

DRAFT RULE LANGUAGE For Advisory Committee Review

Chapter 173-441 WAC Reporting Emissions of Greenhouse Gases

NOTES:

- This document contains draft language only related to those sections in **bold** below.
- Words in *italics* are defined in section 020.

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WAC 173-441-010. Purpose. The purpose of this rule is to develop a comprehensive inventory of greenhouse gas emissions in Washington State by establishing a reporting and verification system for emissions of greenhouse gases, as promulgated in Chapter 70.94 RCW. An inventory of greenhouse gas emissions will support the legislature's intent to limit and reduce emissions of greenhouse gases consistent with the emissions reductions requirements established in RCW 70.235.020.

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

(NOTE: The following is a partial list of definitions. Other definitions will be added as remaining sections are drafted)

“**Biomass**” means plants or parts of plants, animal waste or any product made of either of these, and includes wood and wood products, agricultural residues and wastes, biologically derived organic matter found in municipal and industrial wastes, landfill gas, bio-alcohols, spent pulping liquor, sludge gas, and animal- or plant-derived oils.

Comment [NEP1]: From WCI.
WCI may be changing their definition to separate biomass and biofuels.

“Carbon dioxide **equivalents**” or “CO₂e” means a metric measure used to compare the emissions from various greenhouse gases based upon their *global warming potential*.

Comment [NEP2]: Definition is from HB 2815.

“**Certification**” or “certify” means a written and signed certification statement by the designated representative of the *owner or operator* that, based on information and belief formed after reasonable inquiry, the reported emissions are true, accurate, complete and comply with the requirements of this Chapter.

Comment [NEP3]: Definition of certification adapted from WAC 173-401-520 and used in subsection 120 of this draft.

“Department” means department of ecology.

“Designated **representative**” means the person authorized by the *owner or operator* of an emissions source to represent and legally bind the *owner or operator* and to be responsible for *certifying* and submitting greenhouse gas emissions reports under this Chapter. The designated representative must be an individual having responsibility for the overall operation of the emissions source or sources.

Comment [NEP4]: This term is adapted from WCI’s draft model rule dated 12/5/08.

“**Direct emissions**” means emissions of greenhouse gases from sources of emissions, including stationary combustion sources, mobile combustion emissions, process emissions, and fugitive emissions.

Comment [NEP5]: Definition is from HB 2815.

“**Emissions report**” or “greenhouse gas emissions report” means the report of total greenhouse gas emissions prepared by the *owner or operator* each year and submitted electronically to the department to meet the reporting requirements of this Chapter.

Comment [NEP6]: Definition is adapted from CARB rule definition of “emissions data report”.

“**Fleet of on-road motor vehicles**” means a collection of on-road motor vehicles with a common *owner or operator*.

Comment [NEP7]: Definition drafted by staff.

“**Fugitive emissions**” means emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Comment [NEP8]: From WAC 173-400-030 definitions

“**Global warming potential**” means the ratio of radiative forcing (degree of warming to the atmosphere) that would result from the emission of one unit of a given greenhouse gas compared to one unit of carbon dioxide (CO₂). See Table X in WAC 173-441-080(5).

Comment [NEP9]: Definition from TCR GRP.

“Greenhouse gas” and “greenhouse gases” includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Comment [NEP10]: Definition from HB 2815.

“Indirect emissions” means emissions of greenhouse gases associated with the purchase of electricity, heating, cooling, or steam.

Comment [NEP11]: Definition from HB 2815.

“Material misstatement” means one or more inaccuracies identified during the verification process that result in the total reported emissions being outside the 95 percent accuracy required to receive a positive verification statement.

Comment [NEP12]: Definition from WCI draft model rule and CARB rule.

“Mobile source” means mobile combustion from vehicles or equipment for transporting people or cargo, including but not limited to on-road motor vehicles, aircraft, trains, marine vessels, off-road trucks, mobile cranes, forklifts, front-end loaders, and mining, construction, agriculture, and forestry equipment.

Comment [NEP13]: Definition developed by staff to provide examples of what is considered a mobile emissions source in this rule.

“Negative verification statement” means the final verification opinion prepared by a verification body stating that the emissions report is not free of material misstatement or that the verification body cannot confirm that the emissions report conforms to the requirements of this Chapter.

Comment [NEP14]: Modified from WCI. WCI uses “adverse”. TCR uses “negative”. Since we are referencing TCR’s GVP, chose to use TCR’s terminology.

Term not currently used in draft rule, but expect to add it to draft.

“On-road motor vehicles” means any self-propelled vehicle required to be licensed pursuant to chapter 46.16 RCW. Motor vehicles that operate exclusively within the boundaries of one specific site are not considered on-road motor vehicles and are subject to the 10,000 metric ton CO_{2e} threshold.

Comment [NEP15]: Definition of motor vehicles taken from Chapter 173-422 WAC and modified to address on-road.

“Operating lease” means a lease that does not transfer the risks and rewards of ownership to the lessee and is not recorded as an asset in the balance sheet of the lessee.

Comment [NEP16]: Definition from TCR GRP.

“Operational control” means the authority to introduce and implement operating, environmental, health and safety policies. When this authority is shared, the holder of the operating license is considered to have operational control.

Comment [NEP17]: Definition derived from CARB rule.

“Owner or operator” means any person who owns, leases, operates, controls or supervises a source, a combination of sources, or a fleet of on-road motor vehicles.

Comment [NEP18]: Definition is adapted from WCI draft model rule.

“Positive verification statement” means the final verification opinion prepared by a verification body stating that the emissions report is free of material misstatement and that the emissions report conforms to the requirements of this Chapter.

Comment [NEP19]: Definition is adapted from WCI draft model rule dated 12/29/08.

“Reporter” means the owner or operator responsible for submitting an emissions report under the requirements of this Chapter.

Comment [NEP20]: Definition adapted from TCR GRP.

“Source” or “emissions source” means
a) any stationary source of greenhouse gas emissions or

Comment [NEP21]: Definition is created from text in HB 2815, Section 5(5)(a).

- b) any *mobile source* of greenhouse gas emissions that is used for transporting people or cargo.

“Stationary source” means any building, structure, facility, or installation that emits or may emit greenhouse gases.

Comment [NEP22]: Definition is from RCW 70.94.030 (which was referenced in 2815).

“Streamlined verification” means the verification services provided in interim years of a verification cycle between full verification. Streamlined verification only requires data checks on a *reporter’s emissions report* based on the most current sampling plan developed as part of the most current positive full verification statement.

Comment [NEP23]: Adapted from CARB’s definition of “less intensive verification” and WCI’s discussion in the model rule background document, pg 28.

“The Climate Registry” means the nonprofit corporation by that name incorporated under the District of Columbia Nonprofit Corporation Act with a purpose of creating and operating a North American greenhouse gas emissions registry.

Comment [NEP24]: Have requested TCR to provide a definition. This definition may change.

“Total emissions of greenhouse gases” means all *direct emissions* and all *indirect emissions*.

Comment [NEP25]: Definition is from 2815.

“Verification” means the process used to ensure that an *emissions report* is free of *material misstatement* and complies with the procedures and methods established in Chapter 173-441 WAC for calculating and reporting greenhouse gas emissions.

Comment [NEP26]: Adapted from CARB’s and WCI’s definitions

“Verification body” means an organization meeting the accreditation requirements for third party verification in WAC 173-441-120(2).

Comment [NEP27]: Definition is adapted from WCI draft model rule and TCR GVP.

“Verification cycle” means the three year greenhouse gas emissions verification cycle, which includes one year of full verification and the next consecutive two years of *streamlined verification* for owners or operators subject to third party verification. A verification cycle cannot exceed three calendar years.

Comment [NEP28]: Adapted from WCI draft model rule dated 12/5/08

“Verification report” means a detailed report that a verification body prepares for a *reporter*, describing the scope of the verification activities, standards used, emissions *sources* identified, sampling techniques, evaluation of the *reporter’s* compliance with the reporting requirements of this Chapter, assumptions, and a list of material and immaterial misstatements, if any.

Comment [NEP29]: Adapted from TCR GVP (modified to refer to compliance with this chapter instead of compliance with TCR GRP)

“Verification statement” means the final opinion prepared by a verification body and submitted to the department attesting whether or not an *emissions report* is free of *material misstatements* and whether the *emissions report* conforms to the requirements of this Chapter.

Comment [NEP30]: Adapted from WCI Draft model rule dated 12/5/08.

WAC 173-441-030. Applicability.

- 1) **Reporting thresholds.** Chapter 173-441 WAC reporting requirements apply to:
 - a) **Fleet of on-road motor vehicles.** The *owner or operator* of a *fleet of on-road motor vehicles* that has *direct emissions* of at least 2,500 metric tons of

- greenhouse gases in a calendar year in Washington state, expressed as CO_2e ; and
- b) **Source or combination of sources of emissions.** The *owner or operator* of any *source* or combination of *sources* located in Washington state with *direct emissions* of at least 10,000 metric tons of greenhouse gases in a calendar year, expressed as CO_2e .
 - c) When determining if the direct emissions meet the thresholds in subsection 1(a) or 1(b) of this section, the *owner or operator* must include the direct emissions generated in Washington state from interstate or international *mobile sources*.
 - d) Once an *owner or operator* determines that its *direct emissions* meet the reporting thresholds in 1(b) of this section, the *owner or operator* is responsible for reporting the *total emissions* associated with those emissions *sources*.
- 2) **Phasing in threshold and reporting requirements for sources and combinations of sources.** Refer to WAC 173-441-070 for phasing in of threshold and reporting requirements for certain *sources* and combinations of *sources* of emissions subject to WAC 173-441-030(1)(b) for calendar years 2009, 2010, 2011 and 2012 emissions.
- 3) **Meeting reporting thresholds.**
- a) **Fleet of on-road motor vehicles.**
 - i. An *owner or operator* of a *fleet of on-road motor vehicles* shall use the methods in WAC 173-441-110 when determining if a *fleet of on-road motor vehicles* has *emissions* of at least 2,500 metric tons of CO_2e in any calendar year in Washington state:
 - ii. An *owner or operator* shall include emissions generated within Washington state from interstate or international on-road motor vehicles when determining if a fleet of on-road motor vehicles meets the 2,500 metric tons of CO_2e reporting threshold.
 - iii. If *emissions* from a *fleet of on-road motor vehicles* meet the 2,500 metric tons of CO_2e annual reporting threshold, the *emissions* from the fleet, including emissions generated within Washington state from interstate and international on-road vehicles, must be reported.
 - iv. If *emissions* from a *fleet of on-road motor vehicles* do not meet the 2,500 metric tons of CO_2e annual reporting threshold, the *owner or operator* shall include the *emissions* from on-road motor vehicles when determining if the *direct emissions* from a *source* or combination of sources meet the 10,000 metric tons of CO_2e annual reporting threshold in subsection (3)(b) of this section.
 - b) **Source or combination of sources of emissions.**
 - i. An *owner or operator* of a *source* or combination of sources within Washington state shall use the methods in WAC 173-441-100 when determining if direct greenhouse gas emissions from the source or combination of sources meet the applicable CO_2e annual reporting threshold.
 - ii. *Direct emissions* from on-road motor vehicles, including *direct emissions* generated in Washington state from interstate and

international on-road motor vehicles, are included when determining if the applicable reporting threshold in WAC 173-441-030 is met if on-road motor vehicles are not reported separately under 2(a) of this section.

WAC 173-441-040. Falling Below Reporting Thresholds. If the emissions from a *source* subject to this chapter changes such that the emissions fall below the applicable annual reporting threshold in WAC 173-441-030 the following reporting requirements shall apply:

- 1) The *owner or operator* shall continue to submit an annual *emissions report* until reported emissions are below the applicable threshold for a minimum of three consecutive years.
- 2) If reported emissions are below the applicable reporting threshold for three consecutive years, then the *owner or operator* is not subject to the reporting requirements of this Chapter until emissions exceed the applicable threshold in any future calendar year.

WAC 173-441-050. Reporting Responsibility.

- 1) **Operational Control.** The *owner or operator* with *operational control* is responsible for reporting the *total emissions* of greenhouse gases from those emissions *sources* meeting the thresholds established in WAC 173-441-030.
 - a) **Leased emissions sources.**
 - i. **Fleets of on-road motor vehicles.** The lessee of a fleet of on-road motor vehicles is the reporter if it has the ability to track fuel use or emissions from the leased on-road motor vehicles for the calendar year. If the lessee does not have the ability to track fuel use, the lessee is the reporter if the lessee has the ability to track mileage for the calendar year.
 - ii. **Source or combination of sources of emissions.**
 - A. **Stationary sources.** The lessee is the reporter if the lessee has the ability to track fuel use or emissions from the leased stationary source or combination of sources.
 - B. **Mobile sources.** The lessee is the reporter if the lessee has the ability to track fuel use or emissions from the leased mobile source for the calendar year. If the lessee does not have the ability to track fuel use for the calendar year, the lessee is the reporter if the lessee has the ability to track mileage for the calendar year.

WAC 173-441-060. Reporting requirements for owners or operators of aircraft.

- 1) Beginning with 2012 emissions to be reported in 2013, owners or operators of aircraft with flights beginning and ending in Washington state shall:
 - a) Include greenhouse gas emissions from these aircraft when determining if their sources meet the reporting threshold of 10,000 metric tons of greenhouse gases per year, expressed as CO₂e, and
 - b) Report the emissions from these aircraft if the reporting threshold is met.

- 2) Owners or operators of aircraft are not required to report emissions from interstate or international flights.

WAC 173-441-070. Phasing in threshold and reporting requirements. The thresholds and reporting requirements are phased in for the following *sources* or combination of sources of emissions subject to the reporting threshold in WAC 173-441-030(1)(b), as specified below:

1) Reporting for 2009 emissions.

- a) For 2009 emissions reported in 2010, the reporting threshold shall be 25,000 metric tons of CO_2e .
- b) For 2009 emissions reported in 2010, when determining whether the direct emissions meet the 25,000 metric tons of CO_2e reporting threshold an *owner or operator* shall only include *direct emissions* from those sources or combination of sources located on a **site** or adjacent sites with direct emissions of at least 25,000 metric tons of greenhouse gases, expressed as CO_2e .
- c) For purposes of this rule, a site is considered one or more contiguous or adjacent sites in actual physical contact or separated solely by a public roadway or other public right-of-way and having the same first two digits of the Standard Industrial Classification (SIC) or same first three digits of the North American Industry Classification System (NAICS) code.
- d) An *owner or operator* with multiple noncontiguous sites within Washington state must calculate the *direct emissions* for each site separately. Each site that has *direct emissions* of at least 25,000 metric tons of CO_2e is subject to the reporting requirements of this Chapter.
- e) If WAC 173-441-030(3)(a)(iv) applies, the *owner or operator* will only include emissions from the on-road motor vehicles **associated** with a specific site.
- f) Once an *owner or operator* determines that its *direct emissions* meet the reporting threshold in 1(a) of this subsection, the *owner or operator* is responsible for reporting the *total emissions* associated with those emissions *sources*.

2) Reporting for 2010 emissions.

- a) For 2010 emissions reported in 2011, the reporting threshold shall be 10,000 metric tons of CO_2e .
- b) For 2010 emissions reported in 2011, when determining whether the emissions meet the 10,000 metric tons of CO_2e reporting threshold an *owner or operator* shall only include emissions from those *sources* or combination of sources located on a **site** or adjacent sites with *direct emissions* of at least 10,000 metric tons of greenhouse gases, expressed as CO_2e .
- c) For purposes of this rule, a **site** is considered one or more contiguous or adjacent sites in actual physical contact or separated solely by a public roadway or other public right-of-way and having the same first two digits of the Standard Industrial Classification (SIC) or same first three digits of the North American Industry Classification System (NAICS) code.
- d) An *owner or operator* with multiple noncontiguous sites within Washington state must calculate the *direct emissions* for each site separately. Each site

Comment [NEP31]: This section replaces "facility" with "site" and uses part of the facility definition here to describe what a site is.

Currently do not define "site" within the definitions section.

Comment [NEP32]: The intent here is to make it clear that during the phasing in period, if your state-wide on-road motor vehicles do not trigger the 2,500 threshold, then you only include the on-road vehicles associated (or located/based) at each site when determining if you meet the threshold.

Comment [NEP33]: This section replaces "facility" with "site" and uses part of the facility definition here to describe what a site is.

Currently do not define "site" within the definitions section.

Comment [NEP34]: This repeats subsection 1(c) above. May not need to include here.

that has *direct emissions* of at least 10,000 metric tons of *CO₂e* is subject to the reporting requirements of this Chapter.

- e) If WAC 173-441-030(3)(a)(iv) applies, the *owner or operator* will only include emissions from the on-road motor vehicles **associated** with a specific site.
- f) Once an *owner or operator* determines that its *direct emissions* meet the reporting threshold in 2(a) of this subsection, the *owner or operator* is responsible for reporting the *total emissions* associated with those emissions *sources*.

Comment [NEP35]: The intent here is to make it clear that during the phasing in period, if your state-wide on-road motor vehicles do not trigger the 2,500 threshold, then you only include the on-road vehicles associated (or located/based) at each site when determining if you meet the reporting threshold.

3) Reporting for 2011 emissions and beyond.

- a) For 2011 emissions reported in 2012 and all future reporting years the reporting threshold shall be 10,000 metric tons of *CO₂e*.
- b) Beginning with emissions reported in 2012 for the previous calendar year and all future years, when determining whether the emissions meet the 10,000 metric tons of *CO₂e* reporting threshold, an *owner or operator* shall add together the direct emissions from all sites it owns or operates that are located in Washington state. An *owner or operator* with multiple sites within Washington state will calculate and report the combined *direct emissions* from all of these sites.
- c) Once an *owner or operator* determines that its combined *direct emissions* meet the reporting threshold in 3(a) of this subsection, the *owner or operator* is responsible for reporting the *total emissions* associated with those emissions *sources*.

WAC 173-441-080. Emissions Reporting and Certification Schedule. Owners or operators required to report greenhouse gas emissions under WAC 173-441-030 must submit an annual greenhouse gas *emissions report*, certified by the *designated representative*, based on the following schedule.

- 1) **Fleets of on-road motor vehicles.** Greenhouse gas *emissions reports* for fleets of on-road motor vehicles meeting the 2,500 metric tons of *CO₂e* reporting threshold must be certified by the *designated representative* and submitted to the department by **October 31** for the previous calendar year emissions, beginning in 2010 for 2009 calendar year emissions.
- 2) **Source or combination of sources of emissions.**
 - a) Greenhouse gas *emissions reports* for a *source* or combination of sources that are not subject to the third party verification requirements under WAC 173-441-090 must be certified by the *designated representative* and submitted to the department by **October 31** for the previous calendar year emissions, beginning in 2010 for 2009 calendar year emissions.
 - b) Greenhouse gas *emissions reports* for a *source* or combination of *sources* subject to third party *verification* under WAC 173-441-090 must be certified by the *designated representative* and submitted to the department by **April 1** for the previous calendar year emissions, beginning in 2011 for 2010 calendar year emissions.
- 3) Owners or operators of new emissions *sources* that begin operations after **January 1** of any calendar year must report emissions beginning with the first month of

Comment [NEP36]: Using the October date in 2815 since these sources are not subject to C&T.

Comment [NEP37]: Using the October date in 2815 since these sources are not subject to C&T.

Comment [NEP38]: WCI is proposing an April 1 reporting deadline for reporters subject to cap and trade.

Comment [NEP39]: Modeled after WCI draft model rule.

operation through the end of the first calendar year. Each subsequent annual *emissions report* must cover emissions for the full calendar year.

WAC 173-441-090. Third Party Verification of Reported Emissions. The following *verification* requirements apply to owners or operators of a *source* or combination of sources of greenhouse gas emissions subject to the 10,000 metric tons of *CO₂e* reporting threshold.

- 1) **Third party verification threshold of 25,000 metric tons or more of CO₂e per calendar year.** Beginning with *emissions reports* submitted in 2011 for 2010 calendar year emissions, owners or operators of a *source* or combination of sources with total greenhouse gas emissions of 25,000 metric tons or more of *CO₂e* per calendar year must verify greenhouse gas emissions using *verification* services provided by an accredited third party verification body.
- 2) **Falling below third party verification threshold.** If the emissions from a *source* or combination of sources subject to this chapter change such that *total emissions* fall below the 25,000 metric tons of *CO₂e* verification threshold the following *verification* requirements shall apply:
 - a. **Reported emissions that fall below 25,000 metric tons of CO₂e but equal or exceed 10,000 metric tons of CO₂e.**
 - i. The *emissions report* is subject to full third party *verification* requirements the first year that emissions fall below 25,000 metric tons of *CO₂e*.
 - ii. The *reporter* shall continue to have the annual *emissions report* verified by an accredited third party *verification* body until reported emissions are below the 25,000 metric tons of *CO₂e* verification threshold for a minimum of three consecutive years.
 - iii. Upon completion of a positive verification statement under full *verification* requirements, the *reporter* may choose to obtain less intensive, *streamlined verification* services during the next two calendar years, subject to WAC 173-441-120(4).
 - iv. If reported emissions remain below 25,000 metric tons of *CO₂e* and are equal to or exceed 10,000 metric tons of *CO₂e* for three consecutive years the *reporter* shall be subject to the reporting and *certification* requirements in WAC 173-141-080(2)(a).
 - b. **Reported emissions that fall below 10,000 metric tons of CO₂e.**
 - i. The *reporter* shall continue to have the annual *emissions report* verified by an accredited third party verification body until reported emissions are below the 10,000 metric tons of *CO₂e* reporting threshold for a minimum of three consecutive years.
 - ii. The *emissions report* is subject to full third party *verification* requirements the first year that emissions fall below 10,000 metric tons of *CO₂e*.
 - iii. Upon completion of a positive verification statement under full *verification* requirements, the *reporter* may choose to obtain less intensive, *streamlined verification* services during the next two calendar years, subject to WAC 173-441-120(4).

- iv. If reported emissions remain below 10,000 metric tons of *CO₂e* for three consecutive years the *reporter* is not subject to the reporting and *verification* requirements of this Chapter until emissions exceed the reporting threshold in any future calendar year.

- 3) **Accreditation requirements for verification bodies.** All verification bodies conducting third party verification of reported greenhouse gas emissions under this Chapter must demonstrate to Ecology that:
 - a. They meet the requirements of the International Organization for Standardization (ISO) 14065:2007, as adopted on April 15, 2007, Greenhouse Gases – Requirements for Greenhouse Gas Validation and Verification Bodies for Use in Accreditation or Other Forms of Recognition.
 - b. They have knowledge of the reporting and verification requirements of this Chapter.

Comment [NEP40]: This section is modified in response to comments that Ecology cannot reference TCR, CARB and ANSI lists of accredited verifiers.

- 4) **Verification cycle.**
 - a. **Full verification.** *Reporters* required to obtain annual third party *verification* services shall be subject to full verification requirements in the first year that *verification* is required. Full *verification* must follow the verification process and requirements in The Climate Registry’s General Verification Protocol, Version 1,0, May 2008, Part 2. Upon completion of a positive verification statement under full verification requirements, the *reporter* may choose to obtain two years of less intensive, *streamlined verification* services. This cycle may be repeated in subsequent three-year cycles, but full verification requirements shall apply at least once every three years.
 - b. **Streamlined verification.** *Streamlined verification* is not allowed if either of the following significant changes occur.
 - i. A new verification body is hired to conduct *verification* services; or
 - ii. The verification body was not able to provide a positive verification statement for the reporter’s emissions for the previous calendar year.
 - c. *Reporters* subject to third party verification shall not use the same verification body for a period of more than six consecutive years. If a *reporter* is required or elects to contract with another verification body, the *reporter* may contract verification services from a previously used verification body only after having not using that verification body for at least three years.

Comment [NEP41]: Have revised this section to include the two elements for streamlined verification that are in CARB rule and WCI’s background document (Below):

1)Change in verification body from previous year, or
2)Verification body was not able to provide a positive verification statement for the reporter’s emissions report for the previous year.

See definitions section for definition of streamlined verification.

- 5) **Third party verification schedule.** The verification body must complete the verification process and submit a verification statement to the department by **September 1** for the previous calendar year emissions.

Comment [NEP42]: WCI model rule currently has a 9/1 verification deadline for reporting years 2010 and 2011. The verification deadline for 2012 and beyond hasn’t been determined yet. This draft rule contains a 9/1 deadline for all years for 3rd party verification until WCI proposes something different for us to consider.

- 6) **Verification process.**
 - a. **Conflict of interest self-assessment.** Before each verification may proceed, the verification body must complete a conflict of interest self-assessment and submit it for the approval of the department. This self-assessment must be completed each year for each *reporter* to whom the verification body provides services.
 - i. The conflict of interest self-assessment must follow the methods in The Climate Registry’s General Verification Protocol, Version 1.0, May 2008, Part 3.

- ii. Within 15 business days of receiving the conflict of interest self-assessment, the department will provide a determination of whether the verification body is authorized to proceed with *verification*.
 - b. **Verification plan.** For each *reporter* whose emissions are being verified, the verification body must prepare and implement a verification plan following the methods in The Climate Registry's General Verification Protocol, Version 1.0, May 2008, Part 4.
 - c. **Verification report.** For each *reporter* whose emissions are being verified, the verification body must complete a detailed verification report following the methods in The Climate Registry's General Verification Protocol, Version 1.0, May 2008, Part 5. The verification report will be made available to the department upon request.
 - d. **Verification statement.** For each *reporter* whose emissions are being verified, the verification body must prepare a verification statement following the methods in The Climate Registry's General Verification Protocol, Version 1.0, May 2008, Part 5.
- 7) **Dispute resolution.** *This section is a placeholder and is not included in this draft.*
- 8) **Records retention.** The *owner or operator* must retain verification records and documents for seven years.

Comment [NEP43]: TCR's GVP provides 15 days. WCI's draft model rule does not have a timeline yet (to be determined).

Comment [NEP44]: This is from WCI. TCR has a 5 year requirement for retaining records.

WAC 173-441-100. Quantification methods for emissions sources subject to the 10,000 metric ton CO₂e reporting threshold. Owners or operators of a source or combination of sources of greenhouse gases subject to the 10,000 metric ton of CO₂e reporting threshold in WAC 173-141-030 must use the following quantification methods to calculate their emissions.

- 1) **Biomass.** All *reporters* shall account for and separately report greenhouse gas emissions from combustion of biomass.
- 2) **Direct greenhouse gas emissions.**
 - a) **Quantifying direct greenhouse gas emissions from stationary combustion.** Greenhouse gas emissions from *stationary sources* shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 12. Tier selection shall be based on Figure 12.1 and Figure 12.2 located in Chapter 12 of The Climate Registry's General Reporting Protocol.
 - b) **Quantifying direct emissions from mobile combustion.** Greenhouse gas emissions from non-road mobile combustion operated on exclusively on a specific site shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 13. Tier selection shall be based on Figure 13.1 and Figure 13.2 located in Chapter 13 of The Climate Registry's General Reporting Protocol.
 - c) **Quantifying direct emissions from physical and chemical processes.** Greenhouse gas emissions from physical or chemical processes other than fuel combustion such as in the manufacturing of cement, aluminum, adipic acid and ammonia shall be calculated using methodologies outlined in industry specific protocols in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Appendix E.

Comment [NEP45]: Ecology staff is investigating whether or not Chapter 13 adequately addresses emissions from locomotives and marine vessels. If it does not, we will need to add a separate subsection to address emissions from these sources.

d) Direct fugitive emissions.

- i. **Refrigeration and air conditioning.** Greenhouse gas fugitive emissions from refrigeration and air conditioning shall be calculated using Tier A or B methods as given in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 16. Tier selection shall be based on Figure 16.1 located in Chapter 16 of The Climate Registry's General Reporting Protocol.
- ii. **SF₆ fugitive emissions from electricity transmission and distribution.** SF₆ fugitive emissions from electricity transmission and distribution shall be calculated using the methodology referenced in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Appendix E.5.
- iii. **SF₆ fugitive emissions from other sources.** *This section is a placeholder and is not included in this draft.*
- iv. **Methane leakage from natural gas transport.** *This section is a placeholder and is not included in this draft.*
- v. **Other fugitive emissions.** *This section is a placeholder and is not included in this draft.*

3) Indirect greenhouse gas emissions.**a) Quantifying indirect greenhouse gas emissions from electricity use.**

Indirect greenhouse gas emissions from the purchase and use of electricity shall be quantified using The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 14. Tier selection shall be based on Figure 14.1 located in Chapter 14 of The Climate Registry's General Reporting Protocol.

b) Quantifying indirect greenhouse gas emissions from imported steam, district heating, cooling and electricity from a combined heat and power plant.

- i. *Indirect emissions from stationary sources* shall be calculated using the Tier A or B methods in The Climate Registry's General Reporting Protocol, Version 1.0, March 2008, Chapters 12, 15 and 16. Tier selection shall be based on Figure 12.1, Figure 12.2, Figure 15.1, Figure 15.2 and Figure 16.1 located in Chapters 12, 15, and 16 of The Climate Registry's General Reporting Protocol.
- ii. The owner of a cogeneration, district heating or district cooling plant shall provide greenhouse gas emissions information to all purchasers of heating, cooling, or electricity. The emissions information shall be provided in units appropriate for the *reporter* to use in formulating its annual *emissions report*. i.e. electricity in units of kg CO_{2e}/MWh, steam in units of kg CO_{2e}/1000 lb of steam purchased or kg CO_{2e}/MMBtu of steam, cooling in terms of kg/ton of cooling, etc.

4) The following global warming potential factors must be used when converting emissions of greenhouse gases to CO_{2e} values.

Comment [NEP46]: If WCI's Electric Power Sector guidance document becomes available in time for this rule making, we will include it in the rule.

Comment [NEP47]: This subsection may need to be located in another section of the rule. The purpose of this subsection is to require the owner of the district heating plant to provide the users with emission information in units directly useable to formulate their indirect emissions report.

Comment [NEP48]: This table may be moved to an appendix or to its own section.

Global Warming Potential Factors for Required Greenhouse Gases

Common Name	Formula	Chemical Name	GWP
Carbon dioxide	CO ₂		1
Methane	CH ₄		21
Nitrous oxide	N ₂ O		310
Sulfur hexafluoride	SF ₆		23,900
Hydrofluorocarbons (HFCs)			
HFC-23	CHF ₃	trifluoromethane	11,700
HFC-32	CH ₂ F ₂	difluoromethane	650
HFC-41	CH ₃ F	fluoromethane	150
HFC-43-10mee	C ₅ H ₂ F ₁₀	1,1,1,2,3,4,4,5,5,5- decafluoropentane	1,300
HFC-125	C ₂ H ₂ F ₅	pentafluoroethane	2,800
HFC-134	C ₂ H ₂ F ₄	1,1,2,2-tetrafluoroethane	1,000
HFC-134a	C ₂ H ₂ F ₄	1,1,1,2-tetrafluoroethane	1,300
HFC-143	C ₂ H ₃ F ₃	1,1,2-trifluoroethane	300
HFC-143a	C ₂ H ₃ F ₃	1,1,1-trifluoroethane	3,800
HFC-152	C ₂ H ₄ F ₂	1,2-difluoroethane	43*
HFC-152a	C ₂ H ₄ F ₂	1,1-difluoroethane	140
HFC-161	C ₂ H ₅ F	fluoroethane	12*
HFC-227ea	C ₃ H ₇ F	1,1,1,2,3,3,3- heptafluoropropane	2,900
HFC-236cb	C ₃ H ₂ F ₆	1,1,1,2,2,3-hexafluoropropane	1,300*
HFC-236ea	C ₃ H ₂ F ₆	1,1,1,2,3,3-hexafluoropropane	1,200*
HFC-236fa	C ₃ H ₂ F ₆	1,1,1,3,3,3-hexafluoropropane	6,300
HFC-245ca	C ₃ H ₃ F ₅	1,1,2,2,3-pentafluoropropane	560
HFC-245fa	C ₃ H ₃ F ₅	1,1,1,3,3-pentafluoropropane	950*
HFC-365mfc	C ₄ H ₅ F ₅	1,1,1,3,3-pentafluorobutane	890*
Perfluorocarbons (PFCs)			
Perfluoromethane	CF ₄	tetrafluoromethane	6,500
Perfluoroethane	C ₂ F ₆	hexafluoroethane	9,200
Perfluoropropane	C ₃ F ₈	octafluoropropane	7,000
Perfluorobutane	C ₄ F ₁₀	decafluorobutane	7,000
Perfluorocyclobutane	c-C ₄ F ₈	octafluorocyclobutane	8,700
Perfluoropentane	C ₅ F ₁₂	dodecafluoropentane	7,500
Perfluorohexane	C ₆ F ₁₄	tetradecafluorohexane	7,400

Source: Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report published in 1995, unless no value was assigned in the document. In that case, the GWP values are from the IPCC Third Assessment Report published in 2001 (those marked with *). GWP values are from the Second Assessment Report (unless otherwise noted) to be consistent with international practices. Values are 100-year GWP values.

WAC 173-441-110. Quantification methods for fleets of on-road motor vehicles subject to the 2,500 metric ton CO₂e reporting threshold. Owners or operators of a *fleet of on-road motor vehicles* subject to the 2,500 metric ton of CO₂e reporting threshold in WAC 173-141-030 must use the following quantification methods to calculate their emissions.

1) Greenhouse gas emission calculations.

- a. **Quantifying CO₂ emissions from on-road motor vehicles.** CO₂ emissions from a fleet of on-road motor vehicles shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 13.
- b. **Quantifying CH₄ and N₂O emissions from on-road motor vehicles.** CH₄ and N₂O emissions from a fleet of on-road motor vehicles shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 13.

Simplified Estimation Methods may be used according to WAC 173-441-115.

- c. **Quantifying fugitive emissions from refrigeration and air conditioning from on-road motor vehicles.** Fugitive emissions from refrigeration and air conditioning from a fleet of on-road motor vehicles shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 16. The Department will accept the Screening Method located in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 16 as a tiered method for fleets of on-road motor vehicles.
 - d. **Quantifying emissions from auxiliary power units.** Emissions from the combustion of fuels in auxiliary power units that are associated with a fleet of on-road motor vehicles shall be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 13 or Chapter 12.
- 2) **Biofuels.** All reporters shall account for and separately report greenhouse gas emissions from combustion of biofuels.
 - 3) **The global warming potential factors found in WAC 173-441-100-4 must be used when converting emissions of greenhouse gases to CO₂e values.**
 - 4) **Reporting of emissions occurring in Washington state.** All emissions occurring in Washington state that are subject to the 2,500 MT CO₂e annual threshold must be reported. Emissions occurring outside of Washington state are not required to be reported.
 - a. **Determining emissions occurring in Washington state.** An owner or operator of a fleet of on-road motor vehicles shall consistently use one of the following methods when determining if the emissions of a fleet of on-road motor vehicles occurs in Washington state. The owner or operator must use the highest tiered method that is technically possible without excessive imposed costs before proceeding to a lower tier. Methods are to be applied either to the raw data or as a ratio to an owner or operator's total on-road motor vehicle fleet.
 - i. Tier A: Total miles travelled within Washington state by the fleet of on-road motor vehicles; or
 - ii. Tier B: Fuel purchased within Washington state for use in the fleet of on-road motor vehicles; or
 - iii. Tier C: All emissions generated by a fleet of on-road motor vehicles based in Washington state.

WAC 173-441-115. Simplified Estimation Methods. *This section is a placeholder and is not included in this draft.*

WAC 173-441-120. Report Content and Submission Requirements. *This section is a placeholder and is not included in this draft.*

WAC 173-441-130. Reporting Fees. *This section is a placeholder and is not included in this draft.*

WAC 173-441-140. Ecology to share information with local air authorities and with the Energy Facility Site Evaluation Council.

- 1) The department shall share any information reported to it under these rules with the local air authority in which the *owner or operator* operates.
- 2) The department shall share any information reported to it under these rules from facilities permitted by the energy facility site evaluation council with the council, including notice of a facility that has failed to report as required.

WAC 173-441-160. Enforcement. *This section is a placeholder and is not included in this draft.*

WAC 173-441-170. Confidentiality.

- 1) Emissions data submitted to the department under this section is public information and shall not be designated as confidential.
- 2) Any *owner or operator* submitting information to the department pursuant to Chapter 173-441 WAC may request that information that is not emissions data be kept confidential as proprietary information or because it is otherwise exempt from public disclosure under the Washington Public Records Act (Chapter 42.56 RCW). All such requests for confidentiality shall be handled in accordance with the procedures specified in RCW 43.21A.160.

WAC 173-441-180. Severability. If any provisions of the regulation or its application to any person or circumstance is held invalid, the remainder of the regulation or application of the provision to other persons or circumstances is not affected.