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_2 equivalent"** or **"CO_2e"** 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_2 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).

(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_2 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 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.

(l) **"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;

(O) 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 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_2e 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.**

CO_2 means carbon dioxide.

CO_2e 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 CO_2e 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_2e/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_2e/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

(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.

NEW SECTION

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 OO;

(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) 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) 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.

NEW SECTION

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_2e 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 CO_2e 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_2e/year)	**Ecology Action**
Category 1	Yes	≥ 70,000	Assign baseline Refer to subsections (1), (2) and (3) of this section
Category 2	Yes	< 70,000	Assign baseline when emissions reach 70,000 MT CO_2e, or if requested Refer to subsections (1), (4) and (5) of this section
	No		
	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_2e 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 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.

NEW SECTION

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 CO_2e 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.

NEW SECTION

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 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 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.

(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_X remains constant at the number of years determined for calendar year 2035.

SECTION 3 - COMPLIANCE OPTIONS

NEW SECTION

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 within Washington unless derived from allowances under WAC 173-442-170.

(3) Mandatory retirement of ERUs for compliance.

(a) Ecology must retire an ERU applied to meet a compliance obligation.

(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.

NEW SECTION

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.

(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.

NEW SECTION

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 per WAC 173-442-160(3).

(2) RCW 70.235.030(3) establishes that 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 CO_2 emissions.

NEW SECTION

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.

(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 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.

NEW SECTION

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_2e)

If difference > 1, then must acquire ERUs for each metric ton of CO_2e that exceeds the compliance obligation.

If difference < 0, then have excess ERUs for each metric ton of CO_2e 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 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.

NEW SECTION

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.

NEW SECTION

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

(ii) EITE covered party's contribution as follows:

(A) If the EITE covered party's RA_X is greater than zero, then the difference in MT CO_2e of GHG emissions results in ERUs allocated to the reserve.

(B) If the EITE covered party's RA_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 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_2e for year "x")

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) (%)

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.

(iii) Any calendar year containing curtailment recognized by Ecology does not count toward the total years in Y_X.

(iv) Beginning in calendar year 2036, Y_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.

NEW 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 (Calendar year)	**Report to EPA** Due December 31	**Report to Ecology** 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.

NEW SECTION

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.

NEW SECTION

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.