Chapter 173-442 WAC
CLEAN AIR RULE

NEW SECTION

WAC 173-442-010 Scope. This rule establishes greenhouse gas (GHG) emissions reduction standards for certain stationary sources, petroleum fuel producers or importers, and natural gas distributors operating in Washington state. Covered parties with a compliance obligation under this chapter are required to reduce their covered GHG emissions to meet their GHG emissions reduction pathway or obtain emission reductions from other covered parties, GHG emissions reduction projects, or external emissions market programs.

NEW SECTION

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

(1) Definitions specific to this chapter:
(a) "Council" has the meaning in RCW 80.70.010.
(b) "Covered GHG emissions" means all covered stationary source GHG emissions, covered petroleum fuel producer or importer GHG emissions, and covered natural gas distributor GHG emissions as established in WAC 173-442-030 through 173-442-050.
(c) "Covered party" means the owner or operator of (i) a stationary source located in Washington, (ii) a petroleum fuel producer or importer of fuels in Washington, (iii) a natural gas distributor in Washington, and (iv) any voluntary participant in the program.
(d) "Emission reduction unit" means an accounting mechanism that represents a quantity of emission reductions that can occur or be counted through any of the means recognized in WAC 173-442-120.
(e) "Energy intense and trade exposed facility" or "EITE facility" means a facility with a primary North American Industry Classification System (NAICS) code included in the following list:
   (i) 311411: Frozen fruit, juice, and vegetable manufacturing;
   (ii) 311423: Dried and dehydrated food manufacturing;
   (iii) 311611: Animal (except poultry) slaughtering;
   (iv) 322110: Pulp mills;
   (v) 322121: Paper (except newsprint) mills;
   (vi) 322122: Newsprint mills;
   (vii) 322130: Paperboard mills;
   (viii) 325188: All other basic inorganic chemical manufacturing;
   (ix) 325199: All other basic organic chemical manufacturing;
   (x) 325311: Nitrogenous fertilizer manufacturing;
   (xi) 327111: Flat glass manufacturing;
   (xii) 327213: Glass container manufacturing;
   (xiii) 327310: Cement manufacturing;
   (xiv) 327410: Lime manufacturing;
   (xv) 327420: Gypsum product manufacturing;
NEW SECTION

WAC 173-442-030 Stationary source covered GHG emissions. The following types of GHG emissions are covered GHG emissions from stationary sources under this chapter.

(1) Covered stationary source GHG emissions. Covered stationary source GHG emissions under this chapter are GHG emissions from all source categories listed in WAC 173-441-120, except for GHG emissions listed in subsection (2) of this section, at any facility located in Washington state that are reported to ecology under chapter 173-441 WAC. This includes emissions voluntarily reported under chapter 173-441 WAC. This also includes emissions of all GHGs that are listed in Table A-1 of WAC 173-441-040.

(2) Emissions not part of covered stationary source GHG emissions.

(a) Emissions from the following source categories are not covered stationary source GHG emissions under this chapter.

(i) Suppliers of Petroleum Products: 40 C.F.R. Part 98 Subpart MM.

(ii) Suppliers of Natural Gas and Natural Gas Liquids: 40 C.F.R. Part 98 Subpart NN.

(iii) Manure Management: 40 C.F.R. Part 98 Subpart JJ.

(b) Emissions of carbon dioxide 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) Coal based emissions from a coal-fired baseload electric generation facility in Washington that emitted more than one million tons of greenhouse gases in any calendar year prior to 2008 as provided in RCW 80.80.040 (3)(c).
WAC 173-442-040  Petroleum fuel producer or importer covered GHG emissions. The following types of GHG emissions are covered GHG emissions from petroleum fuel producers or importers under this chapter.

(1) **Covered petroleum fuel producer or importer GHG emissions.** Covered petroleum fuel producer or importer GHG emissions under this chapter are carbon dioxide emissions that would result from the complete combustion or oxidation of fuels covered under the Suppliers of Petroleum Products, 40 C.F.R. Part 98 Subpart MM, source category listed in WAC 173-441-120, except for carbon dioxide emissions listed in subsection (2) of this section, from any producer or importer of fuels in Washington state that are reported to ecology under chapter 173-441 WAC. This includes emissions voluntarily reported under chapter 173-441 WAC.

(2) **Emissions not part of covered petroleum fuel producer or importer GHG emissions.**
   
   (a) Carbon dioxide emissions that would result from the complete combustion or oxidation of fuels made for aviation or maritime use such as:

   (i) Aviation Gasoline;

   (ii) Kerosene-Type Jet Fuel;

   (iii) Residual Fuel Oil No. 5 (Navy Special); and

   (iv) Residual Fuel Oil No. 6 (a.k.a. Bunker C).

   (b) Carbon dioxide emissions that would result from the complete combustion or oxidation of fuels exported from Washington state and where the final distribution of the product occurs outside of Washington state.

NEW SECTION

WAC 173-442-050  Natural gas distributor covered GHG emissions. The following types of GHG emissions are covered GHG emissions from natural gas distributors under this chapter.

(1) **Covered natural gas distributor GHG emissions.** Covered natural gas distributor GHG emissions under this chapter are carbon dioxide emissions that would result from the complete combustion or oxidation of fuels covered under the Suppliers of Natural Gas and Natural Gas Liquids, 40 C.F.R. Part 98 Subpart NN, source category listed in WAC 173-441-120, except for carbon dioxide emissions listed in subsection (2) of this section, from any distributor of fuels in Washington state that are reported to ecology under chapter 173-441 WAC. This includes emissions voluntarily reported under chapter 173-441 WAC.

(2) **Emissions not part of covered natural gas distributor GHG emissions.** Natural gas distributors are not responsible for carbon dioxide emissions that would result from the complete combustion or oxidation of fuels supplied to another covered party with a requirement to make a compliance progress determination as established in WAC 173-442-090 for those carbon dioxide emissions under this chapter.
WAC 173-442-060  Applicability. This section establishes who must make a compliance progress determination as established in WAC 173-442-090.

(1) Threshold. Any covered party with total covered GHG emissions that exceed the compliance threshold defined in this subsection must make a compliance progress determination as established in WAC 173-442-090.

(a) Compliance threshold for covered parties with baseline GHG emissions of one hundred thousand metric tons CO₂e or more. Any stationary source, petroleum fuel producer or importer, or natural gas distributor with baseline GHG emissions as calculated under WAC 173-442-070(1) of one hundred thousand metric tons CO₂e or more has exceeded the compliance threshold. Covered parties must make a compliance progress determination as established in WAC 173-442-090 beginning with emissions year 2017, except covered parties that are energy intense and trade exposed facilities, as defined by this chapter, whose requirement to make a compliance progress determination begins with emissions year 2020.

(b) Covered parties not meeting the threshold in subsection (1)(a) of this section must use the following compliance thresholds. Covered parties must make a compliance progress determination as established in WAC 173-442-090 beginning with the first emissions year that exceeds the thresholds below. All compliance thresholds are for total covered GHG emissions as calculated in (c) of this subsection.

(i) The compliance threshold for emissions years 2017 through 2019 is one hundred thousand metric tons CO₂e or more.

(ii) The compliance threshold for emissions years 2020 through 2022 is ninety-five thousand metric tons CO₂e or more.

(iii) The compliance threshold for emissions years 2023 through 2025 is ninety thousand metric tons CO₂e or more.

(iv) The compliance threshold for emissions years 2026 through 2028 is eighty-five thousand metric tons CO₂e or more.

(v) The compliance threshold for emissions years 2029 through 2031 is eighty thousand metric tons CO₂e or more.

(vi) The compliance threshold for emissions years 2032 through 2034 is seventy-five thousand metric tons CO₂e or more.

(vii) The compliance threshold for emissions years 2035 and later is seventy thousand metric tons CO₂e or more.

(c) Calculating covered GHG emissions for comparison to the threshold. To calculate covered GHG emissions for comparison to the reporting threshold in (b) of this subsection, the covered party must:

(i) Calculate the total annual covered GHG emissions of each GHG in metric tons from all covered GHG emissions that are listed and defined in WAC 173-442-030 through 173-442-050.

(ii) Sum the emissions estimates for each GHG and calculate metric tons of CO₂e using Equation A-1 of WAC 173-441-030.

(iii) Include in the emissions calculation any CO₂ that is captured for transfer off-site.

(iv) The GHG emissions must be calculated using the calculation methodologies specified in WAC 173-441-120 as reported to ecology under chapter 173-441 WAC or the assigned emissions level under WAC 173-441-086.

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(v) Compare the three year annual rolling average, beginning with emissions year 2012, of the total covered emissions in units of metric tons of CO$_2$e to the compliance threshold for the last emissions year in the three year annual rolling average.

(2) **Applicability over time.** A party that does not meet the applicability requirements of subsection (1)(a) or (b) of this section does not have a requirement to make a compliance progress determination as established in WAC 173-442-090. Such a party must make a compliance progress determination as established in WAC 173-442-090 if they exceed the applicability requirements of subsection (1)(b) of this section at a later time. Thus, parties must reevaluate whether this chapter applies to them (including revised emissions calculations or other calculations) whenever there is any change that could cause the party to meet the applicability requirements of subsection (1)(b) of this section. Such changes include, but are not limited to, process modifications, increases in operating hours, increases in production, changes in fuel or raw material use, addition of equipment, source expansion, changes in the compliance threshold, and changes to this chapter.

(3) **Requirements when covered GHG emissions fall below the compliance threshold.** Except as provided in this subsection, once a covered party is subject to the requirements of this chapter, the covered party must continue for each year thereafter to comply with all requirements of this chapter, even if the covered party does not meet the applicability requirements in subsection (1)(a) or (b) of this section in a future year.

(a) If covered GHG emissions are less than seventy thousand metric tons CO$_2$e per year for three consecutive years, then the covered party may discontinue making a compliance progress determination as established in WAC 173-442-090 provided that the covered party submits a notification to ecology that announces their intention to leave the program and explains the reasons for the reduction in emissions. The notification must be submitted no later than the report submission due date, specified in WAC 173-441-050(2), of the year immediately following the third consecutive year of emissions less than seventy thousand metric tons CO$_2$e per year. The covered party must resume making a compliance progress determination as established in WAC 173-442-090 if total annual covered GHG emissions in any future calendar year exceeds the thresholds in subsection (1)(b) of this section.

(b) If the operations of a covered party are changed such that all covered GHG emitting processes and operations listed in WAC 173-441-030 through 173-441-050 cease to operate, then the covered party is exempt from making a compliance progress determination as established in WAC 173-442-090 in the years following the year in which cessation of such operations occurs, provided that the covered party submits a notification to ecology that announces their intention to leave the program and certifies to the closure of all GHG emitting processes and operations no later than the report submission due date, specified in WAC 173-441-050(2), of the year following such changes. This provision does not apply to seasonal or other temporary cessation of operations. This provision does not apply to covered parties with municipal solid waste landfills, industrial waste landfills, or underground coal mines. The covered party must resume making a compliance progress determination as established in WAC 173-442-090 for any future calendar year during which any of the GHG-emitting processes or operations resume operation.
Voluntary participation. A party that does not exceed the thresholds in subsection (1)(a) or (b) of this section may choose to voluntarily make a compliance progress determination as established in WAC 173-442-090. Parties voluntarily making a compliance progress determination as established in WAC 173-442-090 must comply with all provisions of this chapter as if they exceeded the thresholds in subsection (1)(a) or (b) of this section. A voluntary participant may stop complying with the requirements of this chapter if they meet the standards in subsection (3)(a) or (b) of this section.

NEW SECTION

WAC 173-442-070 Baseline GHG emissions. Ecology must assign a baseline GHG emissions value to all covered parties in Washington state that are specified in this section. The baseline GHG emissions value is assigned to the covered party as it exists during the baseline calculation period and remains constant even if there is a subsequent change in processes, production, or GHG emissions at the covered party or a change in owners or operators of the covered party.

(1) Baseline GHG emissions for covered parties with covered GHG emissions for at least three years between emissions years 2012 and 2016. Ecology must use the following method to assign a baseline GHG emissions value to any covered party operating in Washington state with covered GHG emissions above seventy thousand metric tons CO₂e per year under chapter 173-441 WAC for at least three consecutive emissions years beginning with 2012 and ending with 2016.

(a) Ecology must use the following sources of data to assign baseline GHG emissions values.

(i) If a covered party reported GHG emissions to ecology under chapter 173-441 WAC, including data voluntarily reported to ecology, in a timely manner between emissions years 2012 and 2016, use the data from the covered party's annual GHG reports or use the assigned emissions level under WAC 173-441-086.

(ii) If a covered party was required to report GHG emissions to ecology under chapter 173-441 WAC between emissions years 2012 and 2016 but failed to report their GHG emissions in a timely manner, use the data from the covered party's annual GHG reports once they become available to ecology or use the assigned emissions level under WAC 173-441-086.

(iii) Petroleum fuel producers and natural gas distributors that were not required to submit annual GHG reports for their Subpart MM or NN GHG emissions prior to emissions year 2016, but were required to submit annual GHG reports to EPA for those emissions, must submit complete annual GHG reports including those carbon dioxide emissions for emissions years 2012 through 2016 to ecology by the specified report submission due date for emissions year 2016, specified in WAC 173-441-050(2). These reports must include all data elements required to be submitted to EPA or supporting data retained on-site as specified by 40 C.F.R. Part 98 at the date of original report submission to EPA.

(b) Calculate the total annual covered GHG emissions of each GHG in metric tons from all covered GHG emissions that are listed and defined in WAC 173-442-030 through 173-442-050.
(c) Sum the emissions estimates for each GHG and calculate metric tons of CO\textsubscript{2}e using Equation A-1 of WAC 173-441-030.

(d) Include in the emissions calculation any CO\textsubscript{2} that is captured for transfer off-site.

(e) The GHG emissions must be calculated using the calculation methodologies specified in WAC 173-441-120 as reported to ecology under chapter 173-441 WAC or the assigned emissions level under WAC 173-441-086. Ecology may use existing reported GHG data to adjust covered GHG emissions if there has been a change in covered GHG emissions calculation methodologies since the GHG emissions were reported to ecology.

(f) Average the total annual covered GHG emissions in units of metric tons of CO\textsubscript{2}e for all emissions years beginning with 2012 and ending with 2016 with covered GHG emissions under chapter 173-441 WAC. Ecology may omit emissions years from the average that meet at least one of the following criteria:

(i) Have a significant GHG emissions calculation methodology difference from the average. The significant GHG emissions calculation methodology difference must:
   (A) Be at least fifteen percent different from the 2012 through 2016 average of emissions years using the current methodology;
   (B) Be primarily caused by a change in a relevant GHG emissions calculation methodology that is not correctable by adjusting existing reported GHG data as specified in (e) of this subsection; and
   (C) Not be the result of a change in process or production regardless of how large, unusual, or outside the control of the covered party.

(ii) Occur during a period of temporary or permanent shutdown or curtailment. This is defined as any emissions year between 2012 and 2016 where covered GHG emissions and the facility's production are at least eighty percent below the 2012 through 2016 average of emissions years under normal operation.

(2) Baseline GHG emissions for covered parties not covered by subsection (1) of this section. Ecology must use one of the following two methods to assign a baseline GHG emissions value to any covered party operating in Washington state that is covered by WAC 173-441-060 (1)(b) or (4) but either was not in operation between emissions years 2012 and 2016 or did not emit enough covered GHG emissions between 2012 and 2016 to have a baseline emissions value established under subsection (1) of this section. Ecology will select the method most appropriate for the given covered party when assigning the baseline GHG emissions value.

   (a) Setting baseline GHG emissions values based on historic emissions. Use the following procedure to assign a baseline GHG emissions value.

      (i) Calculate the total annual covered GHG emissions of each GHG in metric tons from all covered GHG emissions that are listed and defined in WAC 173-442-030 through 173-442-050.

      (ii) Sum the emissions estimates for each GHG and calculate metric tons of CO\textsubscript{2}e using Equation A-1 of WAC 173-441-030.

      (iii) Include in the emissions calculation any CO\textsubscript{2} that is captured for transfer off-site.

      (iv) The GHG emissions must be calculated using the calculation methodologies specified in WAC 173-441-120 as reported to ecology under chapter 173-441 WAC or the assigned emissions level under WAC 173-441-086. Ecology may use existing reported GHG data to adjust cov-
tered GHG emissions if there has been a change in covered GHG emissions calculation methodologies since the GHG emissions were reported to ecology.

(v) Average the total annual covered emissions in units of metric tons of CO$_2$e for the first three emissions years with average covered GHG emissions above ten thousand metric tons CO$_2$e.

(b) Setting baseline GHG emissions values based on a benchmarking process.

(i) Within sixty working days of a written request by ecology, the covered party must provide the data that is required to calculate actual or projected GHG emissions for the covered party according to the requirements of WAC 173-441-120, information about the GHG emitting processes that are part of the covered party, actual or projected production data for the covered party, and other information requested by ecology, including the actual or projected operating days and hours of the covered party during the data year. The covered party must also make available personnel who can assist ecology in assigning a baseline GHG emissions value for the covered party. If the covered party fails to provide information in a timely manner, ecology must use best available information to conservatively estimate any missing data and assign a baseline GHG emissions value.

(ii) Ecology must assign the covered party a baseline GHG emissions value by comparing the covered party to other existing parties making or supplying similar products using similar processes as the covered party getting an assigned baseline GHG emissions value. Whenever possible, ecology must set the baseline emissions value at a value equal to the most efficient ten percent of similar existing parties, adjusted for the projected production at the covered party being assigned a baseline GHG emissions value. Ecology may use the actual or projected data from (b)(i) of this subsection to inform this process.

(A) Ecology must attempt to find existing parties, either local or otherwise, that meet these criteria.

(B) Ecology may prorate emissions or production data to scale data from existing similar parties to the covered party getting an assigned baseline GHG emissions value.

(C) When possible, ecology should use average 2012 to 2016 emissions year data from the existing similar parties.

(D) Ecology must use best available engineering methods to estimate covered GHG emissions if similar existing parties do not exist.

(E) Ecology must do the following when assigning a baseline GHG emissions value for a covered party:

(I) Calculate the total annual covered GHG emissions of each GHG in metric tons from all covered GHG emissions that are listed and defined in WAC 173-442-030 through 173-442-050.

(II) Sum the emissions estimates for each GHG and calculate metric tons of CO$_2$e using Equation A-1 of WAC 173-441-030.

(III) Include in the emissions calculation any CO$_2$ that is captured for transfer off-site.

(IV) The GHG emissions must be calculated using the calculation methodologies specified in WAC 173-441-120.
WAC 173-442-080  GHG emissions reduction pathway. Ecology must assign a GHG emissions reduction pathway to all covered parties in Washington state that meets the applicability standards in WAC 173-442-060 (1)(a) or (b). The GHG emissions reduction pathway is assigned to the covered party based on their baseline GHG emissions value and does not change even if there is a subsequent change in processes, production, or GHG emissions at the covered party or a change in owners or operators of the covered party.

1) GHG emissions reduction pathway for the first year in the program. The GHG emissions reduction pathway for the first emissions year a covered party meets the applicability standards in WAC 173-442-060 (1)(a) or (b) is the baseline GHG emissions value for that covered party.

2) GHG emissions reduction pathway annual decrease. Each emissions year beginning after the initial GHG emissions reduction pathway established under subsection (1) of this section, the GHG emissions reduction pathway decreases by an additional one and two-thirds percent of the covered party's baseline GHG emissions value relative to the GHG emissions reduction pathway for the previous emissions year.

3) GHG emissions reduction pathway for covered parties voluntarily participating in the program. The GHG emissions reduction pathway for each emissions year a covered party voluntarily participates in the program as specified in WAC 173-442-060 (4) is the baseline GHG emissions value for the covered party. If the covered party voluntarily participating in the program meets the applicability standards in WAC 173-442-060 (1)(a) or (b) at a later date, ecology must assign a new GHG emissions reduction pathway to the covered party that is consistent with the requirements of subsections (1) and (2) of this section beginning with the first emissions year the covered party meets the applicability standards in WAC 173-442-060 (1)(a) or (b).

WAC 173-442-090  Compliance progress determination. Covered parties must make a compliance progress determination for each emissions year that they meet the applicability standards in WAC 173-442-060 unless they have an approved petition as specified under WAC 173-442-220 for that emissions year.

1) Computation of compliance progress determination. The compliance progress determination is equal to the difference between the GHG emissions reduction pathway assigned in WAC 173-442-080 and the covered greenhouse gas emissions reported as per WAC 173-441-120 for that emissions year.

2) No compliance progress determination. Covered parties are not required to reduce their greenhouse gas emissions for any emissions year that they fall below the threshold established in WAC 173-442-060. In such a year there is no compliance progress determination required.
WAC 173-442-100 Compliance obligation. Each covered party must demonstrate that they have met their compliance obligation at the end of the applicable three-year compliance period.

(1) **Compliance periods.** Compliance periods are as follows: 2017-2019; 2020-2022; 2023-2025; 2026-2028; 2029-2031; 2032-2034, and continue from that time forward in intervals of three years.

(2) **Compliance obligation.** The compliance progress determinations required in WAC 173-442-090 must be summed for each applicable emission year of the relevant compliance period for a covered party. If after this summation the total is negative, the covered party has a compliance obligation for that compliance period.

(3) **Computation of compliance obligation.** The compliance obligation is equal to the absolute value of the sum of the compliance progress determinations for the emission years that comprise the applicable compliance period.

(4) **Compliance demonstration.** All covered parties must demonstrate compliance with the requirements of this chapter for the applicable compliance period.

(a) Covered parties with a compliance obligation must demonstrate they have met their compliance obligation for the compliance period by any combination of the following methods:

   (i) By submitting greenhouse gas reporting data, in accordance with chapter 173-441 WAC, that provides evidence that, as a result of the reported greenhouse gas emissions levels for the emission years within the compliance period, the total greenhouse gas emissions reductions necessary to meet the compliance obligation have been achieved.

   (ii) By providing evidence that the covered party has obtained emission reductions through other means, in accordance with WAC 173-442-120, that, in combination with (a)(i) of this subsection, achieves an aggregate emissions level that meets the compliance obligation for the compliance period.

(b) Covered parties that do not have a compliance obligation must confirm that the greenhouse gas reporting data, reported in accordance with chapter 173-441 WAC, demonstrate that there is no compliance obligation.

(5) **Documenting compliance.** The compliance demonstration must be completed as per the requirements and schedule in WAC 173-442-200.

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WAC 173-442-110 Emission reduction units. A covered party may use emission reduction units to meet some or all of its compliance obligation.

(1) **Value.** An emission reduction unit represents one metric ton of greenhouse gases in units of carbon dioxide equivalent.

(2) **Composition of emission reduction units.** An emission reduction unit may be composed of any of the greenhouse gases listed in WAC 173-441-040 or, for the purposes of utilizing WAC 173-442-180(5), chlorofluorocarbons or hydrochlorofluorocarbons that are destroyed.
Regardless of their composition emission reduction units will be expressed in units of carbon dioxide equivalent.

3) **Location of emission reductions.** Emission reduction units must originate from greenhouse gas emission reductions occurring within the state of Washington unless otherwise authorized in WAC 173-442-180 or 173-442-190.

4) **Retirement of emission reduction units.** An emission reduction unit must be retired once it is used to demonstrate partial or full achievement of a compliance obligation. An emission reduction unit must not be used, sold, traded, reallocated, or otherwise transferred again in any way. The use of an emission reduction unit, as recorded in a compliance report required by WAC 173-442-200, permanently and irrevocably disqualifies any further use of the unit.

**NEW SECTION**

**WAC 173-442-120 Generation of emission reduction units.** Emission reduction units may be generated in the following manner:

1) **Emission level below GHG emissions reduction pathway.** Upon providing GHG reporting data for an emission year, if the reported covered GHG emissions level is lower than the GHG emissions reduction pathway level established in WAC 173-442-080, the covered party may generate emission reduction units in an amount equal to the difference between the reported covered GHG emission level and the higher GHG emissions reduction pathway level.

2) **Voluntary participants.** Reporters of greenhouse gas emissions who voluntarily elect to be covered parties as per WAC 173-442-060(4), and whose reported covered GHG emission levels are lower than the GHG emissions reduction pathway level established in WAC 173-442-080(3), may generate emission reduction units in an amount equal to the difference between the reported covered GHG emission level and the higher baseline GHG emissions level.

3) **Alternative emission reductions.** Project types, activities, or programs recognized by ecology that can meet the criteria identified in WAC 173-442-160 may generate emission reduction units consistent with WAC 173-442-180.

4) **External emission markets.** Greenhouse gas emission credit programs, registries, or exchanges not operated or managed by the state of Washington that provide instruments may be used to generate emission reduction units consistent with WAC 173-442-190.

**NEW SECTION**

**WAC 173-442-130 Recording of emission reduction units.** Emission reduction units exist solely as an accounting mechanism reported by covered parties and are not property rights.

1) Each covered party must keep a record of any emission reduction units generated or obtained.

2) This record must be reported as part of the compliance report submitted to ecology in the manner prescribed by WAC 173-442-200.
NEW SECTION

WAC 173-442-140 Banking of emission reduction units. Any emission reduction units not used, sold, or otherwise released by a covered party in a year may be banked for future use or dispensation by the covered party.

(1) **First in, first out provision.** When an emission reduction unit is withdrawn from a pool of banked emission reduction units the emission reduction unit with the oldest vintage year must be withdrawn first. Within the same vintage year the covered party has the option to select what emission reduction units to withdraw.

(2) **Documentation of banked emission reduction units.** Any emission reduction units that are banked for future use must be documented in the compliance report submitted by the covered party consistent with WAC 173-442-200. To be eligible for banking, emission reduction units must be documented in the vintage year in which they were generated.

(3) **Time limit for banking.** The value of any emission reduction unit banked for future use will expire ten years after the date of the first compliance report in which they are reported as held over for future use or dispensation.

NEW SECTION

WAC 173-442-150 Trading of emission reduction units. Emission reduction units may be exchanged, bartered, sold, or otherwise transferred between covered parties if the transfer of the emission reduction units produces sufficient documentation of the exchange.

(1) **Required documentation.** This documentation may consist of contractual arrangements, memorandums of understanding, or other similar records with sufficient detail to document the exchange and to demonstrate a clear and unambiguous transfer of the emission reduction unit from one covered party to another.

(2) **Tracking of emission reduction units.** Any release or acquisition of an emission reduction unit by a covered party must be documented in the compliance report submitted by the covered party as per WAC 173-442-200.

(3) **Role of third parties.** Emission reduction units may only be reported as being released or obtained by covered parties. While third parties may facilitate, broker, or otherwise assist in the trading, transfer, or other exchange of emission reduction units between covered parties at no time may third parties report that they themselves are retaining emission reduction units.

NEW SECTION

WAC 173-442-160 Alternative emission reductions. Covered parties may generate emission reduction units from emission reductions derived from project types, activities, or programs that are not otherwise included in the emission calculations used to derive the cov-
ered emissions for any reporting party reporting as per chapter 173-441 WAC.

(1) **Criteria for emission reductions.** Emission reductions must meet the following criteria:

(a) Emission reductions must be real. A specific, identifiable, and quantifiable reduction of greenhouse gas emissions must be demonstrable.

(b) Emission reductions must be permanent. The emission reductions must not be reversible or, where reversal is a possibility, mechanisms and protocols must be in place to account for and ensure against reversals in a manner approved by the department.

(c) Emission reductions must be enforceable. Emission reductions must derive from activities, infrastructure, equipment, actions, or other origins that are under the control of parties or persons who are subsequently under the authority of the state of Washington. In the case of emission reductions represented by instruments from external emission crediting systems, emission reductions must derive from instruments over which ecology can assert control or limitations over the usability of the instruments for the purposes of this program.

(d) Emission reductions must be verifiable, and verified in the manner prescribed by WAC 173-442-210.

(e) Emission reductions must be additional to existing law or regulation. Emission reductions used for this program must not otherwise be required by statute, regulation, or other legal requirements except under those conditions listed in WAC 173-442-170.

(2) **Additional criteria for emission reductions.** Additional criteria for emission reductions may apply for different types of projects, programs, or activities as detailed in the applicable protocols, methodologies or procedures provided in WAC 173-442-180.

(3) **Emissions from wood products.** Carbon dioxide emission reductions that serve as alternative emission reductions and that are derived from the industrial combustion of biomass in the form of fuel wood, wood waste, wood by-products, and wood residuals are considered to have zero emissions as provided by WAC 173-442-030.

NEW SECTION

**WAC 173-442-170 Interaction of other greenhouse gas policies.** Emission reductions under the economy or sector-wide greenhouse gas policies described in this section can count toward meeting the compliance obligation of a covered party:

(1) The EPA Clean Power Plan (40 C.F.R. Part 60 Subpart UUUU).

(2) Washington's greenhouse gas emission performance standard (chapter 194-20 WAC).

NEW SECTION

**WAC 173-442-180 Sources of alternative emission reductions.** Project types, activities, and programs eligible to generate emission reduction units must comply with WAC 173-442-160 and this section. Eligible project types, activities, and programs include the following:
(1) **Transportation measures.** Transportation measures that address travel demand or expand mobility options, or transportation technology projects that use less energy or different forms of energy to reduce greenhouse gas emissions.

(a) As documented using the following methods:

(i) By exceeding workplace goals established by the commute trip reduction program, as reported by the Washington department of transportation.

(ii) Through the use of the improved efficiency of vehicle fleets protocol from the American Carbon Registry, using the most recent version of the protocol as of January 1, 2016.

(iii) Through the use of the truck stop electrification protocol from the American Carbon Registry using the most recent version of the protocol as of January 1, 2016.

(b) Emission reductions in this category derived from an independent qualified organization recognized by the council per RCW 80.70.050.

(c) Through a methodology that meets the GHG protocol for project accounting from the World Resources Institute as determined by ecology using the most recent version of the protocol as of January 1, 2016.

(2) **Energy measures.** Energy efficiency measures and demand side management of electricity consumption in Washington, and alternative energy generation technologies that serve retail electricity customers of Washington.

(a) As documented using the following methods:

(i) Through the acquisition of conservation above the targets required by the Energy Independence Act and that is reported to commerce or the UTC, as reported by the department of commerce or the utilities and transportation commission.

(ii) Through the acquisition and subsequent retirement of RECs that are not retired for purposes of complying with the Energy Independence Act, as reported by the Washington department of commerce.

(b) Emission reductions in this category derived from an independent qualified organization recognized by the council per RCW 80.70.050.

(c) Through a methodology that meets the GHG protocol for project accounting from the World Resources Institute as determined by ecology using the most recent version of the protocol as of January 1, 2016.

(3) **Livestock and agricultural measures.** Methane management measures addressing agricultural and livestock activities.

(a) Through the use of the U.S. Livestock protocol from the Climate Action Reserve using the most recent version of the protocol as of January 1, 2016.

(b) Emission reductions in this category derived from an independent qualified organization recognized by the council per RCW 80.70.050.

(c) Through a methodology that meets the GHG protocol for project accounting from the World Resources Institute as determined by ecology using the most recent version of the protocol as of January 1, 2016.

(4) **Waste and wastewater measures.** Greenhouse gas management measures addressing waste and wastewater infrastructure and activities.

(a) As documented using the following methods:

(i) Through the use of the U.S. Landfill protocol from the Climate Action Reserve using the most recent version of the protocol as of January 1, 2016.
(ii) Through the use of the organic waste composting protocol from the Climate Action Reserve using the most recent version of the protocol as of January 1, 2016.

(iii) Through the use of the organic waste digestion protocol from the Climate Action Reserve using the most recent version of the protocol as of January 1, 2016.

(b) Emission reductions in this category derived from an independent qualified organization recognized by the council per RCW 80.70.050.

(c) Through a methodology that meets the GHG protocol for project accounting from the World Resources Institute as determined by ecology using the most recent version of the protocol as of January 1, 2016.

(5) Industrial sector measures. Greenhouse gas process and equipment management, operations, and changes affecting industry and manufacturing.

(a) As documented using the following methods:

(i) Through the use of the replacement of SF₆ with alternate cover gas in the magnesium industry protocol from the American Carbon Registry using the most recent version of the protocol as of January 1, 2016.

(ii) Through the use of the use of certified reclaimed HFC refrigerants and advanced refrigeration systems protocol from the American Carbon Registry using the most recent version of the protocol as of January 1, 2016.

(iii) Through the use of the conversion of high-bleed pneumatic controllers in oil and natural gas systems protocol from the American Carbon Registry using the most recent version of the protocol as of January 1, 2016.

(iv) Through the use of the conversion of foam blowing agents from high-GWP to low-GWP materials protocol from the American Carbon Registry using the most recent version of the protocol as of January 1, 2016.

(b) Combined heat and power, as documented through a methodology submitted to and approved by ecology.

(c) Emission reductions in this category derived from an independent qualified organization recognized by the council per RCW 80.70.050.

(d) Through a methodology that meets the GHG protocol for project accounting from the World Resources Institute as determined by ecology using the most recent version of the protocol as of January 1, 2016.

NEW SECTION

WAC 173-442-190 Sources of alternative emission reduction instruments. Instruments provided by emission credit programs, registries, or exchanges as described in this section are eligible to provide emission reduction units for use by covered parties.

(1) Location of emissions. The emission credit programs, registries, or exchanges providing these instruments must be located in the United States or Canada.

(2) Eligible instruments. Eligible emission credit programs, registries, or exchange include the following:
(a) Emission allowances from the Regional Greenhouse Gas Initiative (RGGI);
(b) Emission allowances issued by California's cap and trade program;
(c) Emission allowances from Quebec's cap and trade program;
(d) Offset credits from livestock projects from the California cap and trade program;
(e) Offset credits from mine methane capture projects from the California cap and trade program;
(f) Offset credits from ozone depleting substance (ODS) projects from the California cap and trade program.

(3) Retirement of instruments in original market. Use of an instrument in this program must include documentation that the instrument has been invalidated, retired, or otherwise disqualified from future use in its originating market.

NEW SECTION

WAC 173-442-200 Compliance report. Each regulated party must submit a compliance report in accordance with this section.

(1) The compliance report must be submitted electronically in a format prescribed by ecology.

(2) The compliance report must be submitted no later than one hundred twenty days after the report submission due date for the covered party specified in WAC 173-441-085(6) for the emission year in which the applicable compliance period specified in WAC 173-442-100(1) ends.

(3) The compliance report must contain the following sections and detail:

(a) Record of emission reduction units generated. The record of emission reduction units must include for each distinct emission reduction unit or block of emission reduction units from an identical source or other method of credit generation:

(i) The source of the emission reduction unit or units.
(ii) The source of the emissions data or computational method used to generate the emission reduction unit.
(iii) The vintage year that the emission reduction unit is created.

(b) Record of emission reduction units banked. The compliance report must document all emission reduction units being banked for this compliance period by including the following information:

(i) Vintage year of the emission reduction unit.
(ii) Origin of the emission reduction unit.

(c) Record of emission reduction unit transactions. This documentation must consist of:

(i) The origin of any emission reduction units acquired.
(ii) The destination of any emission reduction units transferred.
(iii) The names and contact information of any third parties who facilitated, brokered, or provided liaison services between the parties making the exchange.
(iv) The value of the emission reduction units at the time of the exchange.
(v) The vintage year of the emission reduction units.
(d) **Documentation of emissions verification.** The compliance report must contain documentation that all emission reductions have been verified by a third party consistent with WAC 173-442-210 and 173-441-085. This documentation must consist of:

(i) For emission reductions generating emission reduction units in the manner described by WAC 173-442-120 (1) and (2) documentation by reference to the applicable annual GHG emissions reports.

(ii) For emission reductions generating emission reduction units in the manner described by WAC 173-442-120(3) the appropriate documentation of verification for each applicable case attached as an appendix or appendices.

(iii) For emission reductions generating emission reduction units in the manner described by WAC 173-442-120(4) the inclusion of documentation consistent with WAC 173-442-190(3), in conjunction with the requirements of this section.

(4) The compliance report must be signed by the covered party's designated representative or alternate designated representative as specified in WAC 173-441-060 and include the certification statement specified in WAC 173-441-060 (5)(a).

**NEW SECTION**

WAC 173-442-210 Verification. (1) Emission reductions subject to third-party verification. All emission reductions for which emission reduction units are generated under WAC 173-442-180 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 173-442-180.

(c) Verified by a certified verifier using processes and procedures consistent with the International Organization for Standardization 14064-3:2006 protocol which is most current as of January 1, 2016.

(2) Compliance reports subject to third-party verification. A covered party that must make a compliance progress determination as established in WAC 173-442-090 or voluntarily participating under WAC 173-442-060(4) must have the covered party's compliance reports verified by a third party as specified in this section. Compliance reports must be third-party verified each year that:

(a) The covered party must make a compliance progress determination as established in WAC 173-442-090; or

(b) The covered party is voluntarily participating under WAC 173-442-060(4) and has a compliance obligation.

(3) **Verification standards.** The third-party verifier must certify that compliance reports are consistent with the relevant requirements and methods in this chapter.

(4) **Verification services.** A verification report must be in a format specified by ecology and contain:

(a) Documentation identifying the covered party's reporting compliance.

(b) 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 qual-
ifications (if any) of all individuals working on the verification report.
(c) Documentation demonstrating and certifying that the requirements of subsection (7)(b) and (c) of this section have been met.
(d) A verification plan that details methodologies used to verify the compliance report and schedule describing when the verification services occurred.
(e) Documentation of the third-party verifier's review of the covered party's accounting of emissions, emissions reductions, emission reduction units, and all information relevant to demonstrating compliance with the applicable emission standards.
(f) Documentation of any corrections made to the annual compliance report.
(g) Documentation supporting the third-party verifiers' findings evaluating if the annual compliance 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 compliance report, and their resolution.
(h) 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.
(i) 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 compliance year. The third-party verifier must visit the headquarters or other location of central data management when the covered party is a supplier of petroleum products or supplier of natural gas and natural gas liquids. During the site visit, the third-party verifier must:
   (i) Confirm that all relevant emissions, emission reductions, and accounting for emission reduction units are included in the compliance report.
   (ii) Check that all sources specified in the compliance report are identified appropriately.
   (iii) Review and understand 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.
   (iv) Interview key personnel.
   (v) Make direct observations of equipment for data sources and equipment supplying data for sources determined to be high risk.
   (vi) Assess conformance with measurement accuracy, data capture, and missing data substitution requirements.
(5) Compliance report corrections. Covered parties subject to this section must correct errors in their compliance report.
   (a) Corrections are required if errors are identified by:
      (i) The third-party verifier;
      (ii) The covered party; or
      (iii) Ecology.
   (b) The covered party must maintain documentation to support any revisions made to the initial compliance report.
   (c) Documentation for all compliance report submittals must be retained by the covered party for ten years.
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 twenty days after the report submission due date for the covered party specified in WAC 173-441-085(6) for the emission year in which the applicable compliance period specified in WAC 173-442-100(1) ends. Any corrections to the compliance or verification report must be submitted to ecology no later than forty-five days after discovery of the error. Records must be retained following the requirements of WAC 173-441-050(6).

Eligible third-party verifiers.

(a) Covered parties subject to this section must have their compliance 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) California Climate Action Registry;
(C) The Climate Registry;
(D) Climate Action Reserve;
(E) American National Standards Institute (ANSI); or
(F) Other GHG verification standard 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. The potential for a conflict of interest must be deemed to be high where:

(i) The third-party verifier and covered party share any management staff or board of directors membership, or any of the senior management staff of the covered party 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 covered party any services within the previous five years.

(iii) Any staff member of the third-party verifier provides any type of nonmonetary incentive to a covered party to secure a verification services contract.

(8) Ecology verification. Ecology retains full authority in determining if the compliance report contains a discrepancy, omission, or misreporting, or any aggregation of the three that impacts the verification status of the compliance report. Ecology may issue an adverse verification statement for a compliance report even if the compliance 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 compliance 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.

NEW SECTION

WAC 173-442-220 Petition for compliance progress determination relief. Any covered party that is an energy intense and trade exposed facility, as defined by this chapter, can petition ecology to modify or exempt them from their compliance progress determination as established in WAC 173-442-090 for a specific emissions year or years if they are experiencing unusual economic hardship. Unless a subsequent petition is approved, the covered party's normal compliance progress determination resumes upon the expiration of any approved petition beginning with the first year after the expiration of the approved petition and would be equal to their GHG emissions reduction pathway for that emissions year.

(1) Unusual economic hardship. A covered party may demonstrate that it is experiencing unusual economic hardship using either of the following standards:
(a) The covered party's earnings before taxes, including accounting for cost of compliance with this chapter, are less than or equal to zero dollars per year. This analysis is conducted at the facility level.
(b) The economic status of the covered party, including the cost of compliance with the requirements of this chapter, would result in the temporary or permanent closure of the covered party.

(2) Petition submittal. A covered party must submit a petition that meets the following conditions before ecology may review the petition and issue a determination.
(a) A covered party must submit a complete petition no later than one hundred eighty days prior to the compliance report deadline established in WAC 173-442-200 for the specified emissions year(s). Such petition must include sufficient information, as described in (b) of this subsection, for ecology to make a determination. Ecology will notify the covered party within thirty days of receipt of a petition of any additional information ecology needs to make the determination of whether the petition meets the criteria in subsection (1) of this section.
(b) A covered party with an expiring approved petition may petition for a subsequent petition, but the subsequent petition must meet all the standards of an original petition as outlined in this section and receive ecology approval independent of the original petition.
(c) The petition must include, at a minimum, the following information:
(i) Identifying information of the designated representative submitting a petition;
(ii) Identifying information of the covered party;
(iii) Documentation demonstrating the covered party's unusual economic hardship;
(iv) Documentation demonstrating any relationship between the unusual economic hardship and the requirements of this chapter;
(v) The emissions year(s) that the covered party requests a modification or exemption of their compliance progress determination as established in WAC 173-442-090;
(vi) The amount of the modification or exemption requested by the covered party;
(vii) Any other supporting data or information as requested by ecology as described in (a) of this subsection; and
(viii) The designated representative must sign and date the petition.

(3) Ecology review of the petition. Ecology must approve the petition before any modification or exemption of the covered party's compliance progress determination as established in WAC 173-442-090 takes effect. Ecology will issue a determination within sixty days of receiving a complete petition.
   (a) Ecology must only approve modifications or exemptions to compliance progress determinations as established in WAC 173-442-090 for covered parties that ecology determines are experiencing an unusual economic hardship as defined in subsection (1) of this section.
   (b) Only covered parties that are energy intense and trade exposed facilities, as defined by this chapter, are eligible for modifications or exemptions to their compliance progress determination as established in WAC 173-442-090.
   (c) If ecology approves a petition, the approval will specify:
      (i) The covered party;
      (ii) The emissions year or years for which the modification or exemption to the compliance progress determination as established in WAC 173-442-090 is valid, which must be for no more than one compliance period; and
      (iii) The amount of the modification or exemption to the compliance progress determination as established in WAC 173-442-090 for each emissions year specified in (c)(iii) of this subsection.

(4) Appeal of determination. An approval or denial issued by ecology in response to a written petition filed under this section is a determination appealable to the pollution control hearings board per RCW 43.21B.110 (1)(h).

NEW SECTION

WAC 173-442-230 Review if alternate program established. Ecology will periodically review the program established by this chapter. If another program requiring GHG reductions from the same covered parties included in the chapter is established, ecology will compare the programs. Ecology may suspend, alter, or repeal some or all of the requirements contained in this chapter if ecology determines the new program requires similar or greater GHG reductions from the covered parties included in the chapter.
NEW SECTION

WAC 173-442-240 Enforcement. (1) Violations. A violation of any requirement of this chapter subjects the violator to enforcement as provided in chapter 70.94 RCW. 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 emission reduction unit is a separate violation, and each day that the covered party does not meet the compliance obligation is a separate violation.

(2) Enforcement responsibility. 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.

NEW SECTION

WAC 173-442-250 Confidentiality. (1) Emissions data. Emissions data submitted to ecology under this chapter are public information and must not be designated as confidential.

(2) Emission reduction unit data. Any data pertaining to emission reduction units is considered public information unless a request is made in accordance with subsection (3) of this section.

(3) Confidentiality requests. Any covered party submitting information to ecology under this chapter may request that ecology keep information that is not emissions data confidential as proprietary information under RCW 70.94.205 or because it is otherwise exempt from public disclosure under the Washington Public Records Act (chapter 42.56 RCW). All such requests for confidentiality must meet the requirements of RCW 70.94.205.

(4) Verification status. Ecology's determinations of the verification status of each report are public information. All confidential data used in the verification process will remain confidential.

NEW SECTION

WAC 173-442-260 Addresses. All requests, notifications, and communications to ecology pursuant to this chapter, must be submitted in a format as specified by ecology to 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: AQComments@ecy.wa.gov.

NEW SECTION

WAC 173-442-270 Severability. If any provision of the regulation or its application to any covered party, person, or circumstance is held invalid, the remainder of the regulation or application of the
provision to other covered parties, persons, or circumstances is not affected.