CO <sub>2</sub> e, or if requested
	No < 70,000	Refer to subsections (1), (4) and (5) of this section	
	N/A or No	≥ 70,000	Assign baseline Refer to subsections (1), (4) and (5) of this section

- (2) Data sources for setting a Category 1 baseline GHG emissions value. Ecology must use the following sources of data to set a Category 1 baseline GHG emissions value.
- (a) Annual GHG emissions reports submitted under chapter 173-441 WAC; or
- (b) An assigned emissions level established under WAC 173-441-086.
- (c) Petroleum product producers and natural gas distributors must submit to ecology all emissions data submitted to EPA, or required to be retained by EPA, under 40 C.F.R. Part 98, Subparts MM and NN for calendar years 2012 through 2016. This submission to ecology must be complete by March 31, 2017, and consistent with the methods established in chapter 173-441 WAC.
- (d) Ecology must use one of the following sources of information to adjust the baseline GHG emissions value of petroleum product producers that adjust their compliance obligation to account for exported petroleum products as specified in WAC 173-442-040 (2)(b):
- (i) The petroleum products producer's GHG emissions for calendar years 2012 through 2016 associated with exported petroleum products voluntarily reported by October 31, 2017, using the methods established in WAC 173-441-120; or
- (ii) An assigned GHG emissions level for the petroleum product producer's exported petroleum products based on methods established in WAC 173-441-086. Ecology may choose to base the assigned emissions level on either:
- (A) GHG emissions data associated with exported petroleum products reported during calendar years 2017 through 2019 using the methods established in WAC 173-441-120; or
- (B) Ecology's estimate of the petroleum product producer's GHG emissions data associated with exported petroleum products during calendar years 2012 through 2016.
- (3) Process to calculate a Category 1 baseline GHG emissions value.
- (a) Ecology must calculate the Category 1 baseline GHG emissions value based on the average (in MT  $CO_2$ e per year) of:
- (i) Five years of covered GHG emissions data between 2012 through 2016: or
- (ii) At least three years of covered GHG emissions subject to (b) of this subsection.

- (b) Ecology may omit a specific calendar year from calculating the baseline GHG emissions value when the data meets at least one of the following criteria:
- (i) The data represents a significant difference from the average data based on all of the following:
- (A) Primarily caused by a change in the GHG emissions calculation methodology approved under chapter 173-441 WAC during the baseline period that is not correctable by adjusting the existing reported GHG data;
- (B) The GHG emissions calculation methodology produced a fifteen percent or more difference between that calendar year's GHG emissions and the 2012 through 2016 average of GHG emissions using the methodology in (a) of this subsection; and
- (C) The change is not the result of a process or production change regardless of how large, unusual, or outside of the control of the covered party; or
  - (ii) The calendar year contains a period of curtailment.
- (c) Ecology may adjust the baseline GHG emissions value of a natural gas distributor to account for increases or decreases in the natural gas distributor's covered GHG emissions due to changes related to other covered parties' covered GHG emissions as specified in WAC 173-442-040(3). Any adjustment to the baseline GHG emissions value should be designed to maintain a consistent aggregate GHG emission reduction pathway for both the natural gas distributor and the other covered party.
- (4) Setting a Category 2 baseline GHG emissions value. Ecology must assign a baseline GHG emissions value based on the first three consecutive calendar years after 2012 with average covered GHG emissions during normal operations greater than or equal to 70,000 MT  $CO_2e$ , or when requested by a voluntary participant. Ecology must use one of the following methods to set a Category 2 baseline GHG emissions value consistent with subsection (3)(a) of this section.
- (a) Method 1: For existing operations, ecology must set the baseline GHG emissions value:
- (i) Using the average of three years of covered GHG emissions (MT  $\rm CO_2e/year)$  from annual GHG reports (WAC 173-441-120 or 173-441-086);
- (ii) Ecology may adjust covered GHG emissions using existing reported GHG emissions data when the calculation methodology approved under chapter 173-441 WAC changes.
- (b) Method 2: For modified operations, ecology must set the baseline GHG emissions value for a covered party that modifies its operations using the following methods:
  - (i) Existing emission unit: Use method 1; and
  - (ii) New or modified emissions unit: Use method 3.
- (c) Method 3: For new operations that result in a new covered party, ecology must set the baseline GHG emissions value using one of the following methods:
- (i) The average of the first three years of covered GHG emissions (MT  $CO_2e/year$ ) under normal operation from annual GHG reports (WAC 173-441-120 or 173-441-086); or
  - (ii) The benchmarking process in subsection (5) of this section.
  - (5) Benchmarking process.
- (a) Responsibilities for covered parties subject to subsection (4)(c) of this section.
- (i) The covered party must provide requested emissions information to ecology within sixty working days of a request.

- (ii) The covered party must provide documentation of the following data to allow ecology to calculate actual or projected actual emissions:
  - (A) Information about the GHG emitting processes;
  - (B) Actual or projected production data;
- (C) Actual or projected operating days and hours of operation during a calendar year;
  - (D) Other information requested by ecology;
- (iii) Application materials submitted to ecology for a permit action need only reference dates of the submittal and the office that received the information.
- (iv) The covered party must provide access to personnel or hired consultants who can assist ecology in assigning the baseline GHG emissions value.
- (b) Ecology responsibilities. Ecology must set the baseline GHG emissions value using the following method:
- (i) Ecology must set the baseline GHG emissions value at an emissions rate equal to the ninety percent most efficient facility in all surveyed stationary sources using the benchmarking process in (b)(ii) of this subsection.
  - (ii) In establishing the benchmark, ecology must:
- (A) Use data from similar or identical existing parties and sources.
- (B) Determine the appropriate production or product measure for the benchmark.
- (C) Use operating and emissions data from existing sources from calendar years 2012 through 2016. Beginning in January 1, 2017, use emissions data for the most recent three years of data.
- (D) Calculate covered GHG emissions using methodologies in WAC 173-441-120.
- (E) Estimate covered GHG emissions using best available information when a covered party fails to provide emissions data within sixty working days of a request.
- (c) To set the baseline GHG emissions value, ecology may request from a covered party:
- (i) Information about the GHG emitting processes included in a notice of construction, prevention of significant deterioration, or nonattainment area new source review permit application.
- (ii) Materials submitted to a nonecology permitting authority related to a permit application.
- (iii) Other information necessary to calculate actual or projected emissions.

- WAC 173-442-060 GHG emission reduction pathway. Ecology must assign a GHG emission reduction pathway to all covered parties with baseline GHG emissions values greater than or equal to 70,000 MT  $CO_2e$ , or when requested by a voluntary participant.
- (1) For non-EITE covered parties, ecology assigns the GHG emission reduction pathway to the covered party based on their baseline GHG emissions value.

- (a) The GHG emission reduction pathway for the first calendar year a covered party meets or exceeds the compliance threshold in WAC 173-442-030(3) is the baseline GHG emissions value for that covered party.
- (b) Annual decrease subsequent to the first calendar year a covered party meets or exceeds the compliance threshold in WAC 173-442-030(3).
- (i) The GHG emission reduction pathway decreases annually by an additional one and seven tenths of a percent (1.7%) of the covered party's baseline GHG emissions value.
- (ii) The additional one and seven tenths of a percent (1.7%) adjustment to a GHG emission reduction pathway does not apply to any calendar year that includes curtailment recognized by ecology.
- (iii) Beginning in calendar year 2036, the emission reduction pathway remains constant at the value calculated for calendar year 2035.
- (2) Ecology will issue a regulatory order as provided in WAC 173-442-200(6) to each covered party which contains:
- (a) The GHG emission reduction pathway in units of MT  ${\rm CO}_2{\rm e}$  for each calendar year in the compliance period; and
  - (b) The total reduction pathway for each compliance period.
- (3) For EITE covered parties the GHG emission reduction pathway is determined per WAC 173-442-070.

- WAC 173-442-070 GHG emission reduction pathway and emission reduction requirement for EITE covered parties. Ecology must establish the GHG emission reduction pathway for each EITE covered party using the procedures in this section. A mass-based GHG emission reduction pathway under WAC 173-442-060(1) does not apply to EITE covered parties.
- (1) **Production data reporting requirements.** Each EITE covered party must its report annual production data, as specified by ecology, concurrent with their annual GHG report under chapter 173-441 WAC. Production data must be reported for each calendar year in the baseline period and each calendar year with an emission reduction requirement.
- (2) **Determine the output-based baseline.** Ecology must calculate the output-based baseline for each EITE covered party. The output-based baseline is calculated once for each EITE covered party and remains constant for all calendar years.
- (a) Determine average GHG emissions and production data for the output-based baseline period.
- (i) Use the EITE covered party's average emissions and average production data during the 2012 through 2016 period for EITE covered parties with:
- (A) Covered GHG emissions averaging greater than or equal to 70,000 MT  $\rm CO_2e$  per year during calendar years 2012 through 2016; and
- (B) At least three full calendar years of covered GHG emissions reported under chapter 173-441 WAC during that period.
- (ii) For all other EITE covered parties, use the EITE covered party's average emissions and average production data during the first

three consecutive calendar years after 2012 of covered GHG emissions under normal operations greater than or equal to 70,000 MT  $CO_2e$  per year reported under chapter 173-441 WAC.

- (iii) The data used for (a)(i) and (ii) of this subsection will not include data for years that would meet the criteria in WAC 173-442-050 (3)(b).
- (b) Divide average emissions by average production to get the output-based baseline.
- (c) Ecology may adjust the output-based baseline for EITE covered parties based on:
- (i) Reported GHG emissions data when the calculation methodology approved under chapter 173-441 WAC changes.
- (ii) Updated annual GHG reports or an assigned emissions level under WAC 173-441-086.
- (3) Determine the efficiency improvement rate. Ecology must calculate the efficiency improvement rate for each EITE covered party. The efficiency improvement rate is calculated once for each EITE covered party concurrently with the output-based baseline and remains constant for all calendar years.
- (a) Ecology must calculate an efficiency intensity distribution for each sector with an EITE covered party that meets the requirements in WAC 173-442-030.
- (i) Ecology must use the following information to calculate the efficiency intensity distribution for each sector:
- (A) GHG emissions data must be comparable to the EITE covered party's data reported under chapter 173-441 WAC or subsection (1) of this section and come from the following sources:
  - (I) EPA's GHG Reporting Program;
  - (II) Other national programs;
  - (III) Trade associations; or
  - (IV) Other similar sources.
  - (B) Production data must come from:
  - (I) EPA's GHG Reporting Program;
  - (II) National emissions inventory;
  - (III) Energy information agency;
  - (IV) Other national programs;
  - (V) Trade associations; or
  - (VI) Other similar sources.
- (C) If ecology determines no production data or emissions data is available to establish an efficiency intensity distribution for a sector, ecology may use existing benchmarking information for the sector. To use the data, ecology must determine that the benchmark is:
  - (I) Reasonably current; and
- (II) Detailed enough to determine the efficiency intensity distribution.
- (D) Ecology must use data from the same time period as the output-based baseline period whenever possible.
- (ii) Ecology calculates the efficiency intensity distribution for a sector by using paired GHG emissions and production data to create a ranking of efficiencies for sample facilities in that sector. Alternately, existing benchmarking information is used as described in (a) (i) (C) of this subsection.
- (b) Ecology must compare the output-based baseline for each EITE covered party to the efficiency intensity distribution for that EITE covered party's sector to determine the EITE covered party's efficiency improvement rate.

- (i) If the EITE covered party's output-based baseline is less efficient than or equal to the twenty-fifth percentile value of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate faster than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be more than one percent per year of the EITE covered party's baseline GHG emissions value faster than would have been required by WAC 173-442-060 (1)(b)(i).
- (ii) If the EITE covered party's output-based baseline is more efficient than or equal to the seventy-fifth percentile value of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate slower than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be less than one percent per year of the EITE covered party's baseline GHG emissions value slower than would have been required by WAC 173-442-060 (1)(b)(i).
- (iii) If the EITE covered party's output-based baseline is between the twenty-fifth and seventy-fifth percentile values of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate consistent with meeting the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1) (b) (i).
- (iv) If ecology determines an EITE covered party has not supplied sufficient information to complete this assessment, then the EITE covered party's efficiency improvement rate must be set at a level that would reduce emissions at a rate faster than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be more than one percent per year of the EITE covered party's baseline GHG emissions value faster than would have been required by WAC 173-442-060 (1)(b)(i).
- (v) If ecology determines that there is not enough information to establish an efficiency intensity distribution for a sector, then EITE covered parties in that sector will be assigned an efficiency improvement rate at a level that would reduce emissions at a rate consistent with meeting the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i).
- (4) Determine the GHG emission reduction pathway. By January 30 of the second year of each compliance period, ecology will issue a regulatory order as provided in WAC 173-442-200(6) to each EITE covered party with its GHG emission reduction pathway in units of MT  $\rm CO_2e$  for each calendar year in the compliance period. Ecology will determine the GHG emission reduction pathway for each compliance period using the following approach:
- (a) Calculate the EITE covered party's average production based on reported data for the following time period:
- (i) For the 2020 through 2022 compliance period: Use average production data from calendar years 2017 through 2019.
- duction data from calendar years 2017 through 2019.

  (ii) For EITE covered parties with a first compliance obligation after the 2020 through 2022 compliance period: Use average production

data from the three calendar year period prior to their first compliance period with a compliance obligation.

- (iii) For all other compliance periods, use average production data from the previous compliance period.
- (b) The EITE covered party's GHG emission reduction pathway is calculated using Equation 1.

#### Equation 1

 $RP_x = (AP \times OB) - (AP \times OB \times ER \times (Y_x - 1))$ 

Where:

 $RP_x = GHG$  emission reduction pathway for year "x" (MT  $CO_2e$  for year "x")

AP = Average production data as specified in subsection (4)(a) of this section (units of production)

OB = Output-based baseline as specified in subsection (2) of this

section (MT  $CO_2e$ /units of production)

ER = Efficiency improvement rate as specified in subsection (3) of this section (% as a decimal)

- $Y_x$  = The number of calendar years the EITE covered party has been subject to WAC 173-442-030. The first calendar year is designated as calendar year number one.
- (c) Any calendar year containing curtailment recognized by ecology does not count toward the total years in  $Y_x$ .
- (d) Beginning in calendar year 2036,  $Y_{\rm x}$  remains constant at the number of years determined for calendar year 2035.

#### SECTION 3 - COMPLIANCE OPTIONS

- WAC 173-442-100 Emission reduction units. (1) A covered party may use ERUs to meet the compliance obligation in WAC 173-442-200.
- (2) ERUs must originate from GHG emission reductions occurring unless derived from allowances under within Washington 173-442-170.
  - (3) Mandatory retirement of ERUs for compliance.
- (a) Ecology must retire an ERU applied to meet a compliance obli-
- (b) The use of an ERU for compliance, as recorded in a compliance report required by WAC 173-442-200 or the registry established in WAC 173-442-230, permanently and irrevocably disqualifies any further use of the unit.

- WAC 173-442-110 Generating emission reduction units. ERUs may be generated in the following manner:
- (1) Actual emissions below GHG emission reduction requirement. Covered parties (including voluntary parties) may generate an ERU when actual covered GHG emissions, as reported per the requirements of chapter 173-441 WAC for a compliance period, are below the emission reduction requirements for that compliance period. The covered party may generate ERUs in an amount equal to the difference between the reported covered GHG emissions and the higher GHG emission reduction requirement.
- (2) Emission reduction projects, programs, or activities. A project, program, or activity allowed under WAC 173-442-160 may generate ERUs consistent with WAC 173-442-150.
- (3) GHG emission markets external to the state of Washington. A covered party may generate ERUs consistent with WAC 173-442-170.

#### NEW SECTION

- WAC 173-442-120 Recording emission reduction units. (1) ERUS exist solely as an accounting mechanism and are not property rights.
- (2) Each covered party must keep a record for ten years in a manner prescribed by ecology of any ERUs generated or obtained.
- (3) Any ERU generated must be recorded with its vintage year in the registry established in WAC 173-442-230 and the compliance report of the covered party.
- (4) A covered party must report ERUs through the compliance report and accounts maintained in the registry established in WAC 173-442-230.

#### NEW SECTION

- WAC 173-442-130 Banking emission reduction units. (1) A covered party may bank an ERU for ten years.
- (2) Banked ERUs are recorded in the registry established in WAC 173-442-230.
  - (3) First in, first out provision.
- (a) The covered party must withdraw an ERU with the oldest vintage year first.
- (b) Within the same vintage year the covered party has the option to select which ERUs to withdraw.

#### NEW SECTION

WAC 173-442-140 Exchanging emission reduction units. Covered parties may transfer ERUs under the conditions in this section.

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- (1) Required documentation.
- (a) Documentation of an ERU transfer may consist of contractual arrangements, memoranda of understanding, or other similar records with sufficient detail to document the transfer of the ERU from one covered party to another.
- (b) The transfer of ERUs occurs between accounts in the registry established in WAC 173-442-230.
- (2) Tracking emission reduction units. The covered party must document each transfer of an ERU in the compliance report in a format specified by ecology and in the registry established in WAC 173-442-230.
  - (3) Role of third-parties in transactions.
- (a) Entities other than covered parties may facilitate, broker, or assist covered parties to transfer ERUs recorded in accounts in the registry, but they may not hold ERUs.
- (b) Only covered parties, ecology, and voluntary participants may hold ERUs.

WAC 173-442-150 Criteria for activities and programs generating emission reduction units. (1) General criteria. An activity or program generating ERUs must meet all of the following criteria. Emission reductions from activities or programs must be:

- (a) Real, specific, identifiable, and quantifiable;
- (b) Permanent: The activity or program must result in an irrevocable and nonreversible reduction in GHGs released to the atmosphere;
  - (c) Enforceable by the state of Washington;
  - (d) Verifiable as described by WAC 173-442-210; and
- (e) Additional to existing law or rule, and any supplementary requirements necessary to meet the conditions of WAC 173-442-160 (2)(a).
- (i) If an emission reduction is required by another statute, rule, or other legal requirement, the emission reduction cannot be used in this program.
- (ii) Emission reductions resulting in part or in whole from the policies below can be used to comply with the requirements of this chapter:
- (A) The EPA Clean Power Plan (40 C.F.R. Part 60, Subpart UUUU) consistent with WAC 173-442-040(4).
- (B) Washington's GHG emission performance standard (RCW 80.80.040);
- (C) Washington's  $CO_2$  mitigation standard for fossil-fueled thermal electric generation facilities (through an energy facility site evaluation council site certificate or by chapter 80.70 RCW); emission reductions must result from mitigation projects, as defined in RCW 80.70.010; or
- (D) Commute trip reduction programs as established through RCW  $70.94.527~{\rm per}$  WAC  $173-442-160\,(3)\,.$
- (2) RCW 70.235.030(3) establishes that  $\mathrm{CO}_2$  emissions from the industrial combustion of biomass in the form of fuel wood, wood waste, wood by-products, and wood residuals are carbon neutral and result in zero  $\mathrm{CO}_2$  emissions.

WAC 173-442-160 Activities and programs recognized as generating emission reduction units. (1) Ecology will accept ERUs from the activities and programs described below, provided they comply with third-party verification under WAC 173-442-220, the requirements of this section, and WAC 173-442-150:

- Transportation activities;
- Combined heat and power activities;
- Energy activities;
- Livestock and agricultural activities;
- Waste and wastewater activities;
- Industrial sector activities;
- Certain EFSEC recognized emission reductions; and
- Ecology approved emission reductions.
- (2) To generate an ERU, the following must occur:
- (a) If a protocol is listed from an external registry program, then the emission reduction must be registered on that registry along with the information necessary to establish eligibility to meet the criteria of this chapter.
- (b) Where a process is listed instead of a registry-specific protocol, all steps of the process must be followed in a manner approved by ecology and any other departments referenced in the applicable process.
- (c) Emission reduction projects implemented consistent with this section and that are physically located at a stationary source facility must not be project types included in the methodologies used in the emission calculations that generate the covered GHG emissions for the covered party with the facility reporting as per chapter 173-441 WAC.
  - (d) Third-party verification must occur as per WAC 173-442-220.
  - (3) Transportation activities. Transportation activities must:
- (a) Use less energy or different forms of energy for transportation through the application of:
- (i) Emission Reductions through Improved Efficiency of Vehicle Fleets methodology from the American Carbon Registry (using a version approved by that program no later than September 1, 2016); or
- (ii) Methodology for GHG Emission Reductions through Truck Stop Electrification from the American Carbon Registry (using a version approved by that program no later than September 1, 2016).
- (b) Exceed workplace targets for a commute trip reduction program established under the authority of RCW 70.94.527 according to the following:
- (i) Organizations that participate in commute trip reduction programs may generate ERUs if they provide data and surveys consistent with the requirements of their applicable program and those of the department of transportation.
- (ii) Generation of ERUs will be derived from reductions in the drive-alone trip rate at workplaces participating in commute trip reduction programs, as tracked and reported by the department of transportation.
- (iii) The drive-alone trip rate will be measured relative to a baseline maintained by the department of transportation consisting of the average of the 2013/2014 and 2015/2016 commute trip reduction program survey years. An imputed baseline will be used for organizations that enter commute trip reduction programs in years after 2016.

- (iv) GHG emission reductions associated with reductions in the drive-alone trip rate will be calculated by the department of transportation.
  - (v) Ecology will assign the appropriate quantity of ERUs.
- (4) **Combined heat and power activities.** Combined heat and power projects demonstrating GHG emission reductions through a methodology submitted to and approved by ecology.
- (5) **Energy measures.** Energy efficiency measures and demand side management of electricity and natural gas consumption in Washington, and alternative energy generation technologies located in Washington may generate ERUs.
- (a) The acquisition of conservation and energy efficiency in excess of the targets required by the Energy Independence Act per RCW 19.285.040 and any additional acquisition targets established by the utilities and transportation commission by rule or order may generate ERUs.
- (i) Eligible conservation and energy efficiency must be reported to the department of commerce or the utilities and transportation commission in accordance with its rules or orders, and consistent with RCW 19.285.070.
- (ii) Utilities that are not qualifying utilities, as defined in RCW 19.285.030, may voluntarily submit data on their conservation and energy efficiency acquisitions to the department of commerce in accordance with its rules and in a manner consistent with RCW 19.285.070 to generate ERUs under this section.
- (iii) Only conservation and energy efficiency that exceeds the targets established through RCW 19.285.040, targets for natural gas conservation put in place through order, and any additional targets established by the utilities and transportation commission by rule or order is eligible to generate ERUs.
- (b) The acquisition and subsequent retirement of renewable energy credits that are not retired for purposes of complying with the Energy Independence Act or other regulatory or voluntary programs may generate ERUs.
- (i) Renewable resources eligible for generating ERUs include eligible renewable resources as defined by RCW  $19.285.030\,(12)$  except that only those eligible renewable resources physically located in Washington may generate ERUs.
- (ii) ERUs may only be generated if a sufficient quantity of renewable energy credits are retired in the renewable energy credit tracking system identified in WAC 194-37-210(1) and the following conditions are met:
- (A) Each renewable energy credit retired must have the appropriate notation within the tracking system that the renewable resource is eligible for Washington compliance for the Energy Independence Act or this rule.
- (B) Renewable energy credits must be retired consistent with the operating rules of the renewable energy credit tracking system and in the proper retirement account within the tracking system as designated by the Washington renewable energy credit tracking system administrator.
- (C) Any renewable energy credit used for the purposes of generating ERUs must not have been retired or otherwise used for any other program or requirements.
- (D) The renewable energy credit tracking system account holder must establish the department of commerce as a state program administrator with access to the account holder's compliance reports.

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- (c) The quantity of ERUs generated from exceeding conservation targets as per (a) of this subsection or from retiring renewable energy credits as per (b) of this subsection is computed by assuming either:
- (i) For electrical energy efficiency, conservation, and alternative energy measures:
- (A) The marginal resource for which an electrical conservation project or the renewable energy generation is avoiding is a new combined-cycle natural gas thermal electric generation turbine sited in Washington.
- (B) The average rate of GHG emissions for such a turbine is nine hundred seventy pounds per megawatt-hour, as per the determination made in WAC 194-26-020.
- (C) That under these assumptions one ERU may be generated by retiring two and one-quarter renewable energy credits or for exceeding a conservation target by two and one-quarter megawatt-hours.
- (ii) For natural gas energy efficiency and conservation the applicable GHG emissions are to be derived from the appropriate conversion process from therms (100,000 British Thermal Units) to  $\rm CO_2e$  as directed in WAC 173-441-120.
- (d) Ecology will allocate the appropriate quantity of ERUs as determined in this subsection.
- (6) Livestock and agricultural activities. GHG management activities addressing agricultural and livestock activities using:
- (a) Methodology for Quantifying Nitrous Oxide ( $N_2O$ ) Emissions Reductions from Reduced Use of Nitrogen Fertilizer on Agricultural Crops from the American Carbon Registry (using a version approved by that program no later than September 1, 2016).
- (b) The enteric methane, manure methane, and nitrous oxide from fertilizer use modules from the *Grazing Land and Livestock Management* methodology from the American Carbon Registry (using a version approved by that program no later than September 1, 2016). The biotic sequestration and fossil fuel modules of this protocol may not generate ERUs.
- (c) The *U.S. Livestock Project* protocol from the Climate Action Reserve (using a version approved by that program no later than September 1, 2016).
- (7) Waste and wastewater activities. GHG management activities addressing waste and wastewater infrastructure and activities using:
- (a) *U.S. Landfill Project* protocol from the Climate Action Reserve (using a version approved by that program no later than September 1, 2016);
- (b) Organic Waste Composting Project protocol from the Climate Action Reserve (using a version approved by that program no later than September 1, 2016); or
- (c) Organic Waste Digestion Project protocol from the Climate Action Reserve (using a version approved by that program no later than September 1, 2016).
- (d) Landfill Methane Collection and Combustion methodology from the American Carbon Registry (using a version approved by that program no later than September 1, 2016).
- (8) **Industrial sector activities.** GHG process and equipment management, operations, and changes affecting industry and manufacturing using:

- (a) Replacement of  $SF_6$  with Alternate Cover Gas in the Magnesium Industry methodology from the American Carbon Registry (using a version approved by that program no later than September 1, 2016);
- (b) Emission Reduction Measurement and Monitoring Methodology for Use of Certified Reclaimed HFC Refrigerants and Advanced Refrigeration Systems from the American Carbon Registry (using a version approved by that program no later than September 1, 2016);
- (c) Conversion of High-Bleed Pneumatic Controllers in Oil and Natural Gas Systems methodology from the American Carbon Registry (using a version approved by that program no later than September 1, 2016); or
- (d) Emission Reduction Measurement and Monitoring Methodology for the Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use from the American Carbon Registry (using a version approved by that program no later than September 1, 2016).
- (e) Nitric Acid Production Project Protocol from the Climate Action Reserve (using a version approved by that program no later than September 1, 2016).
- (9) Emission reductions derived from one of the activity categories in subsections (3) through (8) of this section and that are from an independent qualified organization recognized by the energy facility site evaluation council under RCW 80.70.050.
- (10) Emission reductions derived from one of the activity categories in subsections (3) through (8) of this section through a methodology approved by ecology.

- WAC 173-442-170 Limitations on the use of allowances. (1) A covered party may use allowances from GHG emission reduction programs to generate ERUs when ecology determines:
- (a) The allowances are issued by an established multisector GHG emission reduction program;
- (b) The covered party is allowed to purchase allowances within that program; and
- (c) The allowances are derived from methodologies congruent with chapter 173-441 WAC.
- (2) A covered party may demonstrate compliance through the acquisition and use of allowances to generate ERUs based on the limitations in this subsection.
- (a) A covered party may use a quantity of allowances to generate ERUs for a compliance period that does not exceed the applicable percentage in Table 3 of the covered party's compliance obligation:

Table 3
Percentage Limits on Use of Allowances for a Compliance Period

Compliance Period	Upper Limit
2017-19	100%
2020-22	100%
2023-25	50%
2026-28	25%

Compliance Period	Upper Limit
2029-31	15%
2032-34	10%
2035 and beyond	5%

(b) A quantity of allowances intended for use consistent with (a) of this subsection must be divided so that the proportion of those allowances from a single vintage year does not exceed the percentages in Table 4. The originating GHG emission reduction program assigns the vintage year for each allowance.

Table 4
Vintage Year Requirements for a
Quantity of Allowances Used Within a
Compliance Period

Year within the compliance period	Vintage year of allowance	Percentage not to exceed (%)
1st year	Same year as the 1st year of the compliance period	35
2nd year	Same year as the 2nd year of the compliance period	40
3rd year	Same year as the 3rd year of the compliance period	40

(3) The covered party must document that an allowance used to generate an ERU has been invalidated from use or placed into a permanent holding account in its originating GHG emission reduction program.

# SECTION 4 - DEMONSTRATING COMPLIANCE

# NEW SECTION

WAC 173-442-200 Demonstrating compliance. (1) A covered party must demonstrate compliance with their compliance obligation at the end of each applicable compliance period.

- (2) The compliance period is the three-year period specified in WAC 173-442-020 and 173-442-030(3) (Table 1).
  - (3) Calculation of the compliance obligation and ERU balance.

Compliance obligation = (Sum of covered GHG emissions for the compliance period) - (Emission reduction requirement for the compliance period)

(in MT CO<sub>2</sub>e)

If difference > 1, then must acquire ERUs for each metric ton of  ${\rm CO}_2{\rm e}$  that exceeds the compliance obligation.

If difference < 0, then have excess ERUs for each metric ton of  $\mathrm{CO}_2\mathrm{e}$  below the compliance obligation.

- (4) Covered parties must demonstrate compliance by submitting:
- (a) GHG reporting data under chapter 173-441 WAC;
- (b) ERUs under WAC 173-442-120; or
- (c) A combination of (a) and (b) of this subsection that achieves a level meeting the compliance obligation.
- (5) A covered party must document compliance consistent with the requirements in WAC 173-442-210.
  - (6) Regulatory order.
- (a) By January 30 of the second year of a covered party's first compliance period, ecology will issue a regulatory order establishing emission reduction requirements for each covered party consistent with their emission reduction pathway.
- (b) The emission reduction requirement established for the compliance period ending in 2035 must continue to be met for all following compliance periods.
- (c) Ecology must assign GHG emission reduction requirements to each covered party with a baseline GHG emissions value greater than or equal to 70,000 MT  $\rm CO_2e$  per year, or when requested by a voluntary party.
  - (d) The regulatory order establishes the following:
  - (i) The baseline GHG emissions value for the:
  - (A) Covered party determined through WAC 173-442-050; or
  - (B) EITE covered party determined through WAC 173-442-070; and
- (ii) Emission reduction requirements for each compliance period consistent with WAC 173-442-060 or 173-442-070; and this section.

# NEW SECTION

WAC 173-442-210 Compliance report. (1) Each covered party must submit a compliance report:

- (a) In a format prescribed by ecology;
- (b) That includes verification complying with WAC 173-442-220; and
  - (c) By the deadline in WAC 173-442-250.
- (2) The covered party is solely responsible for ensuring that ecology receives its compliance report by the deadlines.
  - (3) The compliance report must contain the following information:
  - (a) Record of ERUs generated.
  - (i) The record of each ERU generated must include:
  - (A) The source of each ERU(s).
- (B) The source of the emissions data or computational method used to generate each ERU.
  - (C) The vintage year of each ERU.

- (ii) The record may cover a distinct ERU or a block of ERUs from an identical source.
- (b) Record of ERUs banked. The record of ERUs banked must include:
  - (i) Vintage year of the ERU.
  - (ii) Origin of the ERU.
- (c) Record of ERU transactions. The record of each ERU transaction must include:
  - (i) The origin of any ERUs acquired.
  - (ii) The destination of any ERUs transferred.
- (iii) The names and contact information of any entities who facilitated, brokered, or provided liaison services between the covered parties making the transfer.
  - (iv) The vintage year of the ERUs.
- (d) Documentation that a third party verified the compliance report.
- (e) Signature of the chapter 173-441 WAC covered party's designated representative or alternate designated representative.
  - (f) Statement attesting to the report's accuracy and validity.
  - (4) A covered party must retain records for ten years.
  - (5) Compliance report corrections.
- (a) Covered parties must correct errors in their compliance report no later than forty-five days after discovery of an error.
- (b) Ecology requires corrections regardless of whether errors are identified by:
  - (i) The third-party verifier;
  - (ii) The covered party; or
  - (iii) Ecology.
- (c) A covered party may request to have a submitted compliance report for the most recent compliance period reopened for corrective edits and resubmittal.
- (d) The covered party must provide justification to ecology for the report correction(s) and indicate the specific corrections they will make to the report.
- (e) Each submitted request is subject to ecology review and approval. Permissions to correct a report does not preclude enforcement based on misreporting.
  - (6) Ecology denial of compliance report.
- (a) Ecology will determine if the compliance report contains errors that impact the verification status of the compliance report.
- (b) Ecology may deny a compliance report regardless of verification. Ecology may deny for these reasons:
- (i) Failure to submit a complete compliance report by the deadline;
  - (ii) Failure to complete third-party verification if required; or (iii) Other forms of noncompliance with this chapter.
- (7) Requirements when covered GHG emissions fall below the compliance threshold.
- (a) A covered party may discontinue submitting a compliance report for the purposes of this chapter under the following conditions:
- (i) After three consecutive years of reporting covered GHG emissions less than 50,000 MT  $CO_2e/yr$ ; and
- (ii) The covered party notified ecology of its intent to discontinue the report by the compliance report deadline in WAC 173-442-250.
- (iii) Covered parties must continue to submit annual GHG reports required by chapter 173-441 WAC.

- (b) A covered party that shuts down or changes operations to eliminate covered GHG emissions is exempt from submitting future compliance reports under the following conditions:
  - (i) The covered party must:
  - (A) Submit a compliance report for the last year of operation;
- (B) Certify the closure of all GHG emitting processes and operations; and
- (C) Notify ecology of its intent to discontinue the compliance report by the compliance report deadline in WAC 173-442-250.
  - (ii) Exemptions. This provision does not apply to:
  - (A) Seasonal or temporary cessation of operations;
  - (B) Municipal solid waste landfills;
  - (C) Industrial waste landfills; or
  - (D) Underground coal mines.
- (iii) The covered party must resume submitting a compliance report for any future calendar year when GHG-emitting processes or operations resume operation.
- (c) A covered party must resume submitting a compliance report when total covered GHG emissions exceed 50,000 MT  $CO_2e/year$ .
  - (8) Ecology actions.
- (a) Ecology is not responsible for failure of electronically submitted reports.
- (b) Ecology must deem a report submitted electronically to be validly signed when accompanied by a digital signature that meets the requirements designated by ecology.

- WAC 173-442-220 Verification. (1) Emission reductions subject to third-party verification. All emission reductions for which ERUs are generated under WAC 173-442-160 are:
- (a) Subject to the verification procedure requirements of this section;
- (b) Subject to any verification criteria, procedures, or methods that are part of the protocols, processes, or methodologies applicable for the type of emission reduction detailed in WAC 173-442-160; and
- (c) Subject to verification by a certified verifier using processes and procedures consistent with the International Organization for Standardization 14064-3:2006 protocol (as of May 1, 2016).
- (2) The third-party verifier must certify that compliance reports are consistent with the requirements in this chapter.
- (3) **Verification report content.** The verification report must be in a format specified by ecology. The report must include:
- (a) Documentation identifying that the covered party complied with the requirements of chapter 173-441 WAC;
- (b) Name and other information about the third-party verifier, including:
- (i) All relevant information about the third-party verifier in subsection (6)(a) of this section;
- (ii) The names, roles, and sector specific qualifications of individuals working on the verification report;
- (iii) Document that the verifier met the requirements in WAC 173-441-085; and

- (iv) Certify that the verification report is true, accurate, and complete to the best of their knowledge.
- (c) A verification plan that details methodologies used to verify the compliance report and schedule describing when the verification occurred.
- (d) The third-party verifier's review of the covered party's accounting of emissions, emissions reductions, ERUs, and all information relevant to demonstrating compliance with the applicable emission standards.
  - (e) Corrections made to the compliance report.
- (f) The third-party verifier's evaluation of the compliance report. This must include a log of issues identified in the course of verification, their potential impact on the quality of the compliance report, and their resolution.
- (g) Documentation of required on-site visit. Information about the required on-site visit, including date(s) and a description of the verification services conducted on-site.
- (i) The third-party verifier must conduct an on-site visit at least once during a compliance period. During the on-site visit, the verifier must:
- (A) Check that all sources specified in the compliance report are identified appropriately.
- (B) Confirm that all relevant emissions, emission reductions, and accounting for ERUs are included in the compliance report.
- (C) Review the data management systems used by the covered party to track, quantify, and report GHG emissions and, when applicable, product data and fuel transactions. The third-party verifier must evaluate the uncertainty and effectiveness of these systems.
  - (D) Interview key personnel.
- (E) Make direct observations of equipment for data sources and equipment supplying data for sources determined to be high risk.
- (F) Assess conformance with measurement accuracy, data capture, and missing data substitution requirements.
  - (G) Review financial transactions to confirm:
  - (I) Fuel, feedstock, and product data; and
- (II) Complete and accurate reporting of required data, such as facility fuel suppliers, fuel quantities delivered, and if fuel was received directly from an interstate pipeline.
- (ii) The verifier must document the findings from the visit and the dates of the visit.
- (h) For petroleum product producers or importers, or natural gas distributors, the third-party verifier must visit the headquarters or other location of central data management.
- (4) **Verification deadline.** The third-party verifier must submit a complete verification report to ecology by the compliance report deadline in WAC 173-442-250.
- (5) **Corrections.** The covered party must submit corrections to the verification report to ecology no later than forty-five days after discovery of the error.
  - (6) Eligible third-party verifiers.
- (a) A third-party verifier must be approved by ecology. Approval requires:
- (i) Demonstrating to ecology's satisfaction that the third-party verifier has sufficient knowledge of the relevant methods and protocols in this chapter. Ecology may limit certification to certain types or sources of emissions.

- (ii) Registering as a third party with ecology (both individuals and organizations); and
- (iii) Active accreditation or recognition as a third-party verifier under at least one of the following GHG programs:
- (A) California Air Resources Board's mandatory reporting of GHG emissions program;
  - (B) The Climate Registry;
  - (C) Climate Action Reserve;
  - (D) American National Standards Institute (ANSI);
  - (E) Accredited ISO 14064 registrars; or
  - (F) Other GHG verification program approved by ecology.
- (b) A covered party must not use the same third-party verifier (either organization or individuals) for a period of more than six consecutive years. The covered party must wait at least three years before using the previous third-party verifier to verify their compliance reports.
- (c) A covered party and third-party verifier must certify that there is not a conflict of interest in verifying the compliance report. A conflict of interest exists when:
- (i) The third-party verifier and covered party share any management staff or board of directors membership, or the third-party verifier has employed any of the senior management staff of the covered party, or vice versa, within the previous five years; or
- (ii) Any employee of the third-party verifier, or any employee of a related entity, or a subcontractor who is a member of the verification team has provided to the covered party any services within the previous five years.
- (iii) Any staff member of the third-party verifier provides any type of incentive to a covered party to secure a verification services contract.

WAC 173-442-230 Registry. (1) Ecology will develop an electronic data base to ensure a secure and reliable method to track ERUs.

- (2) The data base must:
- (a) Create and assign unique identifiers to ERUs;
- (b) Track movement of ERUs, including:
- (i) Transfers of ERUs between parties; and
- (ii) Retirement of ERUs.
- (c) Interface with other carbon registries or tracking systems, as possible.

# NEW SECTION

WAC 173-442-240 Reserve. Ecology will establish an account of reserve ERUs for the purposes described in this section.

- (1) Contributions to the reserve.
- (a) Ecology must allocate to the reserve:
- (i) Two percent of a covered party's emission reduction pathway annual decrease in WAC 173-442-060 (1)(b); and

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- (ii) EITE covered party's contribution as follows:
- (A) If the EITE covered party's  ${\rm RA_{\rm X}}$  is greater than zero, then the difference in MT  ${\rm CO_{2}e}$  of GHG emissions results in ERUs allocated to the reserve.
- (B) If the EITE covered party's  $RA_{\rm x}$  is less than zero, then the difference in MT  $CO_2e$  of GHG emissions results in ERUs retired from the reserve.
- (C) Calculate MT  $\rm CO_2e$  of GHG emissions of ERUs allocated to or retired from the reserve using Equation 2.

# Equation 2

 $RA_x = ((BP \times OB) - (BP \times OB \times ER \times (Y_x - 1))) - RP_x$ 

Where:

 $RA_x$  = Reserve adjustment for given EITE covered party for calendar year "x" (MT CO<sub>2</sub>e for year "x")

 $\rm RP_{x}$  = GHG emission reduction pathway for given EITE covered party for calendar year "x" as specified in WAC 173-442-070 (4)(b) (MT CO\_2e for year "x")

 $^{-}$ BP = Baseline production data for given EITE covered party as specified in WAC 173-442-070 (2)(a) (units of production)

OB = Output-based baseline for given EITE covered party as specified in WAC 173-442-070(2) (MT  $CO_2e$ /units of production)

ER = Efficiency improvement rate for given EITE covered party as specified in WAC 173-442-070(3) (%)

 $\rm Y_{\rm X}$  = The number of calendar years the EITE covered party has been subject to WAC 173-442-030. The first calendar year is designated as calendar year number one.

- (iii) Any calendar year containing curtailment recognized by Ecology does not count toward the total years in  $Y_{\mathbf{x}}$ .
- (iv) Beginning in calendar year 2036,  $Y_{\rm x}$  remains constant at the number of years determined for calendar year 2035.
  - (v) ERUs generated as a result of facility curtailment.
- (b) Ecology must transfer into the reserve the ERUs specified in (a)(v) of this subsection within one hundred twenty days after each applicable compliance period (WAC 173-442-200).
- (c) Ecology will not accept into the reserve retired or expired ERUs.
- (2) **Retirements within the reserve.** Ecology may retire reserve ERUs to ensure consistency with an aggregate emission cap the program and for purposes consistent with this rule. Ecology may retire reserve ERUs:
- (a) For covered GHG emissions from covered parties that do not have a GHG baseline emissions value established through WAC 173-442-050 (1)(a), or existing stationary sources that expand, or physically modify their operations.
- (b) To address conditions that may arise when ERUs result from reduced GHG emissions from programs or activities that occur in sectors contributing to covered GHG emissions.
- (c) To promote the viability of voluntary renewable energy programs in Washington.
- (i) Ecology, in conjunction with the departments of commerce and the utilities and transportation commission, will engage stakeholders and renewable energy market experts to estimate demand for voluntary

renewable energy programs affecting Washington customers and renewable energy producers.

- (ii) Ecology may allocate a portion of the reserve ERUs for retirement as voluntary renewable energy purchases consistent with the estimate in (c)(i) of this subsection, after taking into account the availability of reserve ERUs.
- (iii) Ecology will determine the number of reserve ERUs retired for each representative unit of renewable energy purchased on the voluntary market.
- (3) Withdrawals from the reserve. Ecology may assign reserve ERUs to covered parties for the following purposes:
- (a) A curtailed stationary source that restarts operations will be assigned fifty percent of the ERUs that were allocated to the reserve during the calendar year prior to restart as per subsection (1)(a)(ii) of this section.
  - (b) The Environmental Justice Advisory Committee.
- (i) Ecology will convene an Environmental Justice Advisory Committee comprised of persons who are well-informed on the principles of environmental justice and who represent communities of color, low-income communities, and environmental justice interests from geographically diverse areas of the state.
- (ii) Ecology will determine the amount of reserve ERUs available to the committee at the end of each applicable compliance period.
- (iii) The purpose of the committee is to award reserve ERUs to covered parties that implement, fund, or otherwise facilitate emission reduction projects, programs or activities consistent with the priorities and environmental justice criteria determined by the committee.
- (iv) Subject to approval by ecology, the committee may award reserve ERUs on a one-for-one or a two-for-one matching basis with ERUs from emission reduction projects, programs or activities that are consistent with WAC 173-442-160.
- (v) The committee does not have to allocate its entire allotment of reserve ERUs.
  - (vi) Unallocated reserve ERUs return to the reserve.
- (4) **Priority of reserve uses.** Ecology will allocate or retire reserve ERUs in the following priority:
- (a) Startup of curtailed facilities consistent with subsection (3)(a) of this section.
- (b) Covered parties entering the program that do not have a GHG baseline emissions value established through WAC 173-442-050 (1)(a), or existing stationary sources that expand, or physically modify their operations consistent with subsection (2)(a) of this section.
- (c) Changes in production consistent with subsection (1)(a)(i)(B)(III) of this section.
- (d) Harmonizing ERU generation with reduced GHG emissions consistent with subsection (2)(b) of this section.
- (e) Projects or programs with positive environmental justice impacts consistent with subsection (3) (b) of this section.
- (f) Supporting voluntary green power renewable programs consistent with subsection (2)(c) of this section.

- WAC 173-442-250 Compliance report and verification due date. (1) Covered parties required to report GHG emissions to EPA to comply with 40 C.F.R. Part 98 must submit their compliance report and verification by the dates in the "Report to EPA" column in Table 5.
- (2) All other covered parties must submit their compliance report and verification by the dates in the "Report to Ecology" column in Table 5.

Table 5
Compliance Report and Verification Due Date

Compliance Period	Report to EPA	Report to Ecology
(Calendar year)	Due December 31	Due July 28
2017 through 2019	2020	2021
2020 through 2022	2023	2024
2023 through 2025	2026	2027
2026 through 2028	2029	2030
2029 through 2031	2032	2033
2032 through 2034	2035	2036
2035 through 2037	2038	2039
Every 3 years	Every 3 years	Every 3 years

# SECTION 5 - OTHER REQUIREMENTS

# NEW SECTION

WAC 173-442-320 Program review. (1) Ecology will periodically review the program established by this chapter.

(2) If another program establishes GHG reduction requirements from covered parties, ecology will compare the programs. As a result of this comparison, ecology may suspend, alter, or repeal some or all of the requirements if ecology determines the new program requires similar or greater GHG reductions from the covered parties.

- WAC 173-442-330 Air operating permit. (1) The regulatory order issued under WAC 173-442-200(6) is an applicable requirement that must be included in an air operating permit, if this permit is required by chapter 173-401 WAC.
- (2) In an air operating permit, the clean air rule regulatory order must be listed as a "state only" requirement.
- (3) The regulatory order is a stand-alone appendix to an air operating permit.
- (4) Only ecology implements and enforces the terms of the regulatory order.

# NEW SECTION

- **WAC 173-442-340 Enforcement.** (1) A violation of any requirement of this chapter subjects the covered party to enforcement in chapter 70.94 RCW.
- (2) Each metric ton of covered GHG emissions that a covered party emits that exceeds the covered party's compliance obligation, and is not covered by an ERU is a separate violation.
- (3) Ecology is solely responsible for enforcing the requirements of this chapter. Nothing in this chapter otherwise alters a local air authority's ability to regulate covered parties in their jurisdiction.
- (4) Penalties may be appealed to the pollution control hearings board per chapter 43.21B RCW.

# NEW SECTION

- WAC 173-442-350 Confidentiality. (1) Emissions data. Emissions data submitted to ecology is public information and is not confidential.
- (2) **ERU data.** Data about an ERU is considered public information unless ecology approves a request under subsection (3) of this section.
- (3) **Confidentiality requests.** A covered party may request proprietary information that is not emissions data be kept confidential. The request must show how the data:
- (a) Meets the requirements of RCW 70.94.205 (Confidentiality of records and information); or
- (b) Is exempt from public disclosure under the Washington Public Records Act (chapter 42.56 RCW).
- (4) **Verification status.** Ecology's determination of the verification status of each report is public information. All confidential data used in the verification process will remain confidential.

- WAC 173-442-360 Addresses. Submit all requests, notifications, and communications to ecology in a format specified by ecology in either of the following:
- (1) For U.S. mail: Clean Air Rule, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.
  - (2) For e-mail: CAR@ecy.wa.gov.

# NEW SECTION

WAC 173-442-370 Severability. If any provision of the rule or its application to any covered party, person, or circumstance is held invalid, the remainder of the rule or application of the provision to other covered parties, persons, or circumstances is not affected.

# ATTACHMENT B

AMENDATORY SECTION (Amending WSR 15-04-051, filed 1/29/15, effective 3/1/15)

WAC 173-441-020 Definitions. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

- (1) Definitions specific to this chapter:
- (a) "Biomass" means nonfossilized and biodegradable organic material originating from plants, animals, or microorganisms, including products, by-products, residues and waste from agriculture, forestry, and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of nonfossilized and biodegradable organic material.
- (b) "Carbon dioxide equivalent" or " $\rm CO_2e$ " means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.
- (c) "Department of licensing" or "DOL" means the Washington state department of licensing.
  - (d) "Director" means the director of the department of ecology.
  - (e) "Ecology" means the Washington state department of ecology.
- (f) "Facility" unless otherwise specified in any subpart of 40 C.F.R. Part 98 as adopted by ((January 1, 2015)) September 1, 2016, means any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right of way and under common ownership or common control, that emits or may emit any greenhouse gas. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties. All source categories in WAC 173-441-120 are considered facilities even if the source category name includes the word "supplier."
- (g) "Greenhouse gas," "greenhouse gases," "GHG," and "GHGs" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Beginning on January 1, 2012, "greenhouse gas" also includes any other gas or gases designated by ecology by rule in Table A-1 in WAC 173-441-040.
  - (h) "Person" includes:
- (i) An owner or operator, as those terms are defined by the United States Environmental Protection Agency in its mandatory greenhouse gas reporting regulation in 40 C.F.R. Part 98, as adopted by (( $\frac{1}{2}$ ) September 1, 2016; and
  - (ii) A supplier.
- (i) <u>"Product data" means data related to a facility's production that is part of the annual GHG report.</u>
  - (j) "Supplier" or "transportation fuel supplier" means:
  - (i) Any person who is:
- $((\frac{i}{i}))$  (A) A motor vehicle fuel or special fuel supplier or ((a motor vehicle fuel importer)) distributor, as those terms are defined in RCW ((82.36.010;
- (ii) A special fuel supplier or a special fuel importer, as those terms are defined in RCW 82.38.020; or
  - (iii))) 82.38.020; or

- $\underline{\text{(B)}}$  A distributor of aircraft fuel, as the term is defined in RCW 82.42.010.
- (ii) Any use of the term "supplier" in a source category in WAC 173-441-120 or incorporated from 40 C.F.R. Part 98, as adopted by September 1, 2016, is not a "supplier" under this definition. Those uses are instead types of "facilities."
- (2) **Definitions specific to suppliers.** Suppliers must use the definitions found in the following ((regulations)) statutes unless the definition is in conflict with a definition found in subsection (1) of this section. These definitions do not apply to facilities.
  - (a) ((WAC 308 72 800);
  - (b) WAC 308-77-005; and
  - (c) WAC 308-78-010)) Chapter 82.38 RCW; and
  - (b) Chapter 82.42 RCW.
- (3) **Definitions from 40 C.F.R. Part 98.** For those terms not listed in subsection (1) or (2) of this section, the definitions found in 40 C.F.R. § 98.6 or a subpart as adopted in WAC 173-441-120, as adopted by  $((\frac{3}{173} 441 120))$  September 1, 2016, are adopted by reference as modified in WAC 173-441-120(2).
- (4) **Definitions from chapter 173-400 WAC.** If no definition is provided in subsections (1) through (3) in this section, use the definition found in chapter 173-400 WAC.

<u>AMENDATORY SECTION</u> (Amending WSR 15-04-051, filed 1/29/15, effective 3/1/15)

- WAC 173-441-050 General monitoring, reporting, recordkeeping and verification requirements. Persons subject to the requirements of this chapter must submit GHG reports to ecology, as specified in this section. Every metric ton of  $CO_{2}$ e emitted by a facility or supplier required to report under this chapter and covered under any applicable source category listed in WAC 173-441-120 or 173-441-130 must be included in the report.
- (1) **General.** Follow the procedures for emission calculation, monitoring, quality assurance, missing data, recordkeeping, and reporting that are specified in each relevant section of this chapter.
  - (2) **Schedule.** The annual GHG report must be submitted as follows:
  - (a) Report submission due date:
- (i) A person required to report GHG emissions to the United States Environmental Protection Agency under 40 C.F.R. Part 98 must submit the report required under this chapter to ecology no later than March 31st of each calendar year for GHG emissions in the previous calendar year.
- (ii) A person not required to report GHG emissions to the United States Environmental Protection Agency under 40 C.F.R. Part 98 must submit the report required under this chapter to ecology no later than October 31st of each calendar year for GHG emissions in the previous calendar year.
- (iii) Unless otherwise stated, if the final day of any time period falls on a weekend or a state holiday, the time period shall be extended to the next business day.
  - (b) Reporting requirements begin:

- (i) For an existing facility or supplier that began operation before January 1, 2012, report emissions for calendar year 2012 and each subsequent calendar year.
- (ii) For a new facility or supplier that begins operation on or after January 1, 2012, and becomes subject to the rule in the year that it becomes operational, report emissions beginning with the first operating month and ending on December 31st of that year. Each subsequent annual report must cover emissions for the calendar year, beginning on January 1st and ending on December 31st.
- (iii) For any facility or supplier that becomes subject to this rule because of a physical or operational change that is made after January 1, 2012, report emissions for the first calendar year in which the change occurs.
- (A) Facilities begin reporting with the first month of the change and ending on December 31st of that year. For a facility that becomes subject to this rule solely because of an increase in hours of operation or level of production, the first month of the change is the month in which the increased hours of operation or level of production, if maintained for the remainder of the year, would cause the facility or supplier to exceed the applicable threshold.
- (B) Suppliers begin reporting January 1st and ending on December 31st the year of the change.
- (C) For both facilities and suppliers, each subsequent annual report must cover emissions for the calendar year, beginning on January 1st and ending on December 31st.
- (3) Content of the annual report. Each annual GHG report must contain the following information:
- (a) Facility name or supplier name (as appropriate), facility or supplier ID number, and physical street address of the facility or supplier, including the city, state, and zip code. If the facility does not have a physical street address, then the facility must provide the latitude and longitude representing the geographic centroid or center point of facility operations in decimal degree format. This must be provided in a comma-delimited "latitude, longitude" coordinate pair reported in decimal degrees to at least four digits to the right of the decimal point.
  - (b) Year and months covered by the report.
  - (c) Date of submittal.
- (d) For facilities, report annual emissions of each GHG (as defined in WAC 173-441-020) and each fluorinated heat transfer fluid, as follows:
- (i) Annual emissions (including biogenic  $CO_2$ ) aggregated for all GHGs from all applicable source categories in WAC 173-441-120 and expressed in metric tons of  $CO_2$ e calculated using Equation A-1 of WAC 173-441-030 (1)(b)(iii).
- (ii) Annual emissions of biogenic  ${\rm CO_2}$  aggregated for all applicable source categories in WAC 173-441-120, expressed in metric tons.
- (iii) Annual emissions from each applicable source category in WAC 173-441-120, expressed in metric tons of each applicable GHG listed in subsections (3)(d)(iii)(A) through (F) of this section.
  - (A) Biogenic  $CO_2$ .
  - (B)  $CO_2$  (including biogenic  $CO_2$ ).
  - (C)  $CH_4$ .
  - (D)  $N_2O$ .
  - (E) Each fluorinated GHG.

- (F) For electronics manufacturing each fluorinated heat transfer fluid that is not also a fluorinated GHG as specified under WAC 173-441-040.
- (iv) Emissions and other data for individual units, processes, activities, and operations as specified in the "data reporting requirements" section of each applicable source category referenced in WAC 173-441-120.
- (v) Indicate (yes or no) whether reported emissions include emissions from a cogeneration unit located at the facility.
- (vi) When applying subsection (3)(d)(i) of this section to fluorinated GHGs and fluorinated heat transfer fluids, calculate and report  $CO_2e$  for only those fluorinated GHGs and fluorinated heat transfer fluids listed in WAC 173-441-040.
- (vii) For reporting year 2014 and thereafter, you must enter into verification software specified by the director the data specified in the verification software records provision in each applicable record-keeping section. For each data element entered into the verification software, if the software produces a warning message for the data value and you elect not to revise the data value, you may provide an explanation in the verification software of why the data value is not being revised. Whenever the use of verification software is required or voluntarily used, the file generated by the verification software must be submitted with the facility's annual GHG report.
  - (e) For suppliers, report the following information:
- (i) Annual emissions of  $CO_2$ , expressed in metric tons of  $CO_2$ , as required in subsections (3)(e)(i)(A) and (B) of this section that would be emitted from the complete combustion or oxidation of the fuels reported to DOL as sold in Washington state during the calendar year.
  - (A) Aggregate biogenic CO<sub>2</sub>.
  - (B) Aggregate  $CO_2$  (including nonbiogenic and biogenic  $CO_2$ ).
- (ii) All contact information reported to DOL not included in (a) of this subsection.
- (f) A written explanation, as required under subsection (4) of this section, if you change emission calculation methodologies during the reporting period.
- (g) Each data element for which a missing data procedure was used according to the procedures of an applicable subpart referenced in WAC 173-441-120 and the total number of hours in the year that a missing data procedure was used for each data element.
- (h) A signed and dated certification statement provided by the designated representative of the owner or operator, according to the requirements of WAC 173-441-060 (5)(a).
  - (i) NAICS code(s) that apply to the facility or supplier.
- (i) Primary NAICS code. Report the NAICS code that most accurately describes the facility or supplier's primary product/activity/service. The primary product/activity/service is the principal source of revenue for the facility or supplier. A facility or supplier that has two distinct products/activities/services providing comparable revenue may report a second primary NAICS code.
- (ii) Additional NAICS code(s). Report all additional NAICS codes that describe all product(s)/activity(s)/service(s) at the facility or supplier that are not related to the principal source of revenue.
- (j) Legal name(s) and physical address(es) of the highest-level United States parent company(s) of the owners (or operators) of the facility or supplier and the percentage of ownership interest for each

listed parent company as of December 31st of the year for which data are being reported according to the following instructions:

- (i) If the facility or supplier is entirely owned by a single United States company that is not owned by another company, provide that company's legal name and physical address as the United States parent company and report one hundred percent ownership.
- (ii) If the facility or supplier is entirely owned by a single United States company that is, itself, owned by another company (e.g., it is a division or subsidiary of a higher-level company), provide the legal name and physical address of the highest-level company in the ownership hierarchy as the United States parent company and report one hundred percent ownership.
- (iii) If the facility or supplier is owned by more than one United States company (e.g., company A owns forty percent, company B owns thirty-five percent, and company C owns twenty-five percent), provide the legal names and physical addresses of all the highest-level companies with an ownership interest as the United States parent companies and report the percent ownership of each company.
- (iv) If the facility or supplier is owned by a joint venture or a cooperative, the joint venture or cooperative is its own United States parent company. Provide the legal name and physical address of the joint venture or cooperative as the United States parent company, and report one hundred percent ownership by the joint venture or cooperative.
- (v) If the facility or supplier is entirely owned by a foreign company, provide the legal name and physical address of the foreign company's highest-level company based in the United States as the United States parent company, and report one hundred percent ownership.
- (vi) If the facility or supplier is partially owned by a foreign company and partially owned by one or more United States companies, provide the legal name and physical address of the foreign company's highest-level company based in the United States, along with the legal names and physical addresses of the other United States parent companies, and report the percent ownership of each of these companies.
- (vii) If the facility or supplier is a federally owned facility, report "U.S. Government" and do not report physical address or percent ownership.
- (k) An indication of whether the facility includes one or more plant sites that have been assigned a "plant code" by either the Department of Energy's Energy Information Administration or by the Environmental Protection Agency's (EPA) Clean Air Markets Division.
- (4) **Emission calculations.** In preparing the GHG report, you must use the calculation methodologies specified in the relevant sections of this chapter. For each source category, you must use the same calculation methodology throughout a reporting period unless you provide a written explanation of why a change in methodology was required.
- (5) **Verification.** To verify the completeness and accuracy of reported GHG emissions, ecology may review the certification statements described in subsection (3)(h) of this section and any other credible evidence, in conjunction with a comprehensive review of the GHG reports and periodic audits of selected reporting facilities. Nothing in this section prohibits ecology from using additional information to verify the completeness and accuracy of the reports.
- (6) **Recordkeeping.** A person that is required to report GHGs under this chapter must keep records as specified in this subsection. Retain all required records for at least three years from the date of submission of the annual GHG report for the reporting year in which the re-

cord was generated. Upon request by ecology, the records required under this section must be made available to ecology. Records may be retained off-site if the records are readily available for expeditious inspection and review. For records that are electronically generated or maintained, the equipment or software necessary to read the records must be made available, or, if requested by ecology, electronic records must be converted to paper documents. You must retain the following records, in addition to those records prescribed in each applicable section of this chapter:

- (a) A list of all units, operations, processes, and activities for which GHG emissions were calculated.
- (b) The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include, but are not limited to, the following information:
  - (i) The GHG emissions calculations and methods used.
- (ii) Analytical results for the development of site-specific emissions factors.
- (iii) The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters.
- (iv) Any facility operating data or process information used for the GHG emission calculations.
  - (c) The annual GHG reports.
- (d) Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.
- (e) Owners or operators required to report under WAC 173-441-030(1) must keep a written GHG monitoring plan (monitoring plan, plan).
- (i) At a minimum, the GHG monitoring plan must include the following elements:
- (A) Identification of positions of responsibility (i.e., job titles) for collection of the emissions data.
- (B) Explanation of the processes and methods used to collect the necessary data for the GHG calculations.
- (C) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.
- (ii) The GHG monitoring plan may rely on references to existing corporate documents (e.g., standard operating procedures, quality assurance programs under appendix F to 40 C.F.R. Part 60 or appendix B to 40 C.F.R. Part 75, and other documents) provided that the elements required by (e)(i) of this subsection are easily recognizable.
- (iii) The owner or operator must revise the GHG monitoring plan as needed to reflect changes in production processes, monitoring instrumentation, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.
- (iv) Upon request by ecology, the owner or operator must make all information that is collected in conformance with the GHG monitoring plan available for review during an audit. Electronic storage of the information in the plan is permissible, provided that the information can be made available in hard copy upon request during an audit.
- (f) The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and

other instrumentation used to provide data for the GHGs reported under this chapter.

- (g) Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.
- (h) Suppliers must retain any other data specified in WAC 173-441-130(5).
  - (7) Annual GHG report revisions.
- (a) A person must submit a revised annual GHG report within forty-five days of discovering that an annual GHG report that the person previously submitted contains one or more substantive errors. The revised report must correct all substantive errors.
- (b) Ecology may notify the person in writing that an annual GHG report previously submitted by the person contains one or more substantive errors. Such notification will identify each such substantive error. The person must, within forty-five days of receipt of the notification, either resubmit the report that, for each identified substantive error, corrects the identified substantive error (in accordance with the applicable requirements of this chapter) or provide information demonstrating that the previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error.
- (c) A substantive error is an error that impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified.
- (d) Notwithstanding (a) and (b) of this subsection, upon request by a person, ecology may provide reasonable extensions of the fortyfive day period for submission of the revised report or information under (a) and (b) of this subsection. If ecology receives a request of the forty-five period, for extension day by e-mail qhqreporting@ecy.wa.gov, at least two business days prior to the expiration of the forty-five day period, and ecology does not respond to the request by the end of such period, the extension request is deemed to be automatically granted for thirty more days. During the automatic thirty-day extension, ecology will determine what extension, if any, beyond the automatic extension is reasonable and will provide any such additional extension.
- (e) The owner or operator must retain documentation for three years to support any revision made to an annual GHG report.
- (8) Calibration and accuracy requirements. The owner or operator of a facility that is subject to the requirements of this chapter must meet the applicable flow meter calibration and accuracy requirements of this subsection. The accuracy specifications in this subsection do not apply where either the use of company records (as defined in WAC 173-441-020(3)) or the use of "best available information" is specified in an applicable subsection of this chapter to quantify fuel usage and/or other parameters. Further, the provisions of this subsection do not apply to stationary fuel combustion units that use the methodologies in 40 C.F.R. Part 75 to calculate  $CO_2$  mass emissions. Suppliers subject to the requirements of this chapter must meet the calibration accuracy requirements in chapters 308-72, 308-77, and 308-78 WAC.
- (a) Except as otherwise provided in (d) through (f) of this subsection, flow meters that measure liquid and gaseous fuel feed rates, process stream flow rates, or feedstock flow rates and provide data for the GHG emissions calculations, must be calibrated prior to Janu-

- ary 1, 2012, using the procedures specified in this subsection when such calibration is specified in a relevant section of this chapter. Each of these flow meters must meet the applicable accuracy specification in (b) or (c) of this subsection. All other measurement devices (e.g., weighing devices) that are required by a relevant subsection of this chapter, and that are used to provide data for the GHG emissions calculations, must also be calibrated prior to January 1, 2012; however, the accuracy specifications in (b) and (c) of this subsection do not apply to these devices. Rather, each of these measurement devices must be calibrated to meet the accuracy requirement specified for the device in the applicable subsection of this chapter, or, in the absence of such accuracy requirement, the device must be calibrated to an accuracy within the appropriate error range for the specific measurement technology, based on an applicable operating standard including, but not limited to, manufacturer's specifications and industry standards. The procedures and methods used to quality-assure the data from each measurement device must be documented in the written monitoring plan, pursuant to subsection (6)(e)(i)(C) of this section.
- (i) All flow meters and other measurement devices that are subject to the provisions of this subsection must be calibrated according to one of the following: You may use the manufacturer's recommended procedures; an appropriate industry consensus standard method; or a method specified in a relevant section of this chapter. The calibration method(s) used must be documented in the monitoring plan required under subsection (6)(e) of this section.
- (ii) For facilities and suppliers that become subject to this chapter after January 1, 2012, all flow meters and other measurement devices (if any) that are required by the relevant subsection(s) of this chapter to provide data for the GHG emissions calculations must be installed no later than the date on which data collection is required to begin using the measurement device, and the initial calibration(s) required by this subsection (if any) must be performed no later than that date.
- (iii) Except as otherwise provided in (d) through (f) of this subsection, subsequent recalibrations of the flow meters and other measurement devices subject to the requirements of this subsection must be performed at one of the following frequencies:
- (A) You may use the frequency specified in each applicable subsection of this chapter.
- (B) You may use the frequency recommended by the manufacturer or by an industry consensus standard practice, if no recalibration frequency is specified in an applicable subsection.
- (b) Perform all flow meter calibration at measurement points that are representative of the normal operating range of the meter. Except for the orifice, nozzle, and venturi flow meters described in (c) of this subsection, calculate the calibration error at each measurement point using Equation A-2 of this subsection. The terms "R" and "A" in Equation A-2 must be expressed in consistent units of measure (e.g., gallons/minute,  $\mathrm{ft^3/min}$ ). The calibration error at each measurement point must not exceed 5.0 percent of the reference value.

$$CE = \frac{|R-A|}{R} \times 100 \qquad (Eq. A-2)$$

Where:

CE = Calibration error (%)

R = Reference value

A = Flow meter response to the reference value

(c) For orifice, nozzle, and venturi flow meters, the initial quality assurance consists of in situ calibration of the differential pressure (delta-P), total pressure, and temperature transmitters.

(i) Calibrate each transmitter at a zero point and at least one upscale point. Fixed reference points, such as the freezing point of water, may be used for temperature transmitter calibrations. Calculate the calibration error of each transmitter at each measurement point, using Equation A-3 of this subsection. The terms "R," "A," and "FS" in Equation A-3 of this subsection must be in consistent units of measure (e.g., milliamperes, inches of water, psi, degrees). For each transmitter, the CE value at each measurement point must not exceed 2.0 percent of full-scale. Alternatively, the results are acceptable if the sum of the calculated CE values for the three transmitters at each calibration level (i.e., at the zero level and at each upscale level) does not exceed 6.0 percent.

$$CE = \frac{|R-A|}{FS} \times 100 \qquad (Eq. A-3)$$

Where:

CE = Calibration error (%)

R = Reference value

A = Transmitter response to the reference value

FS = Full-scale value of the transmitter

- (ii) In cases where there are only two transmitters (i.e., differential pressure and either temperature or total pressure) in the immediate vicinity of the flow meter's primary element (e.g., the orifice plate), or when there is only a differential pressure transmitter in close proximity to the primary element, calibration of these existing transmitters to a CE of 2.0 percent or less at each measurement point is still required, in accordance with (c)(i) of this subsection; alternatively, when two transmitters are calibrated, the results are acceptable if the sum of the CE values for the two transmitters at each calibration level does not exceed 4.0 percent. However, note that installation and calibration of an additional transmitter (or transmitters) at the flow monitor location to measure temperature or total pressure or both is not required in these cases. Instead, you may use assumed values for temperature and/or total pressure, based on measurements of these parameters at a remote location (or locations), provided that the following conditions are met:
- (A) You must demonstrate that measurements at the remote location(s) can, when appropriate correction factors are applied, reliably and accurately represent the actual temperature or total pressure at the flow meter under all expected ambient conditions.
- (B) You must make all temperature and/or total pressure measurements in the demonstration described in (c)(ii)(A) of this subsection with calibrated gauges, sensors, transmitters, or other appropriate measurement devices. At a minimum, calibrate each of these devices to an accuracy within the appropriate error range for the specific measurement technology, according to one of the following: You may cali-

brate using a manufacturer's specification or an industry consensus standard.

- (C) You must document the methods used for the demonstration described in (c)(ii)(A) of this subsection in the written GHG monitoring plan under subsection (6)(e)(i)(C) of this section. You must also include the data from the demonstration, the mathematical correlation(s) between the remote readings and actual flow meter conditions derived from the data, and any supporting engineering calculations in the GHG monitoring plan. You must maintain all of this information in a format suitable for auditing and inspection.
- (D) You must use the mathematical correlation(s) derived from the demonstration described in (c)(ii)(A) of this subsection to convert the remote temperature or the total pressure readings, or both, to the actual temperature or total pressure at the flow meter, or both, on a daily basis. You must then use the actual temperature and total pressure values to correct the measured flow rates to standard conditions.
- (E) You must periodically check the correlation(s) between the remote and actual readings (at least once a year), and make any necessary adjustments to the mathematical relationship(s).
- (d) Fuel billing meters are exempted from the calibration requirements of this section and from the GHG monitoring plan and recordkeeping provisions of subsections (6)(e)(i)(C) and (g) of this section, provided that the fuel supplier and any unit combusting the fuel do not have any common owners and are not owned by subsidiaries or affiliates of the same company. Meters used exclusively to measure the flow rates of fuels that are used for unit startup are also exempted from the calibration requirements of this section.
- (e) For a flow meter that has been previously calibrated in accordance with (a) of this subsection, an additional calibration is not required by the date specified in (a) of this subsection if, as of that date, the previous calibration is still active (i.e., the device is not yet due for recalibration because the time interval between successive calibrations has not elapsed). In this case, the deadline for the successive calibrations of the flow meter must be set according to one of the following: You may use either the manufacturer's recommended calibration schedule or you may use the industry consensus calibration schedule.
- (f) For units and processes that operate continuously with infrequent outages, it may not be possible to meet the deadline established in (a) of this subsection for the initial calibration of a flow meter or other measurement device without disrupting normal process operation. In such cases, the owner or operator may postpone the initial calibration until the next scheduled maintenance outage. The best available information from company records may be used in the interim. The subsequent required recalibrations of the flow meters may be similarly postponed. Such postponements must be documented in the monitoring plan that is required under subsection (6)(e) of this section.
- (g) If the results of an initial calibration or a recalibration fail to meet the required accuracy specification, data from the flow meter must be considered invalid, beginning with the hour of the failed calibration and continuing until a successful calibration is completed. You must follow the missing data provisions provided in the relevant missing data sections during the period of data invalidation.
- (9) Measurement device installation. 40 C.F.R. § 98.3(j) and 40 C.F.R. § 98.3(d) as adopted by  $((\frac{3anuary}{1}, \frac{2015}{2015}))$  September 1, 2016, are adopted by reference as modified in WAC 173-441-120(2).

WAC 173-441-080 Standardized methods and conversion factors incorporated by reference. (1) The materials incorporated by reference by EPA in 40 C.F.R. § 98.7, as adopted by  $((\frac{3}{2} + \frac{2}{2} + \frac{1}{2} + \frac{2}{2}))$  September 1, 2016, are incorporated by reference in this chapter for use in the sections of this chapter that correspond to the sections of 40 C.F.R. Part 98 referenced here.

(2) Table A-2 of this section provides a conversion table for some of the common units of measure used in this chapter.

Table A-2: Units of Measure Conversions

	- "	Multiply by
Kilograms (kg)	Pounds (lbs)	2.20462
Pounds (lbs)	Kilograms (kg)	0.45359
Pounds (lbs)	Metric tons	4.53592 x 10 <sup>-4</sup>
Short tons	Pounds (lbs)	2,000
Short tons	Metric tons	0.90718
Metric tons	Short tons	1.10231
Metric tons	Kilograms (kg)	1,000
Cubic meters (m <sup>3</sup> )	Cubic feet (ft <sup>3</sup> )	35.31467
Cubic feet (ft <sup>3</sup> )	Cubic meters (m <sup>3</sup> )	0.028317
Gallons (liquid, US)	Liters (l)	3.78541
Liters (l)	Gallons (liquid, US)	0.26417
Barrels of liquid fuel (bbl)	Cubic meters (m <sup>3</sup> )	0.15891
Cubic meters (m <sup>3</sup> )	Barrels of liquid fuel (bbl)	6.289
Barrels of liquid fuel (bbl)	Gallons (liquid, US)	42
Gallons (liquid, US)	Barrels of liquid fuel (bbl)	0.023810
Gallons (liquid, US)	Cubic meters (m <sup>3</sup> )	0.0037854
Liters (l)	Cubic meters (m <sup>3</sup> )	0.001
Feet (ft)	Meters (m)	0.3048
Meters (m)	Feet (ft)	3.28084
Miles (mi)	Kilometers (km)	1.60934
Kilometers (km)	Miles (mi)	0.62137
Square feet (ft <sup>2</sup> )	Acres	2.29568 x 10 <sup>-5</sup>
Square meters (m <sup>2</sup> )	Acres	2.47105 x 10 <sup>-4</sup>
Square miles (mi <sup>2</sup> )	Square kilometers (km <sup>2</sup> )	2.58999
Degrees Celsius (°C)	Degrees Fahrenheit (°F)	°C = (5/9) x (°F - 32)
Degrees Fahrenheit (°F)	Degrees Celsius (°C)	°F = (9/5) x (°C + 32)
Degrees Celsius (°C)	Kelvin (K)	$K = {}^{\circ}C + 273.15$
Kelvin (K)	Degrees Rankine (°R)	1.8
Joules	Btu	9.47817 x 10 <sup>-4</sup>
Btu	MMBtu	1 x 10 <sup>-6</sup>
Pascals (Pa)	Inches of Mercury (in Hg)	2.95334 x 10 <sup>-4</sup>
Inches of Mercury (in	Pounds per square inch	0.49110

To convert from	То	Multiply by
Pounds per square inch (psi)	Inches of Mercury (in Hg)	2.03625

WAC 173-441-085 Third-party verification. The owner or operator of a facility that exceeds the compliance threshold under WAC 173-442-030 or voluntarily participating under WAC 173-442-030(6) must have the facility's annual GHG reports verified by a third party as specified in this section.

- (1) Annual GHG reports must be third-party verified each emissions year that:
- (a) The facility has a GHG emission reduction pathway under WAC 173-442-060;
- (b) The facility is voluntarily participating under WAC 173-442-030(6);
- (c) Is part of a baseline calculation for a new entrant after 2020 under WAC 173-442-050 (1)(b); or
- (d) For the first year after no longer meeting the requirements of (a) through (c) of this subsection unless the operations of the facility are changed such that all applicable GHG emitting processes and operations listed in WAC 173-441-120 permanently cease to operate.
- (2) Emissions subject to third-party verification. All covered GHG emissions under chapter 173-442 WAC are subject to the requirements of this section.
- (3) **Verification standards.** The third-party verifier must certify that annual GHG reports meet the following conditions:
- (a) Annual GHG reports must be consistent with the relevant requirements and methods in this chapter.
- (b) The absolute value of any discrepancy, omission, or misreporting, or aggregation of the three, must be less than five percent of total reported covered emissions (metric tons of  $\text{CO}_2\text{e}$ ) or the verification will result in an adverse verification statement. This standard also separately applies to any covered product data in the annual GHG report.
- (i) "Discrepancies" means any differences between the reported covered emissions or covered product data and the third-party verifier's review of covered emissions or covered product data for a data source or product data subject to this section.
- (ii) "Omissions" means any covered emissions or covered product data the third-party verifier concludes must be part of the annual GHG report, but were not included by the reporting entity in the annual GHG report.
- (iii) "Misreporting" means duplicate, incomplete or other covered emissions the third-party verifier concludes should, or should not, be part of the annual GHG report or duplicate or other product data the verifier concludes should not be part of the annual GHG report.
- (iv) "Total reported covered emissions or covered product data" means the total annual reporting entity covered emissions or total reported covered product data for which the third-party verifier is conducting an assessment.
  - (4) Verification services.

- (a) Full verification is required at least once every three reporting years. The first year of third-party verification for a facility must be full verification. An owner or operator may choose to obtain less intensive verification services for the remaining two years in the three-year period as long as:
- (i) No year in the three-year period has an adverse verification statement;
- (ii) The third-party verifier can provide findings with a reasonable level of assurance;
  - (iii) There has not been a change in the third-party verifier;
- (iv) There has not been a change in operational control of the facility; and
- (v) There has not been a significant change in sources or emissions. A difference in emissions of greater than twenty-five percent relative to the preceding year's emissions is considered significant unless that change can be directly shown to result from a verifiable change in product data.
- (b) Full verification. A full verification report must be in a format specified by ecology and contain:
- (i) Documentation identifying the facility reporting emissions and the scope of emissions verified in the report.
- (ii) Documentation identifying the third-party verifier, including all relevant information about the third-party verifier in subsection (7)(a) of this section and the names, roles, and sector specific qualifications (if any) of all individuals working on the verification report.
- (iii) Documentation demonstrating and certifying that the requirements of subsection (7)(b) and (c) of this section have been met.
- (iv) A verification plan that details the data and methodologies used to verify the annual GHG report and schedule describing when the verification services occurred. This must include a sampling plan that describes how the third-party verifier prioritized which emissions to verify and a summary of the data checks used to determine the reliability of the annual GHG report. Full verification requires a more complete sampling of data and additional data checks than less intensive verification.
- (v) Documentation of the third-party verifier's review of facility operations to identify applicable GHG emissions sources and product data. Any applicable GHG emissions sources or product data not included in the annual GHG report must be identified. The third-party verifier must also ensure that the reported current NAICS code(s) accurately represents the activities on-site.
- (vi) Documentation of any corrections made to the annual GHG report.
- (vii) Documentation supporting the third-party verifiers' findings evaluating if the annual GHG report is compliant with the requirements in subsection (3) of this section. This must include a log of any issues (if any) identified in the course of verification, their potential impact on the quality of the annual GHG report, and their resolution.
- (viii) The individuals conducting the third-party verification must certify that the verification report is true, accurate, and complete to the best of their knowledge and belief.
- (ix) Information about the required on-site visit, including date(s) and a description of the verification services conducted on-site. At least one accredited verifier in the verification team, including the sector specific verifier, if applicable, must at a minimum

make one site visit, during each year full verification is required. The third-party verifier must visit the headquarters or other location of central data management when the facility is a supplier of petroleum products or supplier of natural gas and natural gas liquids. During the site visit, the third-party verifier must:

- (A) Confirm that all applicable emissions are included in the annual GHG report.
- (B) Check that all sources specified in the annual GHG report are identified appropriately.
- (C) Review and understand the data management systems used by the owners or operators to track, quantify, and report GHG emissions and, when applicable, product data and fuel transactions. The third-party verifier must evaluate the uncertainty and effectiveness of these systems.
  - (D) Interview key personnel.
- (E) Make direct observations of equipment for data sources and equipment supplying data for sources determined to be high risk.
- (F) Assess conformance with measurement accuracy, data capture, and missing data substitution requirements.
- (G) Review financial transactions to confirm fuel, feedstock, and product data, and confirming the complete and accurate reporting of required data such as facility fuel suppliers, fuel quantities delivered, and if fuel was received directly from an interstate pipeline.
- (c) Less intensive verification. A less intensive verification report must be in a format specified by ecology and meet the requirements of subsection (4)(b)(i) through (viii) of this section. Less intensive verification of an annual GHG report allows for less detailed data checks and document reviews of the annual GHG report based on the analysis and risk assessment in the most current sampling plan developed as part of the most current full verification.
- (5) Annual GHG report corrections. Owners or operators subject to this section must correct errors in their annual GHG report.
  - (a) Corrections are required if errors are identified by:
  - (i) The third-party verifier;
  - (ii) The owner or operator;
  - (iii) Ecology; or
  - (iv) EPA.
- (b) The owner or operator must fix all correctable errors that affect covered emissions, noncovered emissions, or covered product data in the submitted emissions data report, and submit a revised emissions data report to ecology. Failure to do so will result in an adverse verification statement.
- (c) Failure to fix correctable errors that do not affect covered emissions, noncovered emissions, or covered product data represents a nonconformance with this chapter but does not, absent other errors, result in an adverse verification statement.
- (d) The owner or operator must maintain documentation to support any revisions made to the initial emissions data report. Documentation for all emissions data report submittals must be retained by the reporting entity for ten years.
- (6) **Timing.** The third-party verifier must submit a complete verification report to ecology for each year as required under subsection (1) of this section no later than one hundred fifty days after the report submission due date for the facility, specified in WAC 173-441-050(2) for GHG emissions occurring in the previous calendar year. Any corrections to the annual GHG report or verification report must be submitted to ecology no later than forty-five days after dis-

covery of the error. Records must be retained following the requirements of WAC 173-441-050(6).

- (7) Eligible third-party verifiers.
- (a) Owners or operators subject to this section must have their annual GHG report verified by a third-party verifier certified by ecology. Certification requires:
- (i) Registering as a third-party verifier with ecology. Registration is required for both the verification organization and all individuals performing verification services for the verification organization.
- (ii) Demonstrating to ecology's satisfaction that the third-party verifier has sufficient knowledge of the relevant methods and protocols in this chapter. Certification may be limited to certain types or sources of emissions.
- (iii) Active accreditation or recognition as a third-party verifier under at least one of the following GHG programs:
- (A) California ARB's Mandatory Reporting of Greenhouse Gas Emissions program;
  - (B) The Climate Registry;
  - (C) Climate Action Reserve;
  - (D) American National Standards Institute (ANSI);
  - (E) Accredited ISO 14064 registrars; or
  - (F) Other GHG verification standard approved by ecology.
- (b) An owner or operator must not use the same third-party verifier (either organization or individuals) for a period of more than six consecutive years. The owner or operator must wait at least three years before using the previous third-party verifier to verify their annual GHG reports.
- (c) An owner or operator and third-party verifier must certify that there is not a conflict of interest in verifying the annual GHG report. The potential for a conflict of interest must be deemed to be high where:
- (i) The third-party verifier and facility share any management staff or board of directors membership, or any of the senior management staff of the facility have been employed by the third-party verifier, or vice versa, within the previous five years; or
- (ii) Any employee of the third-party verifier, or any employee of a related entity, or a subcontractor who is a member of the verification team has provided to the facility any services within the previous five years.
- (iii) Any staff member of the third-party verifier provides any type of incentive to a facility to secure a verification services contract.
- (8) **Ecology verification.** Ecology retains full authority in determining if an annual GHG report contains a discrepancy, omission, or misreporting, or any aggregation of the three, that impacts the verification status of the annual GHG report. Ecology may issue an adverse verification statement for an annual GHG report even if the annual GHG report has received a positive verification statement from the third-party verifier. Ecology may also issue an adverse verification statement for:
- (a) Failure to submit a complete annual GHG report in a timely manner;
- (b) Failure to complete third-party verification if required by this subsection; or
  - (c) Other forms of noncompliance with this chapter.

- WAC 173-441-086 Assigned emissions level. (1) Ecology may assign an emissions level to any annual GHG report that:
- (a) Failed to submit a complete annual GHG report by the report submission due date, specified in WAC 173-441-050(2);
- (b) Failed to meet the third-party verification requirements in WAC 173-441-085;
  - (c) Has an adverse verification statement; or
- (d) Ecology determines the absolute value of any discrepancy, omission, or misreporting, or aggregation of the three, is at least five percent of total reported covered emissions (metric tons of  $\rm CO_{2}e$ ). This standard also separately applies to any covered product data in the annual GHG report.
- (i) "Discrepancies" means any differences between the reported covered emissions or covered product data and ecology's review of covered emissions or covered product data for a data source or product data.
- (ii) "Omissions" means any covered emissions or covered product data ecology concludes must be part of the annual GHG report, but were not included by the reporting entity in the annual GHG report.
- (iii) "Misreporting" means duplicate, incomplete or other covered emissions ecology concludes should, or should not, be part of the annual GHG report or duplicate or other product data ecology concludes should not be part of the annual GHG report.
- (iv) "Total reported covered emissions or covered product data" means the total annual reporting entity covered emissions or total reported covered product data for which ecology is conducting an assessment.
- (2) The assigned emissions level must be used when determining compliance with chapter 173-442 WAC.
- (3) Ecology must use conservative assumptions when setting the assigned emissions level to avoid underestimating emissions in a compliance year or overestimating emissions in a baseline year.
- (a) Within five working days of a written request by ecology, the third-party verifier (if applicable) must provide any available verification services information or correspondence related to the emissions data.
- (b) Within five working days of a written request by ecology, the owner or operator of a facility must provide the data that is required to calculate GHG emissions for the facility according to the requirements of this chapter, the preliminary or final detailed verification report prepared by the third-party verifier (if applicable), and other information requested by ecology, including the operating days and hours of the facility during the data year. The owner or operator must also make available personnel who can assist ecology's determination of an assigned emissions level for the data year.
- (4) Ecology may adjust the assigned emissions level if the owner or operator is able to obtain a positive verification statement for the annual GHG report at a later date.

AMENDATORY SECTION (Amending WSR 15-04-051, filed 1/29/15, effective 3/1/15)

- WAC 173-441-090 Compliance and enforcement. (1) Violations. Any violation of any requirement of this chapter must be a violation of chapter 70.94 RCW and subject to enforcement as provided in that chapter. A violation includes, but is not limited to, failure to report GHG emissions by the reporting deadline, failure to report accurately, failure to collect data needed to calculate GHG emissions, failure to continuously monitor and test as required, failure to retain records needed to verify the amount of GHG emissions, failure to calculate GHG emissions following the methodologies specified in this chapter, failure to have the annual GHG report third-party verified, and failure to pay the required reporting fee. Each day and each metric ton CO2e of emissions of a violation constitutes a separate violation.
- (2) **Enforcement responsibility.** Ecology must enforce the requirements of this chapter unless ecology approves a local air authority's request to enforce the requirements for persons operating within the authority's jurisdiction.

<u>AMENDATORY SECTION</u> (Amending WSR 10-24-108, filed 12/1/10, effective 1/1/11)

- WAC 173-441-110 Fees. (1) Fee determination. All persons required to report ((or voluntarily reporting)) under WAC 173-441-030(1) must pay a reporting fee for each year they submit a report to ecology. Ecology must establish reporting fees based on workload using the process outlined below. The fees must be sufficient to cover ecology's costs to administer the GHG emissions reporting program.
- (2) **Fee eligible activities.** All costs of activities associated with administering this reporting program, as described in RCW 70.94.151(2), are fee eligible.
- (3) Workload analysis and budget development. Each biennium, ecology must conduct a workload analysis and develop a budget based on the process outlined below:
- (a) Ecology must conduct a workload analysis projecting resource requirements for administering the reporting program, organized by categories of fee eligible activities, for the purpose of preparing the budget. Ecology must prepare the workload analysis for the two-year period corresponding to each biennium. The workload analysis must identify the fee eligible administrative activities related to the reporting program that it will perform during the biennium and must estimate the resources required to perform these activities.
- (b) Ecology must prepare a budget for administering the reporting program for the two-year period corresponding to each biennium. Ecology must base the budget on the resource requirements identified in the workload analysis for the biennium and must take into account the reporting program account balance at the start of the biennium.
- (4) Allocation methodology. ((Ecology must allocate the reporting program budget among the persons required to report or voluntarily reporting under WAC 173-441-030 according to the following components:

- (a))) The reporting fee for an owner or operator of a facility required to report ((or voluntarily reporting)) under WAC 173-441-030(1) is calculated by the equal division of ((seventy-five percent of)) the budget amount by the total number of facilities ((reporting)) required to report GHG emissions under this chapter in a given calendar year. A person required to report ((or voluntarily reporting)) multiple facilities under WAC 173-441-030(1) must pay a fee for each facility reported.
- (((b) The reporting fee for a supplier required to report or voluntarily reporting under WAC 173-441-030 is calculated by the equal division of twenty-five percent of the budget amount by the total number of suppliers reporting GHG emissions under this chapter in a given calendar year.
- (c) A person required to report or voluntarily reporting under WAC 173-441-030 both as an owner or operator of a facility or facilities and as a supplier must pay a fee for each facility reported and a fee for reporting as a supplier.)
- (5) Fee schedule. Ecology must issue annually a fee schedule reflecting the reporting fee to be paid per facility or supplier. Ecology must base the fee schedule on the budget and workload analysis described above and conducted each biennium. Ecology must publish the fee schedule for the following year on or before October 31st of each year.
- (6) **Fee payments.** Fees specified in this section must be paid within sixty days of receipt of ecology's billing statement. All fees collected under this chapter must be made payable to the Washington department of ecology. A late fee surcharge of fifty dollars or ten percent of the fee, whichever is more, may be assessed for any fee received after ninety days past the due date for fee payment.
- (7) **Dedicated account.** Ecology must deposit all reporting fees they collect in the air pollution control account.

<u>AMENDATORY SECTION</u> (Amending WSR 15-04-051, filed 1/29/15, effective 3/1/15)

- WAC 173-441-120 Calculation methods incorporated by reference from 40 C.F.R. Part 98 for facilities. Owners and operators of facilities that are subject to this chapter must follow the requirements of this chapter and all subparts of 40 C.F.R. Part 98 listed in Table 120-1 of this section. If a conflict exists between a provision in WAC 173-441-050(3) through 173-441-080 and any applicable provision of this section, the requirements of this section must take precedence.
- (1) Source categories and calculation methods for facilities. An owner or operator of a facility subject to the requirements of this chapter must report GHG emissions, including GHG emissions from biomass, from all applicable source categories in Washington state listed in Table 120-1 of this section using the methods incorporated by reference in Table 120-1. Table 120-1 and subsection (2) of this section list modifications and exceptions to calculation methods adopted by reference in this section. (( $CO_2$  collected and transferred off site must be included in the emissions calculation as required under WAC 173-441-030 (1)(b)(iv) using the methods established in 40 C.F.R. Part 98 Subpart PP as adopted by January 1, 2015. Owners or operators are

not required to comply with requirements in Subpart PP that do not address  $CO_2$  collected and transferred off-site.)

# Table 120-1: Source Categories and Calculation Methods Incorporated by Reference from 40 C.F.R. Part 98 for Facilities

Note: All source categories in Table 120-1 are considered facilities even if the source category name includes the word "supplier."

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria <sup>+#</sup>
General Stationary Fuel Combustion Sources	С	
Electricity Generation	D	
Adipic Acid Production	Е	
Aluminum Production	F	
Ammonia Manufacturing	G	
Cement Production	Н	
Electronics Manufacturing	I	In § 98.91, replace "To calculate total annual GHG emissions for comparison to the 25,000 metric ton CO <sub>2</sub> e per year emission threshold in paragraph § 98.2 (a)(2), follow the requirements of § 98.2(b), with one exception" with "To calculate GHG emissions for comparison to the emission threshold in WAC 173-441-030(1), follow the requirements of WAC 173-441-030 (1)(b), with one exception."
Ferroalloy Production	K	
Fluorinated Gas Production	L	In § 98.121, replace "To calculate GHG emissions for comparison to the 25,000 metric ton CO <sub>2</sub> e per year emission threshold in § 98.2 (a)(2)" with "To calculate GHG emissions for comparison to the emission threshold in WAC 173-441-030(1)."
Glass Production	N	
HCFC-22 Production and HFC-23 Destruction	0	
Hydrogen Production	P	
Iron and Steel Production	Q	
Lead Production	R	
Lime Manufacturing	S	
Magnesium Production	T	
Miscellaneous Uses of Carbonate	U	
Nitric Acid Production	V	
Petroleum and Natural Gas Systems	W	§ 98.231(a) should read: "You must report GHG emissions under this subpart if your facility contains petroleum and natural gas systems and the facility meets the requirements of WAC 173-441-030(1)."
Petrochemical Production	X	
Petroleum Refineries	Y	
Phosphoric Acid Production	Z	
Pulp and Paper Manufacturing	AA	
Silicon Carbide Production	BB	
Soda Ash Manufacturing	CC	

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria <sup>+#</sup>
Electrical Transmission and Distribution Equipment Use	DD	§ 98.301 should read: "You must report GHG emissions under this subpart if your facility contains any electrical transmission and distribution equipment use process and the facility meets the requirements of WAC 173-441-030(1)." See subsection (2)(f) of this section.
Titanium Dioxide Production	EE	
Underground Coal Mines	FF	
Zinc Production	GG	
Municipal Solid Waste Landfills	НН	CO <sub>2</sub> from combustion of landfill gas must also be included in calculating emissions for reporting and determining if the reporting threshold is met.
Industrial Wastewater Treatment	II	CO <sub>2</sub> from combustion of wastewater biogas must also be included in calculating emissions for reporting and determining if the reporting threshold is met.
Manure Management	JJ	See subsection (2)(e) of this section.
Suppliers of Coal-Based Liquid Fuels	<u>LL</u>	§ 98.380(b) should read: "An importer or exporter shall have the same meaning given in WAC 173-441-120 (2)(h)." § 98.381 should include: "Reporting of exports is voluntary."
Suppliers of Petroleum Products	<u>MM</u>	§ 98.391 should read: "Any refiner or importer that meets the requirements of WAC 173-441-030(1) must report GHG emissions. Any exporter of petroleum products and natural gas liquids may report GHG emissions associated with exported petroleum products using the methods established in this subpart." See subsection (2)(h) of this section.
Suppliers of Natural Gas and Natural Gas Liquids	<u>NN</u>	§ 98.401 should read: "Any supplier of natural gas and natural gas liquids that meets the requirements of WAC 173-441-030(1) must report GHG emissions."
Suppliers of Industrial Greenhouse Gases	<u>00</u>	§ 98.411 should include: "Reporting of exports is voluntary."
Suppliers of Carbon Dioxide	PP	((Owners or operators are only required to calculate and report emissions specified in WAC 173-441-030 (1)(b)(iv).)) § 98.421 should read: "Any supplier of CO <sub>2</sub> who meets the requirements of WAC 173-441-030(1) must report the mass of CO <sub>2</sub> captured, extracted, or imported. The mass of CO <sub>2</sub> exported may be reported using the methods established in this subpart."
Importers and Exporters of Fluorinated Greenhouse Gases Contained in Pre- Charged Equipment or Closed-Cell Foams	QQ	§ 98.431 should read: "Any importer of fluorinated GHGs contained in pre-charged equipment or closed-cell foams who meets the requirements of WAC 173-441-030(1) must report each fluorinated GHG contained in the imported pre-charged equipment or closed-cell foams.  Any exporter of fluorinated GHGs contained in pre-charged equipment or closed-cell foams may report GHG emissions associated with exported products using the methods established in this subpart."
Geologic Sequestration of Carbon Dioxide	RR	§ 98.441(a) should read: "You must report GHG emissions under this subpart if any well or group of wells within your facility injects any amount of CO <sub>2</sub> for long-term containment in subsurface geologic formations and the facility meets the requirements of WAC 173-441-030(1)."
Electrical Equipment Manufacture or Refurbishment	SS	§ 98.451 should read: "You must report GHG emissions under this subpart if your facility contains an electrical equipment manufacturing or refurbishing process and the facility meets the requirements of WAC 173-441-030(1)."

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria <sup>+#</sup>
Industrial Waste Landfills	TT	CO <sub>2</sub> from combustion of landfill gas must also be included in calculating emissions for reporting and determining if the reporting threshold is met.
Injection of Carbon Dioxide	UU	§ 98.471 should read: "(a) You must report GHG emissions under this subpart if your facility contains an injection of carbon dioxide process and the facility meets the requirements of WAC 173-441-030(1). For purposes of this subpart, any reference to CO <sub>2</sub> emissions in WAC 173-441-030 means CO <sub>2</sub> received."

- \* Unless otherwise noted, all calculation methods are from 40 C.F.R. Part 98, as adopted by ((<del>January 1, 2015</del>)) <u>September 1, 2016</u>.

  + Modifications and exceptions in subsection (2) of this section and WAC 173-441-010 through 173-441-050(2) also apply.
- Whenever the use of verification software is required or voluntarily used, the file generated by the verification software must be submitted with the facility's annual GHG report.

### (2) Modifications and exceptions to calculation methods adopted by reference. Except as otherwise specifically provided:

- (a) Wherever the term "administrator" is used in the rules incorporated by reference in this chapter, the term "director" must be substituted.
- (b) Wherever the term "EPA" is used in the rules incorporated by reference in this chapter, the term "ecology" must be substituted.
- (c) Wherever the term "United States" is used in the rules incorporated by reference in this chapter, the term "Washington state" must be substituted.
- (d) Wherever a calculation method adopted by reference in Table 120-1 of this section or a definition adopted by reference from 40 C.F.R. Part 98.6 refers to another subpart or paragraph of 40 C.F.R. Part 98:
- (i) If Table 120-2 of this section lists the reference, then replace the reference with the corresponding reference to this chapter as specified in Table 120-2.
- (ii) If the reference is to a subpart or subsection of a reference listed in Table 120-2 of this section, then replace the reference with the appropriate subsection of the corresponding reference to this chapter as specified in Table 120-2.
- (iii) If the reference is to a subpart or paragraph of 40 C.F.R. 98 Subparts C through UU incorporated by reference in Table 120-1, then use the existing reference except as modified by this chapter.
- (e) For manure management, use the following subsections instead of the corresponding subsections in 40 C.F.R. § 98.360 as adopted by ((<del>January 1, 2015</del>)) <u>September 1, 2016</u>.
- (i) 40 C.F.R. § 98.360(a): This source category consists of livestock facilities with manure management systems.
  - (A) § 98.360 (a)(1) is not adopted by reference.
  - (B) § 98.360 (a)(2) is not adopted by reference.
- (ii) 40 C.F.R. § 98.360(b): A manure management system (MMS) is a system that stabilizes and/or stores livestock manure, litter, or manure wastewater in one or more of the following system components: Uncovered anaerobic lagoons, liquid/slurry systems with and without crust covers (including, but not limited to, ponds and tanks), storage pits, digesters, solid manure storage, dry lots (including feedlots), high-rise houses for poultry production (poultry without litter), poultry production with litter, deep bedding systems for cattle and swine, manure composting, and aerobic treatment.

- (iii) 40 C.F.R. § 98.360(c): This source category does not include system components at a livestock facility that are unrelated to the stabilization and/or storage of manure such as daily spread or pasture/range/paddock systems or land application activities or any method of manure utilization that is not listed in § 98.360(b) as modified in WAC 173-441-120(2)(e)(ii).
- (iv) 40 C.F.R. § 98.360(d): This source category does not include manure management activities located off-site from a livestock facility or off-site manure composting operations.
- (v) 40 C.F.R. § 98.361: Livestock facilities must report GHG emissions under this subpart if the facility contains a manure management system as defined in 98.360(b) as modified in WAC 173-441-120 (2)(e)(ii), and meets the requirements of WAC 173-441-030(1).
  - (vi) 40 C.F.R. § 98.362 (b) and (c) are not adopted by reference.
- (viii)  ${\rm CO}_2$  from combustion of gas from manure management must also be included in calculating emissions for reporting and determining if the reporting threshold is met.
- (f) For electrical transmission and distribution equipment use facilities where the electrical power system crosses Washington state boundaries, limit the GHG report to emissions that occur in Washington state using one of the following methods:
  - (i) Direct, state specific measurements;
- (ii) Prorate the total emissions of the electric power system based upon either nameplate capacity or transmission line miles in the respective service areas by state using company records. Update the nameplate capacity or transmission line miles factor each reporting year and include the data used to establish the nameplate capacity or transmission line miles factor with your annual GHG report( $(\cdot, \cdot)$ ):
- (iii) Prorate the total emissions of the electric power system based upon population in the respective service areas by state using the most recent U.S. Census data. Update the population factor each reporting year and include the data used to establish the population factor with your annual GHG report.
- (g) Use the following method to obtain specific version or date references for any reference in 40 C.F.R. Part 98 that refers to any document not contained in 40 C.F.R. Part 98:
- (i) If the reference in 40 C.F.R. Part 98 includes a specific version or date reference, then use the version or date as specified in 40 C.F.R. Part 98.
- (ii) If the reference in 40 C.F.R. Part 98 does not include a specific version or date reference, then use the version of the referenced document as available on the date of adoption of this chapter.
- (h) For suppliers of petroleum products or coal-based liquid fuels, use the following subsections instead of the corresponding subsections in 40 C.F.R. § 98.390 as adopted by September 1, 2016.
  - (i) 40 C.F.R. § 98.390: Definition of the source category.
- This source category consists of petroleum refineries and importers and exporters of petroleum products and natural gas liquids as listed in Table MM-1 of this subpart.
- (A) A petroleum refinery for the purpose of this subpart is any facility engaged in producing petroleum products through the distillation of crude oil.

- (B) A refiner is the owner or operator of a petroleum refinery.
- (C) Importer has the same meaning given in subsection (2)(h)(ii) of this section and includes any entity that imports petroleum products, natural gas liquids, or coal-based liquid fuels as listed in Table MM-1 of this subpart. Any blender or refiner of refined or semirefined petroleum products shall be considered an importer if it otherwise satisfies the aforementioned definition.
- (D) Exporter has the same meaning given in subsection (2)(h)(ii) of this section and includes any entity that exports petroleum products, natural gas liquids, or coal-based liquid fuels as listed in Table MM-1 of this subpart. Any blender or refiner of refined or semirefined petroleum products shall be considered an exporter if it otherwise satisfies the aforementioned definition.
  - (ii) Definitions specific to imports and exports:
- (A) Export means to transport a product from inside Washington state to persons outside Washington state, excluding any such transport on behalf of the United States military including foreign military sales under the Arms Export Control Act. The final destination of the product must occur outside of Washington state.
- (B) Exporter means any person, company or organization of record that transfers for sale or for other benefit, products from Washington state to another state, country, or to an affiliate in another country, excluding any such transfers on behalf of the United States military or military purposes including foreign military sales under the Arms Export Control Act. The final destination of the product must occur outside of Washington state. An exporter is not the entity merely transporting the domestic products, rather an exporter is the entity deriving the principal benefit from the transaction.
- (C) Import means, to land on, bring into, or introduce into, any place subject to the jurisdiction of Washington state.
- (D) Importer means any person, company, or organization of record that for any reason brings a product into Washington state from a different state or foreign country, excluding introduction into Washington state jurisdiction exclusively for United States military purposes. The term includes, as appropriate:
  - (I) The consignee.
  - (II) The importer of record.
  - (III) The actual owner.
- (IV) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred.
- (iii) Each importer shall report all information at the state level.
- (iv) Each exporter choosing to report emissions associated with exported products to ecology under these subparts shall report all information at the state level:
- (v) Exporters choosing to report emissions associated with exported products to ecology under these subparts and refineries and importers must report information for each product where emissions were calculated.

### Table 120-2: Corresponding References in 40 C.F.R. Part 98 and Chapter 173-441 WAC

Reference in 40 C.F.R. Part 98		Corresponding Reference in Chapter 173-441 WAC	
Section	Topic	Section	Topic
40 C.F.R. Part 98 or "part"	Mandatory Greenhouse Gas Reporting	Chapter 173-441 WAC	Reporting of Emissions of Greenhouse Gases

Reference in 40 C.F.R. Part 98		Corresponding Reference in Chapter 173-441 WAC		
Subpart A	General Provision	WAC 173-441-010 through 173-441-100	General Provisions	
§ 98.1	Purpose and scope	WAC 173-441-010	Scope	
§ 98.2	Who must report?	WAC 173-441-030	Applicability	
§ 98.2(a)	Applicability: Facility reporting	WAC 173-441-030(1)	Applicability: Facility reporting	
§ 98.2 (a)(1)	Applicability: Facility reporting Table A-3	WAC 173-441-030(1)	Applicability: Facility reporting	
§ 98.2 (a)(2)	Applicability: Facility reporting Table A-4	WAC 173-441-030(1)	Applicability: Facility reporting	
§ 98.2 (a)(3)	Applicability: Facility reporting source categories that meet all three of the conditions listed in this paragraph (a)(3)	WAC 173-441-030(1)	Applicability: Facility reporting	
§ 98.2 (a)(4)	Applicability: Facility reporting Table A-5 source categories	WAC 173-441-030(1)	Applicability: Facility reporting	
§ 98.2(b)	Calculating emissions for comparison to the threshold	WAC 173-441-030 (1)(b)	Calculating facility emissions for comparison to the threshold	
§ 98.2(i)	Reporting requirements when emissions of greenhouse gases fall below reporting thresholds	WAC 173-441-030(5)	Reporting requirements when emissions of greenhouse gases fall below reporting thresholds	
§ 98.3	What are the general monitoring, reporting, recordkeeping and verification requirements of this part?	WAC 173-441-050	General monitoring, reporting, recordkeeping and verification requirements	
§ 98.3(c)	Content of the annual report	WAC 173-441-050(3)	Content of the annual report	
§ 98.3(g)	Recordkeeping	WAC 173-441-050(6)	Recordkeeping	
§ 98.3 (g)(5)	A written GHG monitoring plan	WAC 173-441-050 (6)(e)	A written GHG monitoring plan	
§ 98.3(i)	Calibration accuracy requirements	WAC 173-441-050(8)	Calibration and accuracy requirements	
§ 98.3 (i)(6)	Calibration accuracy requirements: Initial calibration	WAC 173-441-050 (8)(f)	Calibration accuracy requirements: Initial calibration	
§ 98.4	Authorization and responsibilities of the designated representative	WAC 173-441-060	Authorization and responsibilities of the designated representative	
§ 98.5	How is the report submitted?	WAC 173-441-070	Report submittal	
§ 98.5(b)	Verification software	WAC 173-441-070(1)	Facility report submittal	
§ 98.6	Definitions	WAC 173-441-020	Definitions	
§ 98.7	What standardized methods are incorporated by reference into this part?	WAC 173-441-080	Standardized methods and conversion factors incorporated by reference	
§ 98.8	What are the compliance and enforcement provisions of this part?	WAC 173-441-090	Compliance and enforcement	
§ 98.9	Addresses	WAC 173-441-100	Addresses	
Table A-1 to Subpart A of Part 98—Global Warming Potentials, Table A-1 of this part, or Table A-1 of this subpart	Global Warming Potentials	Table A-1 of WAC 173-441-040	Global Warming Potentials	
Table A-2 to Subpart A of Part 98—Units of Measure Conversions	Units of Measure Conversions	Table A-2 of WAC 173-441-080	Units of Measure Conversions	

- (3) Calculation methods for voluntary reporting. GHG emissions reported voluntarily under WAC 173-441-030(4) must be calculated using the following methods:
- (a) If the GHG emissions have calculation methods specified in Table 120-1 of this section, use the methods specified in Table 120-1.
- (b) If the GHG emissions have calculation methods specified in WAC 173-441-130, use the methods specified in WAC 173-441-130.
- (c) For all GHG emissions from facilities not covered in Table 120-1 of this section or persons supplying any product other than those listed in WAC 173-441-130, contact ecology for an appropriate calculation method no later than one hundred eighty days prior to the emissions report deadline established in WAC 173-441-050(2) or submit a petition for alternative calculation methods according to the requirements of WAC 173-441-140.
- (4) Alternative calculation methods approved by petition. An owner or operator may petition ecology to use calculation methods other

than those specified in Table 120-1 of this section to calculate its facility GHG emissions. Such alternative calculation methods must be approved by ecology prior to reporting and must meet the requirements of WAC 173-441-140.

<u>AMENDATORY SECTION</u> (Amending WSR 15-04-051, filed 1/29/15, effective 3/1/15)

WAC 173-441-130 Calculation methods for suppliers. Suppliers of (( $\frac{1}{2}$ iquid)) motor vehicle fuel, special fuel, or aircraft fuel subject to the requirements of this chapter must calculate the  $CO_2$  emissions that would result from the complete combustion or oxidation of each fuel that is reported to DOL as sold in Washington state using the methods in this section.

- (1) **Applicable fuels.** Suppliers are responsible for calculating  ${\rm CO}_2$  emissions from the following applicable fossil fuels and biomass derived fuels:
- (a) All taxed (( $\frac{1iquid}{2}$ )) motor vehicle fuel that the supplier is required to report to DOL as part of the supplier's filed periodic tax reports of motor vehicle fuel sales under chapter (( $\frac{308-72 \text{ WAC}}{208-72 \text{ WAC}}$ ))  $\frac{82.38}{208-72 \text{ RCW}}$
- (b) All taxed special fuel that the supplier is required to report to DOL as part of the supplier's filed periodic tax reports of special fuel sales under chapter (( $\frac{308-77\ WAC}{}$ )) 82.38 RCW.
- (c) All taxed and untaxed aircraft fuel supplied to end users that the supplier is required to report to DOL as part of the supplier's filed periodic tax reports of aircraft fuel under chapter  $((308-78\ WAC))\ 82.42\ RCW$ .
- (2) Calculating  $\mathrm{CO}_2$  emissions separately for each fuel type.  $\mathrm{CO}_2$  emissions must be calculated separately for each applicable fuel type using Equation 130-1 of this section. Use Equation 130-2 of this section to separate each blended fuel into pure fuel types prior to calculating emissions using Equation 130-1.

 $CO_{2i} = Fuel Type_i \times EF_i$  (Eq. 130 – 1)

Where:

 $CO_{2i}$  = Annual  $CO_2$  emissions that would result from the complete combustion or oxidation of each fuel type "i"

(metric tons)

Fuel Type<sub>i</sub> = Annual volume of fuel type "i" supplied by the supplier (gallons).

supplied by the supplier (gallons).

EF<sub>i</sub> = Fuel type-specific CO<sub>2</sub> emission factor (metric tons CO<sub>2</sub> per gallon)

found in Table 130-1 of this section.

 $Fuel Type_i = Fuel_i \times \%Vol_i$  (Eq. 130 – 2)

Where:

Fuel Type<sub>i</sub> = Annual volume of fuel type "i"

supplied by the supplier (gallons).

 $Fuel_i$  = Annual volume of blended fuel "i"

supplied by the supplier (gallons).

 $%Vol_{i}$  = Percent volume of product "i" that is

fuel type<sub>i</sub>.

(3) Calculating total  ${\rm CO_2}$  emissions. A supplier must calculate total annual  ${\rm CO_2}$  emissions from all fuels using Equation 130-3 of this section.

$$CO_{2x} = \sum (CO_{2i}) \qquad (Eq. 130 - 3)$$

Where:

 $CO_{2x}$  = Annual  $CO_2$  emissions that would result

from the complete combustion or oxidation of all fuels (metric tons).

 $CO_{2i}$  = Annual  $CO_2$  emissions that would result

from the complete combustion or oxidation of each fuel type "i" (gallons).

(4) Monitoring and QA/QC requirements. Comply with all monitoring and QA/QC requirements under chapters 308-72, 308-77, and 308-78 WAC.

- (5) Data recordkeeping requirements. In addition to the annual GHG report required by WAC 173-441-050 (6)(c), the following records must be retained by the supplier in accordance with the requirements established in WAC 173-441-050(6):
- (a) For each fuel type listed in Table 130-1 of this section, the annual quantity of applicable fuel in gallons of pure fuel supplied in Washington state.
- (b) The  ${\rm CO}_2$  emissions in metric tons that would result from the complete combustion or oxidation of each fuel type for which subsection (5)(a) of this section requires records to be retained, calculated according to subsection (2) of this section.
- (c) The sum of biogenic  ${\rm CO}_2$  emissions that would result from the complete combustion oxidation of all supplied fuels, calculated according to subsection (3) of this section.
- (d) The sum of nonbiogenic and biogenic  ${\rm CO_2}$  emissions that would result from the complete combustion oxidation of all supplied fuels, calculated according to subsection (3) of this section.
- (e) All records required under chapters 308-72, 308-77, and 308-78 WAC in the format required by DOL.

## Table 130-1: Emission Factors for Applicable ((Liquid)) Motor Vehicle Fuels, Special Fuels, and Aircraft Fuels

Engl Town (comp for 1)	Emission Factor (metric tons CO <sub>2</sub> per	
Fuel Type (pure fuel)	gallon)	
Gasoline	0.008960	
Ethanol (E100)	0.005767	
Diesel	0.010230	
Biodiesel (B100)	0.009421	
Propane	0.005593	

Fuel Type (pure fuel)	Emission Factor (metric tons CO <sub>2</sub> per gallon)
Natural gas	0.000055*
Kerosene	0.010150
Jet fuel	0.009750
Aviation gasoline	0.008310

Contact ecology to obtain an emission factor for any applicable fuel type not listed in this table. \*In units of metric tons  $\mathrm{CO}_2$  per scf. When using Equation 130-1 of this section, enter fuel in units of scf.

# ATTACHMENT C



### RULE-MAKING ORDER

CR-103P (May 2009) (Implements RCW 34.05.360)

1889	(Implements RCW 34.05.360)
Agency: Department of Ecology AO # 15-10	Permanent Rule Only
Effective date of rule:  Permanent Rules  31 days after filing.  Other (specify) (If less than 31 days after filing, a sp stated below)	pecific finding under RCW 34.05.380(3) is required and should be
Any other findings required by other provisions of law as pre ☐ Yes ☐ No If Yes, explain:	econdition to adoption or effectiveness of rule?
Purpose: The purpose of this rulemaking is to establish greenhouse gas (Greduce GHG emissions to protect human health and the environn	
Washington State, petroleum product producers and imp this program will reduce their GHG emissions over time.	or GHG emissions from certain stationary sources located in corters, and natural gas distributors. Parties covered under The rule provides a variety of options to reduce emissions. by the reporting program, modifies reporting requirements,
Citation of existing rules affected by this order: Repealed: N/A Amended: Chapter 173-441 WAC, Reporting of Emissions of Suspended: N/A	of Greenhouse Gases
Statutory authority for adoption: Chapter 70.94 RCW; Ch	napter 70.235 RCW
Other authority: N/A	
PERMANENT RULE (Including Expedited Rule Making)  Adopted under notice filed as WSR # 16-12-098 on May 31,  Describe any changes other than editing from proposed to ac  See Attachment A	
If a preliminary cost-benefit analysis was prepared under RC contacting:  Name: Kasia Patora Phone: (	
Address: PO Box 47600 Fax:	(360) <u>407-6184</u> (360) <u>407-6989</u> kpat461@ecy.wa.gov
Date adopted: September 15, 2016	CODE REVISER USE ONLY
NAME Maia D. Bellon	OFFICE OF THE CODE REVISER STATE OF WASHINGTON FILED
Maial Bollon	DATE: September 15, 2016 TIME: 8:23 AM WSR 16-19-047
Director	

(COMPLETE REVERSE SIDE)

## Note: If any category is left blank, it will be calculated as zero. No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note.  A section may be counted in more than one category.					ote.		
The number of sections adopted in order to comply with:							
Federal statute:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	
Federal rules or standards:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	
Recently enacted state statutes:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	
The number of sections adopted at the	The number of sections adopted at the request of a nongovernmental entity: New $\underline{0}$ Amended $\underline{0}$ Repealed $\underline{0}$						
The number of sections adopted in the agency's own initiative:							
	New	<u>29</u>	Amended	7	Repealed	<u>0</u>	
The number of sections adopted in ord	der to cla	rify, streamli	ne, or reforr	n agency pro	cedures:		
	New	<u>2</u>	Amended	7	Repealed	<u>0</u>	
The number of sections adopted using:							
Negotiated rule making:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	
Pilot rule making:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	
Other alternative rule making:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>	

## Attachment A: Differences between the Revised May 31, 2016 Proposed Rule and Final Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes. We must also state the reasons for the differences between the proposal and the adopted rule.

There are differences between the proposed rule filed on May 31, 2016 and the adopted rule filed on September 15, 2016. Ecology made these changes for the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.

Ecology did not make any changes to the proposed rule that are substantially different from the original proposal. In making this determination, Ecology considered the following factors:

- The extent to which a reasonable person affected by the adopted rule would have understood that the published proposed rule would affect his or her interests.
- The extent to which the subject of the adopted rule or the issues determined in it are substantially different from the subject or issues involved in the published proposed rule.
- The extent to which the effects of the adopted rule differ from the effects of the published proposed rule.

Ecology did not make any revisions to the proposed rule that change who is covered or otherwise affected by the rule. We believe a reasonable person affected by the proposed rule would also be affected by the adopted rule. A reasonable person not affected by the proposed rule would not be affected by the adopted rule. Ecology believes this supports our conclusion that we did not make any substantive changes to the proposed rule.

Ecology did not make any changes to the subject of the adopted rule or issues determined in it. We believe the subject matter of the adopted rule is identical to the subject matter of the proposed rule: establishing GHG emission reduction standards. The issues involved in this subject matter are identical between the proposed and adopted versions of the rule and include:

- Scope
- Definitions
- Applicability
- Baselines
- Energy Intense Trade Exposed (EITEs)
- General compliance issues (timelines, reduction requirements, regulatory orders, etc.)
- Compliance options
- Emission Reduction Units
- Limitations on generating emission reductions
- Third-party verification
- Registry
- Reserve

- Other requirements
- Enforcement
- Confidentiality
- Severability
- Amendments to Chapter 173-441 WAC

Ecology believes this supports our conclusion that we did not make any substantive changes to the proposed rule.

Finally, Ecology considered the extent to which the effects of the adopted rule differ from the effects of the published proposed rule. Most of the changes made to the adopted version of the rule simply clarify Ecology's original intent. The effects of these changes are consistent between the proposed and adopted versions of the rule. Ecology made many of these changes at the suggestion of stakeholders and other public commenters. We evaluated those changes to determine if they were a "substantial" change. We determined they were not. These changes are:

- Instead of requiring all EITEs to use the production-based efficiency metric, the adopted rule now allows EITEs to choose to be treated as non-EITEs. We made this change at the request of multiple commenters. As this provision merely provides an option, we do not think it rises to the level of a "substantial" change to the rule. See WAC 173-442-020(1)(m)(ii).
- The adopted rule adds an exemption for natural gas distributors selling product that is used as a feedstock to produce another product, such as methanol. We made this change at the request of a commenter and believe it is consistent with the other exemptions listed in the proposed rule. We do not think this change rises to the level of a "substantial" change to the rule. See WAC 173-442-040(3)(a).
- The adopted rule adds clarifying instructions on how to adjust a natural gas distributor's baseline when other covered parties enter or exit the program. We made this change in response to comments. It clarifies our original intent and does not change requirements. We do not think this change rises to the level of a "substantial" change to the rule. See WAC 173-442-050(3)(c).
- The adopted rule added bounds on the required emission reductions for EITEs. These bounds were not included in the proposed rule. The most stringent reduction requirement for the least efficient EITE facilities will be no more than 2.7 percent per year. The least stringent reduction requirement for the most efficient EITE facilities will be no less than 0.7 percent per year. We made this change at the request of multiple commenters. We believe this clarifies Ecology's original intent and does not rise to the level of a "substantial" change to the rule. See WAC 173-442-070(3)(b)(i) and (ii).
- The adopted rule added two new protocols that will be accepted for generation of emission reduction units(ERUs). These protocols were not listed in the proposed rule. These new protocols are "Landfill Methane Collection and Combustion" and "Nitric Acid Production Project Protocol." These provisions were added at the request of commenters. As these provisions merely provide additional options, we do not think they rise to the level of a "substantial" change to the rule. See WAC 173-442-160(7)(d) and WAC 173-442-160(8)(e).
- The adopted rule added another type of accreditation for third party verifiers. This accreditation was not listed in the proposed rule but was requested by a commenter. As this provision merely provides an option, we do not think it rises to the level of a "substantial" change to the rule. See WAC 173-442-220(6)(a)(iii)(E) and WAC 173-441-085(7)(a)(iii)(E).

The following describes the exact changes made to the final adopted rule and explains Ecology's reasons for making them. Where a change was made solely for typographical or editing purposes (including subsequent renumbering), we did not include it in this section. We did include clarifications made in response to comments.

Table 1: Changes Made to Adopted Rule

Section in Final Rule	Change made	Reason for change
173-442-020(1)(b)	Adds new definition for "allowance"	Stakeholders expressed confusion about the meaning and requested the definition be added
173-442-020(1)(m)(ii)	Adds new option for EITEs to choose to not be treated as EITEs	EITE stakeholders requested the ability to opt out of EITE provisions
173-442-020(1)(n)	Clarifies definition of "ERU" is an emission reduction for accounting purposes	Clarifies meaning
173-442-020(1)(s)	Rewords "aggregate emission reduction limit" as "aggregate emission cap"	Clarifies meaning
173-442-020(1)(t)	Rewords "external program" as "GHG emission reduction program"	Clarifies meaning
173-442-030(1)	Clarifies applicability is triggered by three- year rolling average	Clarifies meaning
173-442-030(3) 173-442-030(3)	Clarifies to indicate emission reduction requirements apply when the average emissions exceed the compliance thresholds listed in Table 1  Adds notation clarifying 2017–2019	Stakeholders asked for clarification about when the requirements applied to covered parties  Stakeholders asked for
Table 1	compliance year applies for three-year rolling average starting in 2012	clarification about when the requirements applied to covered parties
173-442-040(2)(b)(ii)	Changed wording from final "distribution" to "destination"	Commenters asked for clarification to address concerns about meaning
173-442-040(3)(a)	Adds exclusion for natural gas used to make a product and clarifies that natural gas supplied to voluntary parties is treated the same as other covered parties	Commenters requested additional exclusion applicable to natural gas feedstocks and clarification that voluntary parties are treated the same as other covered parties
173-442-040(4)(a)	Clarifies the referenced "implementation plan" is for the federal CPP	Clarifies original intent
173-442-050(3)(c)	Adds clarifying language allowing for baseline adjustments for natural gas distributors due to entrance or exit of covered parties.	Commenters requested change to prevent double counting emissions
173-442-060(1)(b)	Adds language clarifying when "Annual decrease" becomes applicable	Commenter requested clarification
173-442-060(2)	Clarifies the contents of a regulatory order	Commenters requested clarification
173-442-070(1)	Clarifies that EITEs must only report their own production data, not production data from other companies in their industry sector	Commenters were confused about whether they were required to produce data for other companies—new wording clarifies original intent
173-442-070(2)	Removes applicability section, now clarified in WAC 173-442-030(3)	Commenters found original wording confusing—removes wording to clarify original intent
173-442-070(2)(c)	Removes obsolete reference	Removed 173-442-070(2) as noted above
173-442-070(3)	Changes terminology from "efficiency reduction rate" to "efficiency improvement rate"	Commenters found the original wording counterintuitive—new wording clarifies original intent
173-442-070(3)(a)(i)(A)	Clarifies that GHG emissions data must be comparable to that reported under Chapter 173-441 WAC or WAC 173-442-070(1)	Clarifies that production data submitted by the facility can be used to calculate the efficiency intensity distribution
173-442-070(3)(b)(i)	Clarifies wording regarding "greater,"	Commenters found the original

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Clarifies that emission reduction projects at a stationary source must not be used to generate ERUs that are already counted  173-442-160(3)(a)(ii) 173-442-160(3)(a)(iii) 173-442-160(6)(a) 173-442-160(6)(b) 173-442-160(6)(b) 173-442-160(7)(a) 173-442-160(7)(b) 173-442-160(7)(c) 173-442-160(8)(a) 173-442-160(8)(b) 173-442-160(8)(c) 173-442-160(8)(c) 173-442-160(8)(c) 173-442-160(8)(c) 173-442-160(8)(c) 173-442-160(5)(a)  173-442-160(5)(a)  173-442-160(5)(a)  173-442-160(5)(a)  173-442-160(5)(a)  Clarifies that emission reduction projects at a stationary source must not be used to generate ERUs that are already counted  Clarifies original intent to avoid double counting emission reductions for on-site projects  Clarifies to avoid confusion about which protocols are acceptable  1, 2016  Clarifies to avoid confusion about which protocols are acceptable  1, 2016  Clarifies to avoid confusion about which protocols are acceptable  1, 2016  Clarifies to avoid confusion about which protocols are acceptable  173-442-160(7)(b)  173-442-160(8)(c)  173-442-160(8)(c)  173-442-160(5)(a)  Clarifies original intent  Commenters requested removal of provision requiring use of megawath hours  173-442-160(5)(c)  Corrects regulatory references  Clarifies original intent  Clarifies original intent  Clarifies original intent  Clarifies original intent			
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173-442-160(3)(a)(i)			
173-442-160(3)(a)(ii)       version approved no later than September 1, 2016       about which protocols are acceptable         173-442-160(6)(a)       1, 2016       about which protocols are acceptable         173-442-160(6)(b)       1, 2016       acceptable         173-442-160(6)(c)       1, 2016       acceptable         173-442-160(7)(a)       1, 2016       acceptable         173-442-160(7)(b)       1, 2016       acceptable         173-442-160(7)(b)       1, 2016       Carifies original intent         173-442-160(8)(a)       1, 2016       Clarifies original intent         173-442-160(8)(b)       1, 2016       Carifies original intent         173-442-160(8)(b)       1, 2016       Corrects regulatory references       Clarifies original intent         173-442-160(5)(c)       Corrects regulatory references       Clarifies original intent         173-442-160(5)(c)(i)(A)       Clarifies applicability to electrical conservation projects       Clarifies original intent	173-442-160(3)(a)(i)		
173-442-160(6)(b)       173-442-160(6)(c)         173-442-160(7)(a)       173-442-160(7)(b)         173-442-160(7)(c)       173-442-160(8)(a)         173-442-160(8)(b)       173-442-160(8)(c)         173-442-160(8)(d)       Rephrase terms for commute trip reduction       Clarifies original intent         173-442-160(3)(b)       Deletes provision       Commenters requested removal of provision requiring use of megawatt hours         173-442-160(5)(c)       Corrects regulatory references       Clarifies original intent         173-442-160(5)(c)(i)(A)       Clarifies applicability to electrical conservation projects       Clarifies original intent			about which protocols are
173-442-160(6)(c)       173-442-160(7)(a)         173-442-160(7)(b)       173-442-160(7)(c)         173-442-160(7)(d)       173-442-160(8)(a)         173-442-160(8)(b)       173-442-160(8)(c)         173-442-160(8)(d)       Rephrase terms for commute trip reduction       Clarifies original intent         173-442-160(3)(b)       Deletes provision       Commenters requested removal of provision requiring use of megawatt hours         173-442-160(5)(c)       Corrects regulatory references       Clarifies original intent         173-442-160(5)(c)(i)(A)       Clarifies applicability to electrical conservation projects       Clarifies original intent	` / ` /		acceptable
173-442-160(7)(a)       173-442-160(7)(b)         173-442-160(7)(c)       173-442-160(8)(a)         173-442-160(8)(b)       173-442-160(8)(b)         173-442-160(8)(d)       Rephrase terms for commute trip reduction         173-442-160(3)(b)       Rephrase terms for commute trip reduction         173-442-160(5)(a)(iv)       Deletes provision         173-442-160(5)(a)(iv)       Commenters requested removal of provision requiring use of megawatt hours         173-442-160(5)(c)       Corrects regulatory references       Clarifies original intent         173-442-160(5)(c)(i)(A)       Clarifies applicability to electrical conservation projects       Clarifies original intent	` , ` ,		
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173-442-160(5)(a)(iv)  Deletes provision  Commenters requested removal of provision requiring use of megawatt hours  173-442-160(5)(c)  Corrects regulatory references  Clarifies original intent  Clarifies original intent  Clarifies original intent			
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173-442-160(5)(c)(i)(A) Clarifies applicability to electrical conservation projects Clarifies original intent	173-442-160(5)(c)	Corrects regulatory references	
conservation projects			•
	173-442-160(5)(c)(ii)		Commenters requested use of

Section in Final Rule	Change made	Reason for change
	remain in therms	therms instead of megawatt
		hours
173-442-160(7)(d)	Adds "Landfill Methane Collection and	Commenters requested adding
	Combustion" protocol to acceptable list	this protocol—consistent with
173-442-160(8)(e)	Adds "Nitric Acid Production Project	original intent Commenters requested adding
173-442-100(6)(e)	Protocol" to acceptable list	this protocol—consistent with
	1 Totocol to acceptable list	original intent
173-442-170(2)	Clarifies use of allowances to generate	Commenters found the original
	ERUs	wording confusing—new
		wording clarifies original intent
173-442-170(2)(a)	Clarifies use of allowances cannot exceed	Commenters found the original
	limits on percentages in Table 3	wording confusing—new
		wording clarifies original intent
173-442-170(2)(a)	Changes title to add clarity	Commenters found the original
Table 3		wording confusing—new
470, 440, 470(0)(b)	Olarifica van af allawan and beerinta an ear	wording clarifies original intent
173-442-170(2)(b)	Clarifies use of allowances by vintage year	Commenters found the original wording confusing—new
	cannot exceed the percentage limits in Table 4	wording confusing—new wording clarifies original intent
173-442-170(2)(b)	Changes title to add clarity	Commenters found the original
Table 4	Onanges the to add clarity	wording confusing—new
1 45.5		wording clarifies original intent
173-442-170(3)	Clarifies requirement to invalidate	Commenters found the original
, ,	allowances	wording confusing—new
		wording clarifies original intent
173-442-200(3)	Clarifies requirement is for each MT CO2e	Clarifies original intent
173-442-200(6)(d)(ii)	Adds missing cross reference for EITEs	Clarifies original intent
173-442-220(1)	Removes reference to 173-442-150(2)	Reference obsolete
173-442-220(1)(b)	Removes reference to 173-442-150(2)	Reference obsolete
173-442-220(6)(a)(iii)(E)	Adds additional acceptable accreditation	Commenters asked for
		expanded accreditation to
		include omitted program—
173-442-240(1)(a)(ii)(C)	Changes terminology in Equation 2	extends original intent Clarifies original intent
173-442-240(2)	Clarifies terminology regarding aggregate	Clarifies original intent
170 442 240(2)	emissions cap	Olarines original intent
173-442-240(2)(b)	Clarifies retirement options for ERUs	Commenters asked for
	· ·	clarification
173-442-240(2)(c)(i)	Expands data collection requirement	Broadened to offer flexibility to
		meet original intent
173-442-240(2)(c)(ii)	Removes requirement that purchases	Broadened to offer flexibility to
	apply only to Washington customers	meet original intent
173-442-240(3)(b)(iii)	Adds "activities" to "projects" and	Clarifies original intent
173-442-240(3)(b)(iv)	"programs" Clarifies ERU awards from committee are	Clarifies original intent
113-442-240(3)(D)(IV)	subject to Ecology approval	
173-442-330(1)	Adds provision for whether permit is	Stakeholders requested
10 112 000(1)	required	clarification to avoid unintended
		consequence and meet original
		intent
173-442-340(3)	Deletes provision that violation is for each	Removed unnecessary
	day	reference to daily violations—
		covered by statutory provisions
173-441-020(1)(f)	Updates 40 C.F.R. Part 98 adoption by	Provides consistency with
173-441-020(1)(h)(i)	reference dates to September 1, 2016	statutory requirement
173-441-020(1)(j)(ii)	throughout	
173-441-020(3)		
173-441-050(9)		
173-441-080(1) 173-441-120 Table 120-1		
173-441-120 Table 120-1		
110-441-120(2)(C)	1	1

Section in Final Rule	Change made	Reason for change
173-441-120(2)(e)(vii)		
173-441-120(2)(h)		
173-441-020(1)	Clarifies distinction between "facility" and "supplier"	Clarifies original intent in response to comments
173-441-050	Clarifies all applicable MT CO <sub>2</sub> e must be included in the report	Clarifies existing requirement
173-441-085(7)(a)(iii)(E)	Adds additional acceptable accreditation	Requested by commenters
173-441-120	Adds clarifying language about facility	Clarifies in response to
Table 120-1	definition	comments
173-441-120(2)(h)(ii)	Changes wording from final "distribution" to "destination"	Commenters found the original wording confusing—new wording clarifies original intent