DRAFT RULE LANGUAGE
For Advisory Committee Review

Chapter 173-441 WAC
Reporting Emissions of Greenhouse Gases

NOTE: This document contains draft language only related to those sections in bold below

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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)

“Capital lease” means a lease that transfers substantially all the risks and rewards of ownership to the lessee and is accounted for as an asset on the balance sheet of the lessee. Also known as a finance lease or financial lease.
“Carbon dioxide equivalents” means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

“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.

“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 facility or emissions source.

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

“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.

“Facility” means
(a) A stationary source or collection of stationary sources of emissions located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or operational control 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. A facility also includes any mobile sources of emissions under common ownership or operational control and operated exclusively on the grounds of the facility.
(b) Commercial rail, truck, and marine vessels, including the collection of individual locomotive and rail cars, trucks, or marine vessels under common ownership or operational control.

“Finance lease” means the same as capital lease.

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

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

“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.

“Mobile source” means
  a) mobile combustion sources for transporting people or cargo and includes on-road motor vehicles, aircraft, trains, and marine vessels; and
  b) mobile combustion sources that operate exclusively on the grounds of a single facility such as off-road trucks, mobile cranes, forklifts, front-end loaders, and mining, construction, agriculture, and forestry equipment.

“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.

“Operational control” means the authority to introduce and implement operating, environmental, health and safety policies. When this authority is shared among multiple entities, the entity holding the operating license is considered to have operational control.

“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.

“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.

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

“Source” or “emissions source” means any stationary source of greenhouse gas emissions or any mobile source of greenhouse gas emissions used for transporting people or cargo.

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

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

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

“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 less intensive verification for owners or operators subject to third party verification. A verification cycle cannot exceed three calendar years.

“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.

“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.

WAC 173-441-030 Applicability. This section is a placeholder and is not included in this draft.

WAC 173-441-040. Emissions Reporting Schedule. Owners or operators required to report greenhouse gas emissions under WAC 173-441-030 must submit an annual greenhouse gas emissions report based on the following schedule.

1) Greenhouse gas emissions reports for emissions sources that are operational as of January 1, 2009 are due for calendar year 2009 emissions by October 31, 2010.
2) Greenhouse gas emissions reports for emissions sources that are subject to third party verification under WAC 173-441-120(1)(a) are due by April 1 for the previous calendar year emissions, beginning in 2011 for 2010 calendar year emissions.
3) Greenhouse gas emissions reports for emissions sources that are subject to self certification under WAC 173-441-120(1)(b) and (c) are due by October 31 for the previous calendar year emissions, beginning in 2011 for 2010 calendar year emissions.
4) 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 operation through the end of the first calendar year. Each subsequent annual emissions report must cover emissions for the full calendar year.
WAC 173-441-050. 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.
3) The energy facility site evaluation council shall contract with the department to monitor the reporting requirements under Chapter 173-441 WAC.

WAC 173-441-060. Compatibility with federal regulations. Should the federal government adopt rules sufficient to track progress toward the emissions reductions required by Chapter 70.235.020, the department shall amend this Chapter, as necessary, to seek consistency with the federal rules to ensure duplicate reporting is not required.

WAC 173-441-070. Enforcement. This section is a placeholder and is not included in this draft.

WAC 173-441-080. 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) 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 mobile combustion operated on a specific facility site or owned and used by specific facilities 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.
   d) Direct fugitive emissions.
      i. Refrigeration and air conditioning. Greenhouse gas fugitive emissions from refrigeration and air conditioning shall be calculated

Comment [NEP30]: 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.
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.


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.

2) **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 CO₂e/MWh, steam in units of kg CO₂e/1000 lb of steam purchased or kg CO₂e/MMBtu of steam, cooling in terms of kg/ton of cooling, etc.

3) **Biofuels.** All reporters shall account for and separately report greenhouse gas from combustion of biofuels.
4) **The following global warming potential factors** must be used when converting emissions of greenhouse gases to CO2e values.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Formula</th>
<th>Chemical Name</th>
<th>GWP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide</td>
<td>CO2</td>
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</tr>
<tr>
<td>Methane</td>
<td>CH4</td>
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<td>21</td>
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<tr>
<td>Nitrous oxide</td>
<td>N2O</td>
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<td>Sulfur hexafluoride</td>
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<td><strong>Hydrofluorocarbons (HFCs)</strong></td>
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<td>HFC-32</td>
<td>CH2F2</td>
<td>di fluoromethane</td>
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<td>decafluorobutane</td>
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<td>Perfluorohexane</td>
<td>C6F14</td>
<td>tetrafluorohexane</td>
<td>7,400</td>
</tr>
</tbody>
</table>

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 173-441-090. 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.

*This section is a placeholder and is not included in this draft.*

**WAC 173-441-100. Report Content and Submission Requirements.** *This section is a placeholder and is not included in this draft.*

**WAC 173-441-110. Reporting Fees.** *This section is a placeholder and is not included in this draft.*
WAC 173-441-120. Verification of Reported Emissions. The following verification requirements apply to owners or operators required to report greenhouse gas emissions under RCW 70.94.151(5).

1) Verification thresholds.
   a. Verification of emissions of 25,000 metric tons or more of CO₂e per calendar year.
      i. Beginning with emissions reports submitted in 2011 for 2010 calendar year emissions, owners or operators of any 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.
      ii. The owner or operator shall submit a fully verified emissions report if the annual emissions of a source subject to third party verification fall below 25,000 metric tons of CO₂e but remain above 10,000 metric tons of CO₂e. If reported emissions are less than 25,000 metric tons of CO₂e per calendar year for the next two years, the owner or operator shall submit streamlined verification reports for those two years. After the third consecutive year of reported emissions being less than 25,000 metric tons per calendar year, the owner or operator will be subject to the reporting and verification requirements for emissions less than 25,000 metric tons of CO₂e per year.
      iii. If the annual emissions of a source subject to third party verification fall below 10,000 metric tons of CO₂e, the owner or operator shall submit a fully verified emissions report followed by streamlined verification reports for the next two consecutive years. If reported emissions are less than 10,000 metric tons of CO₂e per year for three consecutive years, then the owner or operator shall be exempt from further reporting and verification until the emissions exceed 10,000 metric tons of CO₂e in any future calendar year.
   b. Certification of emissions less than 25,000 metric tons of CO₂e per year.
      i. Owners or operators of any source or combination of sources reporting total greenhouse gas emissions of at least 10,000 metric tons but less than 25,000 metric tons of CO₂e per calendar year must have their designated representative certify their reported emissions.
      ii. If the annual emissions of a source subject to certification of emissions fall below 10,000 metric tons of CO₂e, the owner or operator shall continue to submit a certified emissions report for the next two consecutive years. If reported emissions are less than 10,000 metric tons of CO₂e per year for three consecutive years, then the owner or operator shall be exempt from further reporting and verification until the emissions exceed 10,000 metric tons of CO₂e in any future calendar year.
   c. Certification of emissions from fleets of on-road motor vehicles. Owners or operators of a fleet of on-road motor vehicles reporting total greenhouse
gas emissions of 2,500 metric tons or more of CO₂e per calendar year must have their designated representative certify their reported emissions.

2) **Accreditation requirements for verification bodies.** All verification bodies conducting third party verification of reported greenhouse gas emissions under this Chapter must be approved or accredited by one or more of the following:
   a. The Climate Registry
   b. California Air Resources Board
   c. American National Standards Institute

3) **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 requirement 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 any of the following significant changes occur:
      i. The reporter’s organizational structure changes significantly from the previous year;
      ii. The greenhouse gas emissions change by more than five percent from the previous year;
      iii. A new verification body is hired to conduct verification services;
      iv. The verification body cannot reasonably assure the reported emissions do not have a material misstatement; or
      v. Other issues as deemed appropriate by the verification body.
   c. **Streamlined verification requires the verification body to conduct the minimum investigation necessary to ensure there is not a material misstatement in the reported emissions and to support the findings included in the verification statement.** The minimum required investigation shall include a risk-based assessment, facility site visits, and verification of emissions estimates against verification criteria. The verification body shall use its professional judgment to determine what additional activities are required to enable it to meet the verification requirements of this Chapter.
   d. 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.

4) **Verification schedule.**
   a. **Third party verification.** 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.
b. **Self certification.** Beginning with emissions reports submitted in 2011 for 2010 calendar year emissions, the designated representative must submit a certification statement and the emissions report by **October 31** for the previous calendar year emissions.

5) **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.
      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.

6) **Certification process.**
   a. The designated representative shall represent the owner or operator in all matters pertaining to this Chapter.
   b. **Certification of the emissions report.** The designated representative must sign and certify each greenhouse gas emissions report submitted to the department.
   c. Reporters not subject to third party verification are considered to have completed the reporting process once the designated representative has certified the emissions report.

7) **Records retention.** The owner or operator must retain verification records and documents for **seven** years.

**WAC 173-441-130. Confidentiality.**

(1) Emissions data submitted to the department under this section is public information and shall not be designated as confidential.

(2) Any entity submitting information to the department pursuant to Chapter 173-441 WAC may designate information that is not emissions data as confidential because it is a
trade secret or 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 173-441-140, 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.