

DRAFT RULE LANGUAGE For Advisory Committee Review

Chapter 173-441 WAC Reporting Emissions of Greenhouse Gases

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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 required 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:

“Activity data” means information collected and used to calculate greenhouse gas emissions. Examples include but are not limited to: fuel use, fuel properties, electricity consumption, mileage, location, duration of operation, and number of emission units.

“Aircraft” means any vehicle for transporting people or cargo by air, including but not limited to airplanes, helicopters, and airships. Any associated mobile equipment capable of emitting greenhouse gases while in transit is considered to be part of the aircraft, including but not limited to: air conditioning units, refrigerated units, and auxiliary power units.

“Auxiliary power unit” means equipment associated with a mobile source whose purpose is to provide energy for functions other than propulsion.

“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, and fuels derived from biomass.

“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, as described in the Statement of Financial Accounting Standards 13, Accounting for Leases, issued November 1976. Also known as a finance lease or financial lease.

“Carbon dioxide equivalents” or “CO₂e” 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 that, based on information and belief formed after reasonable inquiry, the reported emissions are true, accurate, complete, free of material misstatement, and comply with the requirements of this Chapter.

“Department” means department of ecology.

“Designated representative” means the person authorized by the reporter of an emissions source to represent and legally bind the reporter 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.

“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 emissions of greenhouse gases prepared by the reporter each year and submitted electronically to the department to meet the reporting requirements of this Chapter.

“Finance lease” means the same as capital lease.

“Fleet of aircraft” means a collection of all aircraft operating in Washington state with a common owner or operator. Aircraft that operate exclusively within the boundaries of a specific site are considered part of the emissions from that site and not part of the fleet of aircraft.

“Fleet of marine vessels” means a collection of all marine vessels operating in Washington state with a common owner or operator. Marine vessels that operate exclusively within the boundaries of a specific site are considered part of the emissions from that site and not part of the fleet of marine vessels.

“Fleet of mobile sources” means a collection of each fleet of aircraft, fleet of marine vessels, fleet of rail equipment, and fleet of other land based mobile sources operating in Washington state for the purpose of transporting people or cargo with a common owner or operator. This definition excludes fleets of on-road motor vehicles. Mobile sources that operate exclusively within the boundaries of a specific site are considered part of the emissions from that site and not part of the fleet of mobile sources.

“Fleet of on-road motor vehicles” means a collection of all on-road motor vehicles operating in Washington state with a common owner or operator. On-road motor vehicles that operate exclusively within the boundaries of a specific site are considered part of the emissions from that site and not part of the fleet of on-road motor vehicles.

“Fleet of other land based mobile sources” means a collection of all land based mobile sources other than fleets of on-road motor vehicles or rail equipment operating in Washington state with a common owner or operator including but not limited to: off-road trucks; industrial and construction equipment used for the purpose of transporting people or cargo such as mobile cranes, forklifts, and front-end loaders; and mining, agriculture, or forestry equipment used for the purpose of transporting people or cargo. Other land based mobile sources that operate exclusively within the boundaries of a specific site are considered part of the emissions from that site and not part of the fleet of other land based mobile sources.

“Fleet of rail equipment” means a collection of all rail equipment operating in Washington state with a common owner or operator. All rail equipment operating in Washington state, including rail equipment operating exclusively in a single rail yard or other restricted location, is considered part of the fleet of rail equipment instead of being part of a site.

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

“Global warming potential” or “GWP” 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 Tables 3 and 4 in WAC 173-441-100(5).

“Greenhouse gas” and “greenhouse gases” includes carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

“Hydrofluorocarbons” or “HFCs” means a class of greenhouse gases primarily used as refrigerants, consisting of hydrogen, fluorine, and carbon.

“Intergovernmental Panel on Climate Change” or “IPCC” means the scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP).

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

“Marine vessel” means any vessel for transporting people or cargo by sea or freshwater, including but not limited to cargo, passenger, fishing, military, personal, tugboats, and special purpose ships and boats. Any associated mobile equipment capable of emitting greenhouse gases while in transit is considered to be part of the marine vessel, including but not limited to: air conditioning units, refrigerated units, and auxiliary power units.

“Material misstatement” means one or more inaccuracies identified during the certification or verification process that result in the total emissions of greenhouse gases reported being outside the ninety-five percent accuracy required under this Chapter. The ninety-five percent accuracy in total emissions of greenhouse gases reported is required for all reporters. For reporters subject to third party verification, the total emissions of greenhouse gases reported must meet the ninety-five percent accuracy requirement to receive a positive verification statement.

“Mobile source” means vehicles, vessels, craft, or equipment for transporting people or cargo, including but not limited to on-road motor vehicles; aircraft; marine vessels; rail equipment; and other land based mobile sources including but not limited to: off-road trucks; industrial and construction equipment used for the purpose of transporting people or cargo such as mobile cranes, forklifts, and front-end loaders; and mining, agriculture, or forestry equipment used for the purpose of transporting people or cargo.

“Negative verification statement” means a 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.

“On-road motor vehicles” means any self-propelled vehicle required to be licensed for operation on the roads of Washington state. Any associated mobile equipment capable of emitting greenhouse gases while in transit is considered to be part of the on-road motor vehicle, including but not limited to: air conditioning units, refrigerated units, and auxiliary power units.

“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 as described in the Statement of Financial Accounting Standards 13, Accounting for Leases, issued November 1976.

“Operational control” means the authority to introduce and implement operating, environmental, health and safety policies. When this authority is shared, the holder of the business license to operate the site, fleet of on-road motor vehicles, or fleet of mobile sources is considered to have operational control.

“Other land based mobile sources” means all land based mobile sources other than fleets of on-road motor vehicles or rail equipment, including but not limited to: off-road trucks; industrial and construction equipment used for the purpose of transporting people or cargo such as mobile cranes, forklifts, and front-end loaders; and mining, agriculture, or forestry equipment used for the purpose of transporting people or cargo. Any associated mobile equipment capable of emitting greenhouse gases while in transit is considered to be part of the land based mobile source, including but not limited to: air conditioning units, refrigerated units, and auxiliary power units.

“Owner or operator” means any person who owns, leases, operates, controls or supervises a source of emissions, as defined in this Chapter.

“Perfluorocarbons” or “PFCs” means a class of greenhouse gases consisting on the molecular level of carbon and fluorine.

“Positive verification statement” means a 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.

“Process emissions” means the emissions from industrial processes (e.g. cement production, ammonia production) involving chemical or physical transformations other than fuel combustion. For example, the calcination of carbonates in a kiln during cement production or the oxidation of methane in an ammonia process results in the release of process CO₂ emissions to the atmosphere. Emissions from fuel combustion to provide process heat are not part of process emissions, whether the combustion is internal or external to the process equipment.

“Rail equipment” means mobile equipment operating on a track, including but not limited to: locomotives, multiple units, railcars, rolling stock, railroad cars, and refrigerator cars. Any associated mobile equipment capable of emitting greenhouse gases while in transit is considered to be part of the rail equipment, including but not limited to: air conditioning units, refrigerated units, and auxiliary power units.

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

“Site” means all 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, under common 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. All of an owner or operator’s transmission or distribution pipelines and associated emitting units in Washington state are considered a single site. All of an owner or operator’s electric transmission and distribution lines, substations, switch yards, and associated equipment in Washington state are considered a single site. All rail equipment, including rail equipment operating exclusively in a single rail yard or other restricted location, is part of the fleet of rail equipment and not part of a site.

“Source” or “emissions source” or “source of emissions” means

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

“Source or combination of sources” or “source or combination of sources of emissions” means all sources of greenhouse gas emissions except fleets of on-road motor vehicles.

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

“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.

“The Climate Registry” or “TCR” means the 501(c)3 nonprofit organization incorporated in Washington, DC March 14, 2007 with the purpose of setting consistent and transparent standards to calculate, verify and publicly report greenhouse gas emissions in North America.

“Tier” means an emission calculation method designated as acceptable in WAC 173-441-100, WAC 173-441-110, or WAC 173-441 Appendix A and B. Simplified estimation methods as described in WAC 173-441-115 are not considered tiered methods. If multiple tiers of emission calculation methods are available for a source or greenhouse gas, then the tiers are ranked alphabetically in order of preference from highest to lowest. If available, “Tier A” designates the preferred, or highest tier; “Tier B” represents an alternative second-highest tier; and “Tier C” represents the least preferred, or lowest tier. In some cases there may be multiple tiers for a given source or greenhouse gas with the same letter designation (such as A1 and A2). Tiers with the same letter designation are considered equivalently ranked for the given source or greenhouse gas.

Note: emission calculation methods described in IPCC documents use a numerical tier classification system that ranks the tiers from lowest to highest (example: Tier 3 is designated as preferred or higher than Tier 1).

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

“Unified Business Identifier number” means a unique number that is assigned to a business by the Corporations Division of the WA Secretary of State or from the Washington Department of Licensing.

“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 173-441-090(3).

“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 reporters subject to third party verification. A verification cycle must not 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.

“Waters of the state” means all of the lakes, rivers, ponds, streams, inland waters, harbors, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, including coastal waters within three nautical miles seaward of the mean low-water mark of the coast of Washington.

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 CO₂e. The reporting threshold for emissions from fleets of on-road motor vehicles is not phased in and must be reported according to subsection (2)(b) of this section for 2009 emissions reported in 2010 and beyond; and
 - b) **Source or combination of sources of emissions.** The owner or operator of a source or combination of sources of emissions located in Washington state that has direct emissions of at least 10,000 metric tons of greenhouse gases in a calendar year, expressed as CO₂e, PROVIDED, that the phasing provisions in WAC 173-441-035 apply to the reporting of emissions occurring during 2009, 2010, and 2011.
- 2) **Meeting reporting thresholds.** An owner or operator must use the process established below to determine if the direct emissions meet the applicable reporting threshold.

- a) **Reporting emissions from intrastate, interstate, and international travel.** When determining if the direct emissions meet the applicable 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 intrastate, interstate, and international mobile sources.
- b) **Fleet of on-road motor vehicles.** An owner or operator of a fleet of on-road motor vehicles must determine if the direct emissions meet the reporting threshold established in subsection (1)(a) of this section using the following methods:
 - i) **Calculation methods.** An owner or operator of a fleet of on-road motor vehicles must use the methods in WAC 173-441-110 when determining if a fleet of on-road motor vehicles has direct emissions of at least 2,500 metric tons of CO₂e in any calendar year in Washington state.
 - ii) **Aggregation of on-road motor vehicles.** An owner or operator of a fleet of on-road motor vehicles must combine the direct greenhouse gas emissions from all on-road motor vehicles that operate beyond the boundaries of a single site when determining if the fleet of on-road motor vehicles meets the 2,500 metric tons of CO₂e reporting threshold.
 - iii) **Reporting emissions from intrastate, interstate, and international travel.** An owner or operator must use the methods in WAC 173-441-055(2) to determine which emissions are generated within Washington state from intrastate, interstate, and international on-road motor vehicles when determining if a fleet of on-road motor vehicles meets the 2,500 metric tons of CO₂e reporting threshold.
 - iv) **Reporting total emissions of greenhouse gases.** If direct emissions from a fleet of on-road motor vehicles meet the 2,500 metric tons of CO₂e annual reporting threshold, the total emissions of greenhouse gases from the fleet must be reported.
- c) **Source or combination of sources of emissions.** An owner or operator of a source or combination of sources of emissions must determine if the direct emissions meet the reporting threshold established in subsection (1)(b) of this section using the following methods:
 - i) **Calculation methods.** An owner or operator of a source or combination of sources of emissions within Washington state must use the methods in WAC 173-441-100 when determining if direct greenhouse gas emissions from these sources of emissions meet the applicable CO₂e annual reporting threshold.
 - ii) **Mobile sources.** An owner or operator must include emissions from mobile sources when applying the CO₂e annual reporting threshold, including but not limited to emissions from: a fleet of aircraft, a fleet of marine vessels, a fleet of rail equipment, a fleet of other land based mobile sources, and mobile sources that operate exclusively within the boundaries of a single site. An owner or operator must not include emissions from its fleet of on-road motor vehicles that operate beyond the boundaries of a single site when applying the CO₂e annual reporting threshold.
 - iii) **Reporting emissions from intrastate, interstate, and international travel.** An owner or operator must use the methods in WAC 173-441-055 to determine which emissions are generated within Washington state from

intrastate, interstate, and international mobile sources when determining if a fleet of mobile sources meets the reporting threshold established in subsection (1)(b) of this section.

- iv) **Reporting total emissions of greenhouse gases.** Once an owner or operator determines that the direct emissions meet the reporting threshold for a source or combination of sources of emissions, the owner or operator must report the total emissions of greenhouse gases from those sources including emissions from fleets of on-road motor vehicles.

WAC 173-441-031. Reporting responsibility.

- 1) **Operational Control.** The owner or operator with operational control of an emissions source during the reporting period is the reporter and is responsible for submitting an emissions report under the requirements of this Chapter.
- 2) **Fleets of on-road motor vehicles.** The owner or operator with operational control of the fleet of on-road motor vehicles is the reporter of the emissions from the fleet. When determining who has reporting responsibility for a fleet of on-road motor vehicles, one or more of the following conditions establishes operational control of the fleet:
 - a) The owner or operator has operational control if it has the authority to introduce and implement operating, environmental, health and safety policies. If this authority is shared between two or more owners or operators, the holder of the business license to operate the fleet of on-road motor vehicles is considered to have operational control of the fleet of on-road motor vehicles.
 - b) **Leased on-road motor vehicles.** Under a capital, finance or operating lease, the lessee of a fleet of on-road motor vehicles has operational control and is responsible for reporting the emissions from the fleet. For purposes of this Chapter, leases or rental agreements of less than one year duration are considered short term rentals. Under a short term rental, the owner or operator of the rental company has operational control and is responsible for reporting emissions from these on-road motor vehicles.
- 3) **Source or combination of sources of emissions.** The owner or operator with operational control of a source or combination of sources of emissions is the reporter of those emissions. When determining who has reporting responsibility for a source or combination of sources, one or more of the following conditions establishes operational control:
 - a) The owner or operator with the authority to introduce and implement operating, environmental, health and safety policies has operational control of the emissions source. If this authority is shared between two or more owners or operators, the holder of the business license to operate the source or combination of sources is considered to have operational control of the emissions source.
 - b) **Leased source or combination of sources of emissions.** Under a capital, finance or operating lease, the lessee of a stationary source or a mobile source has operational control and is responsible for reporting the emissions. For purposes of this Chapter, leases or rental agreements of less than one year duration are considered short term rentals. Under a short term rental, the owner or operator of the rental company has operational control and is responsible for reporting emissions from the stationary source or mobile source.

WAC 173-441-035. Phasing in the applicability of the reporting requirements for a source or combination of sources of emissions. The applicability of the reporting threshold for a source or combination of sources of emissions subject to the reporting threshold in WAC 173-441-030(1)(b), is phased in as specified below.

- 1) **Phasing not applicable for fleets on-road motor vehicles.** The reporting threshold for emissions from fleets of on-road motor vehicles is not phased in and emissions must be reported according to WAC 173-441-030(2)(b) for 2009 emissions reported in 2010 and beyond.
- 2) **Reporting for 2009 emissions reported in 2010.** The thresholds and reporting requirements for 2009 emissions reported in 2010 are specified below. Refer to Figure 1 for a flow chart of how to apply the reporting thresholds for 2009 emissions reported in 2010.
 - a) **Reporting threshold for 2009 emissions reported in 2010.** For 2009 emissions reported in 2010, the reporting threshold shall be 25,000 metric tons of direct emissions, expressed as CO₂e.
 - b) **Level of reporting for 2009 emissions reported in 2010.** An owner or operator with multiple sites or fleets of mobile sources within Washington state must calculate the direct emissions for each site and fleet of mobile sources separately. Each site or fleet of mobile sources that has direct emissions of at least 25,000 metric tons of CO₂e is subject to the reporting requirements of this Chapter. For 2009 emissions reported in 2010, an owner or operator is not required to report emissions from a site or fleet of mobile sources with direct emissions less than 25,000 metric tons of CO₂e.
 - i) **Source or combination of sources.** For 2009 emissions reported in 2010, when determining whether the direct emissions of a site meets the 25,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from any source or combination of sources located on the site, including all mobile sources that operate exclusively within the boundaries of the site.
 - ii) **Fleet of marine vessels.** For 2009 emissions reported in 2010, when determining whether the direct emissions of a fleet of marine vessels meets the 25,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all marine vessels operating in Washington state beyond the boundaries of a single site.
 - iii) **Fleet of rail equipment.** For 2009 emissions reported in 2010, when determining whether the direct emissions of a fleet of rail equipment meets the 25,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all rail equipment operating in Washington state.
 - iv) **Fleet of other land based mobile sources.** For 2009 emissions reported in 2010, when determining whether the direct emissions of a fleet of other land based mobile sources meets the 25,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all other land based mobile sources operating in Washington state beyond the boundaries of a single site.
 - v) **Fleet of aircraft.** For 2009 emissions reported in 2010, emissions from intrastate, interstate, and international fleets of aircraft are not required to be reported.

- vi) **Intrastate, interstate, and international mobile sources.** An owner or operator must use the methods in WAC 173-441-055 to determine which emissions are generated within Washington state from intrastate, interstate, and international mobile sources when determining if a fleet of mobile sources meets the reporting threshold established in (a) of this subsection.
 - c) **Reporting total emissions of greenhouse gases.** Once an owner or operator determines that the direct emissions from a site or fleet of mobile sources meet the reporting threshold in established (a) of this subsection, the owner or operator is responsible for reporting its total emissions of greenhouse gases from the site or fleet of mobile sources.
 - d) **Report consistency requirements for 2009 emissions reported in 2010.** For 2009 emissions reported in 2010, the report consistency requirements in WAC 173-441-060 do not apply.
- 3) **Reporting for 2010 emissions reported in 2011.** The thresholds and reporting requirements for 2010 emissions reported in 2011 are specified below. Refer to Figure 1 for a flow chart of how to apply the reporting thresholds for 2010 emissions reported in 2011.
- a) **Reporting threshold for 2010 emissions reported in 2011.** For 2010 emissions reported in 2011, the reporting threshold shall be 10,000 metric tons of direct emissions, expressed as CO₂e.
 - b) **Level of reporting for 2010 emissions reported in 2011.** An owner or operator with multiple sites or fleets of mobile sources within Washington state must calculate the direct emissions for each site and fleet of mobile sources separately. Each site or fleet of mobile sources that has direct emissions of at least 10,000 metric tons of CO₂e is subject to the reporting requirements of this Chapter. For 2010 emissions reported in 2011, an owner or operator is not required to report emissions from a site or fleet of mobile sources with direct emissions less than 10,000 metric tons of CO₂e.
 - i) **Source or combination of sources.** For 2010 emissions reported in 2011, when determining whether the direct emissions of a site meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from any source or combination of sources of emissions located on the site, including all mobile sources that operate exclusively within the boundaries of the site.
 - ii) **Fleet of marine vessels.** For 2010 emissions reported in 2011, when determining whether the direct emissions of a fleet of marine vessels meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all marine vessels operating in Washington state beyond the boundaries of a single site.
 - iii) **Fleet of rail equipment.** For 2010 emissions reported in 2011, when determining whether the direct emissions of a fleet of rail equipment meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all rail equipment operating in Washington state.
 - iv) **Fleet of other land based mobile sources.** For 2010 emissions reported in 2011, when determining whether the direct emissions of a fleet of other land based mobile sources meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all

- other land based mobile sources operating in Washington state beyond the boundaries of a single site.
- v) **Fleet of aircraft.** For 2010 emissions reported in 2011, emissions from intrastate, interstate, and international fleets of aircraft are not required to be reported.
 - vi) **Intrastate, interstate, and international mobile sources.** An owner or operator must use the methods in WAC 173-441-055 to include emissions generated within Washington state from intrastate, interstate, and international mobile sources when determining if a fleet of mobile sources meets the reporting threshold established in (a) of this subsection.
- c) **Reporting total emissions of greenhouse gases.** Once an owner or operator determines that the direct emissions from a site or fleet of mobile sources meet the reporting threshold established in (a) of this subsection, the owner or operator is responsible for reporting its total emissions of greenhouse gases from the site.
- d) **Report consistency.** For 2010 emissions reported in 2011, the report consistency requirements in WAC 173-441-060 do not apply.
- 4) **Reporting for 2011 emissions reported in 2012.** The thresholds and reporting requirements for 2011 emissions reported in 2012 are specified below. Refer to Figure 1 for a flow chart of how to apply the reporting thresholds for 2011 emissions reported in 2012.
- a) **Reporting threshold for 2011 emissions reported in 2012.** For 2011 emissions reported in 2012 the reporting threshold shall be 10,000 metric tons of direct emissions, expressed as CO₂e.
 - b) **Level of reporting for 2011 emissions reported in 2012.** An owner or operator with multiple sites or fleets of mobile sources within Washington state must calculate the direct emissions for each site and fleet of mobile sources separately. Each site or fleet of mobile sources that has direct emissions of at least 10,000 metric tons of CO₂e is subject to the reporting requirements of this Chapter. For 2011 emissions reported in 2012, an owner or operator is not required to report emissions from a site or fleet of mobile sources with direct emissions less than 10,000 metric tons of CO₂e.
 - i) **Source or combination of sources.** For 2011 emissions reported in 2012, when determining whether the direct emissions of a site meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from any source or combination of sources of emissions located on the site, including all mobile sources that operate exclusively within the boundaries of the site.
 - ii) **Fleet of marine vessels.** For 2011 emissions reported in 2012, when determining whether the direct emissions of a fleet of marine vessels meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all marine vessels operating in Washington state beyond the boundaries of a single site.
 - iii) **Fleet of rail equipment.** For 2011 emissions reported in 2012, when determining whether the direct emissions of a fleet of rail equipment meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all rail equipment operating in Washington state beyond the boundaries of a single site.

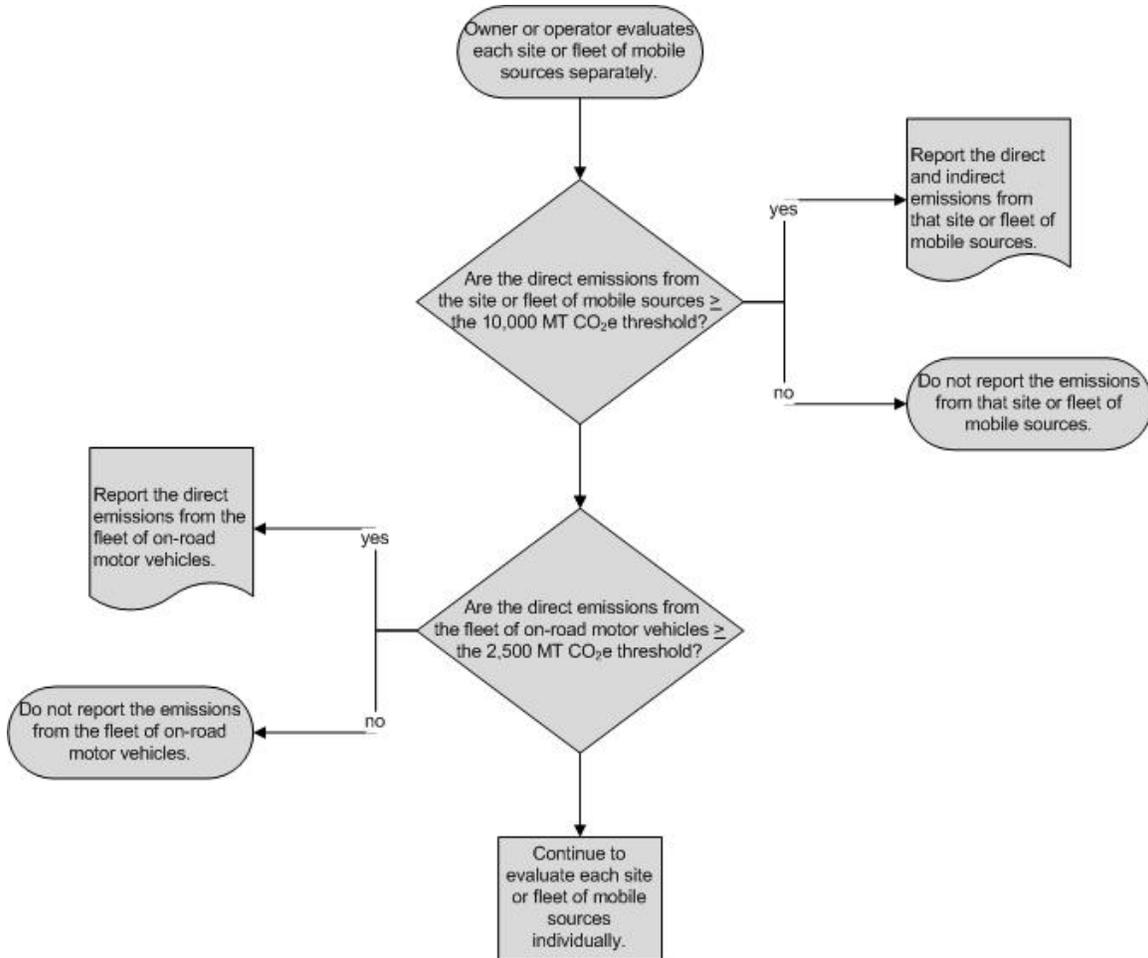
- iv) **Fleet of other land based mobile sources.** For 2011 emissions reported in 2012, when determining whether the direct emissions of a fleet of other land based mobile sources meets the 10,000 metric tons of CO₂e reporting threshold, an owner or operator must include the direct emissions from all other land based mobile sources operating in Washington state beyond the boundaries of a single site.
 - v) **Fleet of aircraft.** For 2011 emissions reported in 2012, emissions from intrastate, interstate, and international fleets of aircraft are not required to be reported.
 - vi) **Intrastate, interstate, and international mobile sources.** An owner or operator must use the methods in WAC 173-441-055 to determine which emissions are generated within Washington state from intrastate, interstate, or international mobile sources when determining if a fleet of mobile sources meets the reporting threshold established in (a) of this subsection.
 - c) **Reporting total emissions of greenhouse gases.** Once an owner or operator determines that the direct emissions from a site or fleet of mobile sources meet the reporting threshold established in (a) of this subsection, the owner or operator is responsible for reporting its total emissions of greenhouse gases from the site.
- 5) **Reporting for 2012 emissions reported in 2013 and beyond.** The thresholds and reporting requirements for 2012 emissions reported in 2013 and for each year after are specified below. Refer to Figure 2 for a flow chart of how to apply the reporting thresholds beginning with 2012 emissions reported in 2013.
- a) **Reporting threshold for 2012 emissions reported in 2013 and all future reporting years.** For 2012 emissions reported in 2013 and all future reporting years the reporting threshold shall be 10,000 metric tons of direct emissions, expressed as CO₂e.
 - b) **Level of reporting for 2012 emissions reported in 2013 and all future reporting years.** Beginning with 2012 emissions reported in 2013 and for all future years, an owner or operator must include direct emissions from any source or combination of sources of emissions located in Washington state when determining whether the direct emissions meet the 10,000 metric tons of CO₂e reporting threshold. (i.e. An owner or operator with multiple sites or fleets of mobile sources within Washington state, excluding the owner or operator's direct emissions from fleets of on-road motor vehicles that operate beyond the boundaries of a single site, must use the combined direct emissions from all of these sites and fleets of mobile sources to determine whether the direct emissions meet the 10,000 metric tons of CO₂e reporting threshold.)
 - i) **Intrastate aircraft.** Beginning with 2012 emissions reported in 2013, an owner or operator of intrastate aircraft, defined as aircraft with flights that have both the takeoff and landing located inside Washington state, must:
 - A) Include direct emissions of greenhouse gases from the intrastate aircraft when determining if the combined direct emissions from sites and fleets of mobile sources meet the reporting threshold of 10,000 metric tons of greenhouse gases per year, expressed as CO₂e, and
 - B) Report the total emissions of greenhouse gases from the intrastate aircraft if the reporting threshold is met.

- ii) **Intrastate, interstate, or international mobile sources.** An owner or operator must use the methods in WAC 173-441-055 to determine which emissions are generated within Washington state from intrastate, interstate, or international mobile sources when determining if a fleet of mobile sources meets the reporting threshold established in subsection (a) of this section.
- c) **Reporting total emissions of greenhouse gases.** Once an owner or operator determines that the combined direct emissions from any source or combination of sources meet the reporting threshold established in (a) of this subsection, the owner or operator is responsible for reporting its total emissions of greenhouse gases, including emissions from its fleet of on-road motor vehicles operating beyond the boundaries of a single site.

Table 1. Phasing Schedule for a Source or Combination of Sources of Emissions

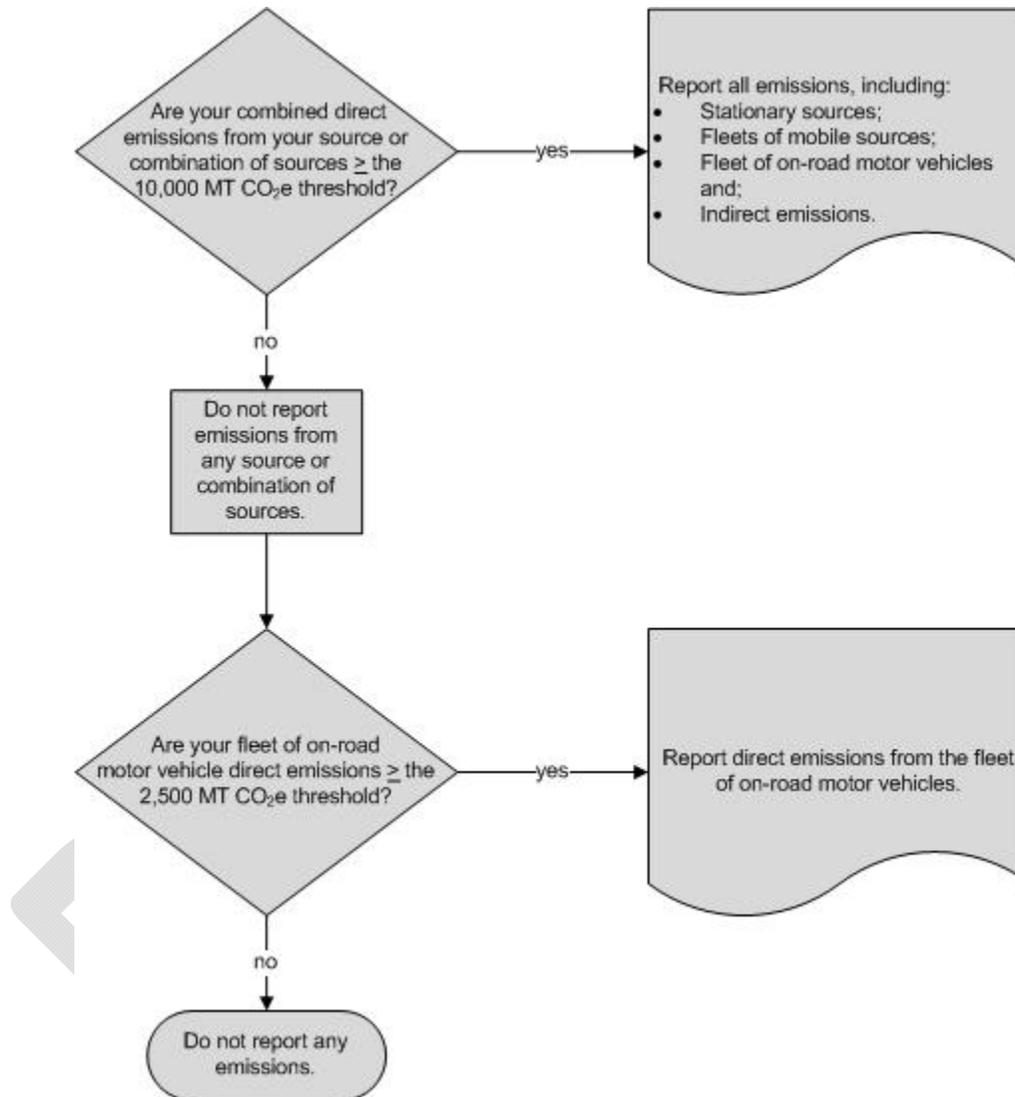
Draft Rule Subsection	Emissions Year	Application of Reporting Threshold	Reporting Threshold for a Source or Combination of Sources of Emissions
WAC 173-441-035(2)	2009 (2010 report)	Each site or fleet of mobile sources	$\geq 25,000$ MT CO ₂ e of direct emissions
WAC 173-441-035(3)	2010 (2011 report)	Each site or fleet of mobile sources	$\geq 10,000$ MT CO ₂ e of direct emissions
WAC 173-441-035(4)	2011 (2012 report)	Each site or fleet of mobile sources	$\geq 10,000$ MT CO ₂ e of direct emissions
WAC 173-441-035(5)	2012 (2013 report) and later	Combined direct emissions from a source or combination of sources	$\geq 10,000$ MT CO ₂ e of direct emissions

Figure 1: Applying Reporting Thresholds For 2009* Emissions Reported in 2010, 2010 Emissions Reported in 2011, and 2011 Emissions Reported in 2012



* NOTE: For 2009 emissions to be reported in 2010, the first diamond in the figure above would read “Does the site emit $\geq 25,000$ MT of CO₂e?”

Figure 2: Applying Reporting Thresholds for 2012 Emissions Reported in 2013 and All Future Reporting Years



WAC 173-441-036. Deferred reporting requirements for owners or operators of interstate or international mobile sources.

- 1) Owners or operators are not required to report emissions from interstate or international commercial aircraft, defined as aircraft with flights that have either the takeoff or landing located outside Washington state. Emissions from intrastate aircraft must be reported beginning with 2012 emissions reported in 2013 as described in WAC 173-441-035(5).
- 2) Emissions from interstate or international travel are not deferred for any other mobile source.

WAC 173-441-040. Reporting requirements when direct emissions of greenhouse gases fall below reporting thresholds.

- 1) **Submitting a written petition to end reporting requirements.** A reporter may submit a written petition to the department to end the reporting requirements under this Chapter when there is a change in operations that results in the permanent reduction of direct emissions below the applicable reporting threshold or when the emissions source permanently ceases operations. The petition must include a detailed description of the change in operations, supporting data to document the permanent change or cessation in operations, documentation of the emissions after the change in operations, and any other information as requested by the department. If the petition is not approved by the department, the reporting requirements in subsection (2) of this section apply when direct emissions of greenhouse gases fall below the applicable reporting threshold.
- 2) **Reporting requirements when direct emissions of greenhouse gases fall below the applicable reporting threshold.** When greenhouse gas emissions change such that the direct emissions fall below the applicable annual reporting threshold in WAC 173-441-030 the reporter must continue to submit an annual emissions report until direct emissions are below the applicable reporting threshold for a minimum of three consecutive years. When direct emissions are below the applicable reporting threshold for three consecutive years, the reporter is not subject to the reporting requirements of this Chapter until direct emissions exceed the applicable threshold in any future calendar year.

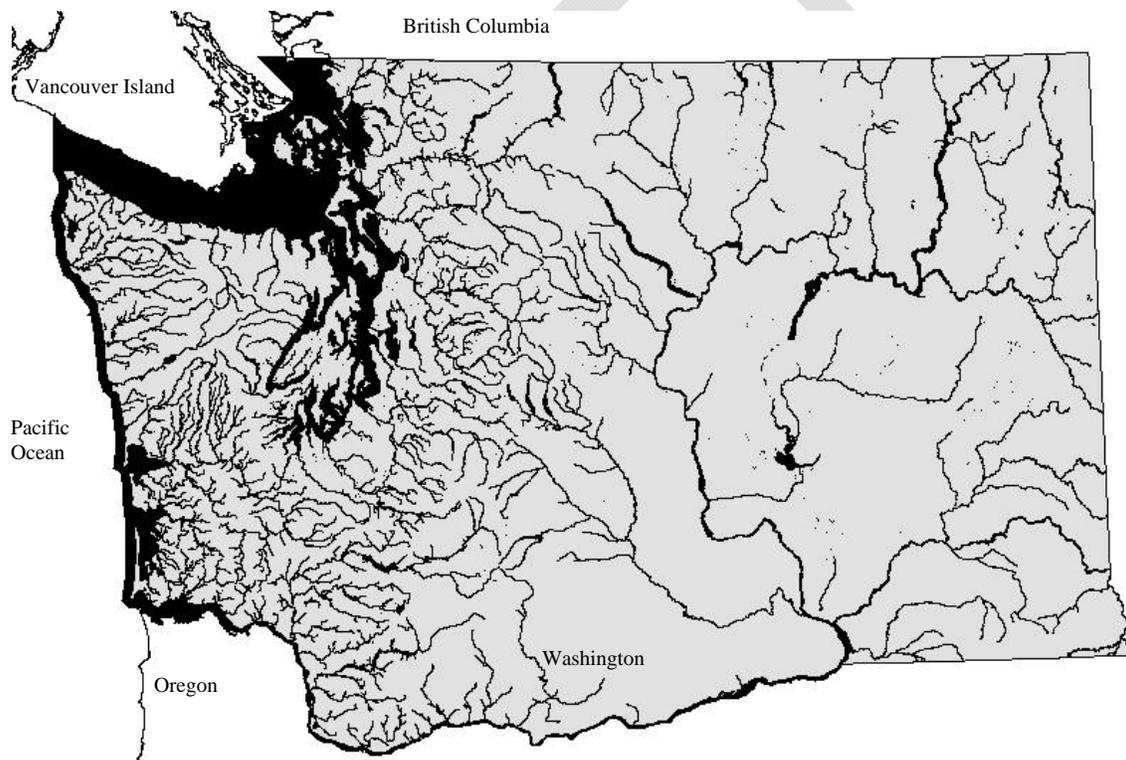
WAC 173-441-055. Determining if greenhouse gas emissions from mobile sources occur in Washington state. An owner or operator of mobile sources must use the following methods consistently throughout its organization and over time to determine if its emissions occur in Washington state. Emissions that occur while a mobile source is in port, hotelling, or idling are considered to occur in the state in which the mobile source is located at the time of the activity and are the responsibility of the owner or operator of the mobile source.

- 1) **Determining if greenhouse gas emissions from mobile sources that operate exclusively within the boundaries of a single site occur in Washington state.** If a mobile source operates exclusively within the boundaries of a single site, then the greenhouse gas emissions from the mobile sources are part of the emissions of the site. All rail equipment operating in Washington state, including rail equipment operating exclusively in a single rail yard or other restricted location, is considered part of the fleet of rail equipment instead of being part of a site.
- 2) **Determining if greenhouse gas emissions from on-road motor vehicles occur in Washington state.** An owner or operator of on-road motor vehicles must use the following methods to determine if its greenhouse gas emissions occur in Washington state. An owner or operator may use a combination of Option 1 and Option 2 to determine if emissions occur in Washington state provided that all vehicles from the same vehicle size class use the same option and that the options are applied consistently throughout the fleet of on-road motor vehicles and over time.
 - a) **Option 1: Miles travelled within Washington state by the on-road motor vehicles.** Assign emissions to Washington state based on the documented location of miles the on-road motor vehicle travels inside the state. The owner or operator may report activity data based on mileage location information, or prorate activity data

- based on the ratio of miles traveled inside of Washington state to the total miles traveled by the interstate or international fleet of on-road motor vehicles; or
- b) **Option 2: Fuel transferred to on-road motor vehicles within Washington state.** Assign emissions to Washington state based on the documented location of fuel transfers to on-road motor vehicles. The owner or operator may report activity data based on fuel transfer location information, or prorate activity data based on the ratio of fuel transferred to on-road motor vehicles inside of Washington state to the total fuel transferred to the interstate or international fleet of on-road motor vehicles. Fuel purchase location can be used to document fuel transfer location if the refueling location is the point of purchase of the fuel; or
 - c) **Option 3: All emissions generated by on-road motor vehicles licensed in Washington state.** Assign all of the on-road motor vehicle's emissions to Washington state if the on-road motor vehicle is licensed in Washington state. Do not report emissions from on-road motor vehicles registered outside the state of Washington. Option 3 must not be combined with Option 1 or Option 2. The owner or operator may only use Option 3 if mileage location or fuel transfer location is not available due to limitations imposed by rental agreements.
- 3) **Determining if greenhouse gas emissions from aircraft occur in Washington state.** An owner or operator must assign a flight's greenhouse gas emissions to Washington state if both the takeoff and landing are located inside Washington state. For flights with multiple legs, each leg must be evaluated as a unique flight.
 - 4) **Determining if greenhouse gas emissions from marine vessels occur in Washington state.** An owner or operator of marine vessels must use the appropriate method or methods from the list below to determine if its greenhouse gas emissions occur in Washington state. The methods must be applied in the order in which they are listed. Figure 3 shows a graphical representation of the reporting area for marine vessels.
 - a) **Intrastate marine vessel voyages.** If a marine vessel's arrival and departure points are both inside the waters of the state, then the owner or operator must assign the voyage's greenhouse gas emissions to Washington state.
 - b) **Marine vessel voyages transiting Puget Sound.** If a marine vessel transits Puget Sound, the Strait of Juan de Fuca, Haro Strait, or the Strait of Georgia then the owner or operator must assign to Washington state the greenhouse gas emissions occurring in those waters if the point of arrival or last departure is within the waters of the state of Washington. The reportable emissions occurring in Puget Sound are defined as all activities between the point of arrival or last departure and three nautical miles west of the mean low-water mark of Cape Flattery for the Strait of Juan de Fuca, 48° 40' 00" N latitude for Haro Strait, or 49° 00' 00" N latitude for the Strait of Georgia. . The international border marks the western limit of the reporting area for the Strait of Georgia and Boundary Pass. Figure 4 shows a graphical representation of the reporting area for marine vessels in Puget Sound.
 - c) **Marine vessel voyages in rivers that form the state border.** If a marine vessel operates in a river that forms a border of Washington, then the owner or operator must assign to Washington state half of the greenhouse gas emissions occurring in the stretch of the river located on the border of Washington state beginning three nautical miles downstream of the river mouth. The owner or operator must assign to Washington state all of the emissions occurring in any stretch of river located

- completely in Washington state. The owner or operator may report activity data based on hours of operation information, or prorate activity data based on the ratio of hours operated exclusively inside of the waters of the state to the total hours operated on the voyage.
- d) **All other interstate marine vessel voyages.** If either the arrival or departure point is outside of the waters of the state, then the owner or operator must assign to Washington state the greenhouse gas emissions occurring in Washington state based on the documented hours the voyage occurs inside the waters of the state. The owner or operator may report activity data based on hours of operation information, or prorate activity data based on the ratio of hours operated inside of the waters of the state to the total hours operated on the voyage.

Figure 3: Reporting Area for Marine Vessels



Report emissions occurring in the black or gray shaded areas according to the methods outlined in WAC 173-441-055(4).

Figure 4: Reporting Area for Marine Vessels in Puget Sound

Report emissions occurring in the black or gray shaded areas according to the methods outlined in WAC 173-441-055(4).

- 5) **Determining if greenhouse gas emissions from rail equipment occur in Washington state.** An owner or operator of rail equipment must use the following methods to determine if its emissions occur in Washington state. An owner or operator may use different methods for line haul powered rail equipment, yard powered rail equipment, and unpowered rail equipment, provided that all rail equipment of the same type uses the same method and the methods are applied consistently throughout the fleet of rail equipment and over time.
- Intrastate rail equipment.** Assign all of the rail equipment's greenhouse gas emissions to Washington state if the rail equipment operates exclusively within Washington state.
 - Percentage of total gross ton-miles operated within Washington state by the rail equipment.** Assign emissions to Washington state based on the documented gross ton-miles the rail equipment operates inside the state relative to the total gross ton-miles operated by the owner or operator. An owner or operator using this method must prorate activity data based on the ratio of gross ton-miles operated inside of Washington to the total gross ton-miles operated in the United States or North America by the owner or operator. For Class I railroads, data must be consistent with data reported on its Annual Report to the Surface Transportation Board. The owner or operator must not use a gross ton-miles per gallon efficiency factor to estimate fuel use or other activity data.
 - Hours operated within Washington state by the rail equipment.** Assign emissions to Washington state based on the documented hours the rail equipment operates inside the state. The owner or operator may report activity data based on hours of operation information, or prorate activity data based on the ratio of hours

operated inside of Washington to the total hours operated by the interstate or international fleet of rail equipment.

- 6) **Determining if greenhouse gas emissions from all other mobile sources occur in Washington state.** An owner or operator of any type of mobile source not covered in subsections 1 through 5 of this section must select one of the following methods to determine if its emissions occur in Washington state. The owner or operator must evaluate each type of mobile source independently from other mobile source types when applying the following methods.
- a) **Miles operated within Washington state by the mobile source.** Assign emissions to Washington state based on the documented location of miles the mobile source operates inside Washington state. The owner or operator may report activity data based on mileage location information, or prorate activity data based on the ratio of miles operated inside of Washington state to the total miles operated by the interstate or international fleet of mobile sources; or
 - b) **Fuel transferred to the mobile source within Washington state.** Assign emissions to Washington state based on the documented location fuel transfers to the mobile sources. The owner or operator may report activity data based on fuel transfer location information, or prorate activity data based on the ratio of fuel transferred inside of Washington state to the total fuel transferred by the interstate or international fleet of mobile sources. Fuel purchase location can be used to document fuel transfer location if the refueling location is the point of purchase of the fuel; or
 - c) **Hours operated within Washington state by the mobile source.** Assign emissions to Washington state based on the documented hours the mobile source operates inside Washington state. The owner or operator may report activity data based on hours of operation information, or prorate activity data based on the ratio of hours operated inside of Washington state to the total hours operated by the interstate or international fleet of mobile sources.

WAC 173-441-060. Report consistency. A reporter must consistently report greenhouse gas emissions over time.

- 1) **Switching to a higher tier method.** A reporter may switch to an equivalent or higher tier method provided that the reporter continues to use the new method in subsequent reporting years.
- 2) **Switching to a lower tier method.** A reporter must not switch to a lower tier method unless the data required to perform the previous method is no longer available due to process or organizational changes.
- 3) **Adjusting emissions reports from previous years due to a change in methods.** If a reporter makes a change in reporting methodologies that results in a change of five percent or larger in either the reporter's total direct or total indirect CO₂e emissions, then the reporter must adjust emissions reports from all previous years within the document retention period described in WAC 173-441-125 to account for the change. If the activity data needed to use the new method is not available for previous emission years, then the reporter must clearly describe the change in methodology and document the lack of activity data in the emissions report, but is not required to recalculate emissions for previous years. All changes and documentation relating to previous emission years must be submitted as part of the current year's reporting activities and be in accordance with WAC 173-441-120(5). The requirement

to adjust emissions reports from previous years due to a change in methods begins with 2011 emissions reported in 2012 and does not apply to 2009 emissions reported in 2010 and 2010 emissions reported in 2011.

- 4) **Verification of emissions report adjustments due to a change in methods.** Any changes to emissions from previous years that are subject to third party verification must be verified according to WAC 173-441-090 and submitted as part of the current year's verification activities.
- 5) **Phasing of report consistency requirements.** For 2009 emissions reported in 2010 and 2010 emissions reported in 2011, the report consistency requirements of this section do not apply. An owner or operator may switch methods during this time. The requirement to adjust emissions reports from previous years due to a change in methods begins with 2011 emissions reported in 2012 and does not apply to 2009 emissions reported in 2010 and 2010 emissions reported in 2011.

WAC 173-441-080. Emissions reporting and certification schedule. Reporters subject to 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 of emissions 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 of emissions 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. Third party verification must be completed based on the schedule found in WAC 173-441-090(5).
- 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 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 requirement for third party verification, per this section, becomes effective when Washington state begins participating in a regional or national cap and trade program for greenhouse gases. The following verification requirements will apply to reporters of emissions from a source or combination of sources that are subject to both the greenhouse gas cap and trade program and the reporting threshold in WAC 173-441-030(1)(b).

- 1) **Applicability of third party verification.** Beginning with the first calendar year that a cap and trade program is effective in Washington state, reporters of emissions from a source or combination of sources subject to the cap and trade program must verify their direct

emissions using verification services provided by an accredited third party verification body, as described in subsection (3) of this section.

- 2) **Verification requirements when direct emissions fall below third party verification threshold.** If the direct emissions from a source or combination of sources of emissions subject to this Chapter change such that direct emissions fall below the emissions threshold for the cap and trade program the following verification requirements shall apply:
 - a) **Verification requirements when direct emissions fall below the cap and trade threshold but equal or exceed 10,000 metric tons of CO₂e.**
 - i) The reporter must continue to have the annual emissions report verified by an accredited third party verification body until direct emissions are below the cap and trade threshold for a minimum of three consecutive years.
 - ii) The emissions report is subject to full third party verification requirements the first year that direct emissions fall below the cap and trade threshold.
 - 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 subsection 4 of this section.
 - iv) If direct emissions remain below the cap and trade threshold and are equal to or exceed the reporting threshold of 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).
 - v) **Submitting a written petition to end verification requirements.** A reporter may submit a written petition to the department to end the verification requirements under this Chapter when there is a change in operations that results in the permanent reduction of direct emissions below the cap and trade threshold but equal to or exceeding 10,000 metric tons of CO₂e. The petition must include a detailed description of the change in operations, supporting data to document the permanent change or cessation in operations, documentation of the emissions after the change in operations, and any other information as requested by the department. If the petition is not approved by the department, the verification requirements in (a)(i) through (a)(iv) of this subsection shall apply.
 - b) **Verification requirements when direct emissions fall below 10,000 metric tons of CO₂e.**
 - i) The reporter must continue to have the annual emissions report verified by an accredited third party verification body until direct 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 direct 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 subsection 4 of this section.
 - iv) If direct 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 direct emissions exceed the reporting threshold in any future calendar year.
- v) **Submitting a written petition to end verification requirements.** A reporter may submit a written petition to the department to end the verification requirements under this Chapter when there is a change in operations that results in the permanent reduction of direct emissions below 10,000 metric tons of CO₂e or when the emissions source permanently ceases operations. The petition must include a detailed description of the change in operations, supporting data to document the permanent change or cessation in operations, documentation of the emissions after the change in operations, and any other information as requested by the department. If the petition is not approved by the department, the verification requirements in (b)(i) through (b)(iv) of this subsection shall apply.
- 3) **Accreditation requirements for verification bodies.** All verification bodies conducting third party verification of reported greenhouse gas emissions under this Chapter must demonstrate to the department 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.
- 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 occurs.
 - 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.
- 5) **Third party verification schedule.** The verification body must complete the verification process and submit a verification statement to the department's registry of greenhouse gas emissions by September 1 for the previous calendar year emissions.
- 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 direct emissions are being verified, the verification body must develop and implement a verification plan following the methods in The Climate Registry's General Verification Protocol, Version 1.0, May 2008, Part 4. Upon request by the department, the verification plan will be made available to the department within ten business days.
 - c) **Core verification activities.** For each reporter whose direct emissions are being verified, the verification body must conduct the core verification activities within The Climate Registry's General Verification Protocol, Version 1.0, May 2008, Part 4.
 - d) **Verification report.** For each reporter whose direct 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. Upon request by the department, the verification report will be made available to the department within ten business days.
 - e) **Verification statement.** For each reporter whose direct 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.** Prior to providing a negative verification statement to the department, the verification body must provide the reporter at least ten business days to modify the emissions report to correct any material misstatement or nonconformance with this Chapter found by the verification body. The modified report and verification statement must be submitted to the department before the applicable verification deadline. If the reporter and the verification body cannot reach agreement on modifications to the emissions report that result in a positive verification statement, the reporter may make a request to the department, as provided below.
- a) The reporter may petition the department to make a final decision as to the verifiability of the submitted emissions report.
 - b) If the department determines that the emissions report does not meet the standards and requirements of this Chapter, the reporter must have the opportunity to submit to the verification body any emissions report revisions that address the department's determination, for re-verification of the emissions report. The reporter must submit the emissions report revisions within sixty calendar days of the date of the department's determination. In re-verifying a revised emissions report, the verification body must be subject to the requirements in subsection 6 of this section.
- 8) **Completion of verification process.** Once the verification statement has been submitted to the department, all verification requirements of this Chapter will be considered complete, the

emissions report will be considered final and no changes may be made except as provided in WAC 173-441-060 and WAC 173-441-120(5).

- 9) **Set aside of positive verification statement.** If the department finds a high level of conflict of interest existed between a verification body and a reporter or an emissions report that received a positive verification statement fails an audit by the department, the department may set aside the positive verification statement submitted by the verification body.
- 10) **Data request by the department.** Upon request by the department, the reporter must provide the data used to generate an emissions report, including all data available to a verifier in the conduct of the verification services. The department may also review the full verification report given by the verification body to the reporter. The full verification report must be provided to the department upon request. The data requested or the full report must be made available within ten business days of the request by the department.
- 11) **Verifier availability.** Upon written request by the department, the verification body must make itself available for a verification services audit.
- 12) **Records retention.** The reporter must retain verification records and documents for seven years.

WAC 173-441-100. Quantification methods for emissions from a source or combination of sources of emissions. Reporters subject to the reporting threshold in WAC 173-141-030(1)(b) must use the following quantification methods to calculate emissions.

- 1) **Biomass.** All reporters must account for and separately report greenhouse gas emissions from the combustion of biomass.
 - a) **Quantifying direct emissions from stationary combustion of biomass.**
 - i) Emissions of CO₂ from biomass combustion must be calculated using the methodologies in Chapter 12 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008). A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data. A reporter must report CO₂ emissions from fossil fuel combustion separately from CO₂ emissions from biomass combustion. Emissions of CH₄ and N₂O from biomass combustion are direct emissions and are not treated separately from CH₄ and N₂O from fossil fuel combustion.
 - ii) For facilities that combust municipal solid waste (MSW), the CO₂ emissions from combusting the biomass portion of MSW (eg. wood, yard waste, paper products) must be separately calculated and reported as biomass CO₂ emissions using the methodologies found in the California Air Resources Board Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, Section 95125 (h)(2) adopted on December 2, 2008 and codified in the California Code of Regulations at 17 CCR § 95125(h)(2).
- 2) **Direct greenhouse gas emissions.**
 - a) **Quantifying direct emissions from stationary combustion.**
 - i) All stationary combustion sources except oil refineries must calculate greenhouse gas emissions using one of the tiered methods in Chapter 12 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008). A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data.

- ii) Stationary combustion sources at an oil or petroleum refinery must calculate greenhouse gas emissions using one of the tiered methods in Appendix A-6 of this Chapter unless the source is included in Appendix A-4 or Appendix A-5 of this Chapter. A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data.
- b) **Quantifying direct emissions from mobile sources.**
 - i) **Quantifying direct combustion emissions from mobile sources.** Direct greenhouse gas combustion emissions from mobile sources must be calculated using one of the tiered methods in Chapter 13 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008).
 - ii) **Quantifying direct fugitive emissions from mobile sources.** Direct greenhouse gas fugitive emissions from mobile sources must be calculated according to the methods described in subsection (2)(d) of this section.
 - iii) **Quantifying direct combustion emissions from auxiliary power units.** Direct greenhouse gas combustion emissions from the combustion of fuels in auxiliary power units must be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 12 or Chapter 13.
 - iv) **Quantifying direct emissions from on-road motor vehicles.** Direct greenhouse gas combustion emissions from on-road motor vehicles must be calculated according to the methods described in WAC 173-441-110.
- c) **Quantifying direct process emissions.** Direct emissions from physical and chemical processes must be calculated using the appropriate methodology referenced in Table 2. A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data.

Table 2. Quantification Methods for Process Emissions

Industry	Reference Methodology
Aluminum	TCR GRP, Appendix E.2: Tier A using plant specific emission factors or Tier B using default factors.
Cement	TCR GRP, Appendix E.4: Clinker Method using Tier A plant specific clinker emission factor.
Iron & Steel	TCR GRP, Appendix E.7: Tier A using plant specific carbon content emission factors or Tier B using default carbon content emission factors.
Lime	TCR GRP, Appendix E.8: Tier A1 or Tier A2 using plant specific emission factors; Tier B using default emission factors; or Tier C using default emission factors.
Pulp & Paper	TCR GRP, Appendix E.10: Tier A using default stoichiometric emission factors.
Semi- Conductor	TCR GRP, Appendix E.12: Tier A or Tier B using plant specific emissions factors or Tier C using default factors.
Natural Gas extraction, processing , storage, transmission and	Chapter 173-441 WAC, Appendix A-1.

Industry	Reference Methodology
distribution	
Hydrogen Plants	Chapter 173-441 WAC, Appendix A-4.
Petroleum Refinery	Chapter 173-441 WAC, Appendix A-5.
Other Process Emission Sources	Use the applicable TCR GRP, Appendix E process emissions methodology. If no TCR process emissions protocol is applicable, contact the department.

d) **Direct fugitive emissions.**

- i) **Fugitive emissions from refrigeration and air conditioning.** Greenhouse gas fugitive emissions from refrigeration and air conditioning must be calculated using Tier A or B methods as given in Chapter 16 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008). For stationary sources, a reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data. The tier selection restriction does not apply to refrigeration or air conditioning units that are part of a mobile source. A reporter may use the Screening Method given in Chapter 16 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) for sources that qualify for simplified estimation methods as described in WAC 173-441-115. The Screening Method is only considered to be a tiered method when applied to on-road motor vehicles.
- ii) **SF₆ fugitive emissions from electricity transmission and distribution.** SF₆ fugitive emissions from electricity transmission and distribution must be calculated using the methodology referenced in Appendix E.5 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008).
- iii) **Fugitive emissions from industrial wastewater treatment emissions.** Greenhouse gas emissions from wastewater treatment systems at pulp and paper mills, food processing plants, ethanol production plants, petrochemical facilities and petroleum refining facilities must be calculated using the methodologies described in Appendix A-2.
- iv) **Fugitive emissions from industrial landfill operations.** Greenhouse gas emissions, including fugitive methane emissions, from landfill operations must follow the methodologies outlined in Appendix A-3.
- v) **Fugitive emissions from coal piles.** Greenhouse gas emissions from coal piles must be calculated using the methodologies described in Appendix A-7.
- vi) **Other fugitive emissions.** Contact the department if there is no calculation methodology listed in this section for a source of fugitive emissions. Some sources of fugitive emissions may qualify for simplified estimation methods as described in WAC 173-441-115.

3) **Indirect greenhouse gas emissions.**

- a) **Quantifying indirect greenhouse gas emissions from the use of purchased electricity.** Indirect greenhouse gas emissions from the purchase and use of electricity must be quantified using one of the following methods. A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data.

- i) Tier A methodology in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 14. If the reporter purchases electricity directly from a known electric generation source then the reporter must use generator-specific emission factors; or
 - ii) Tier A2 methodology must use the most recent CO₂ utility-specific emission factor (lbs/MWh) calculated and published annually by the Washington Department of Community, Trade and Economic Development (CTED) from data obtained during the fuel mix disclosure process required under RCW 19.29A. For the most accurate estimation of the CO₂ utility-specific emission factor, utilities providing data under this fuel mix disclosure process must use the average system mix methodology described in Appendix B. The reporter must use the CO₂ utility-specific emission factor in combination with the most recent Northwest Power Pool eGRID default factors for methane and nitrous oxide published by the U.S. Environmental Protection Agency; or
 - iii) Tier B methodology in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 14. Tier B must use the most recent Northwest Power Pool eGRID default factors published by the U.S. Environmental Protection Agency.
- 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 must 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. The determination of Tier A or B is based on the quality of information supplied by the district heating, cooling or cogeneration facility. A reporter must use the highest tier possible based on the reporter's existing monitoring systems and available data.
 - ii) The owner or operator of a cogeneration, district heating or district cooling plant must provide greenhouse gas emissions information to all purchasers of heating, cooling, or electricity who are reporters under this Chapter, upon request from the reporter. The emissions information must 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 /1,000 lbs of steam purchased or kg CO₂e /MMBtu of steam, cooling in terms of kg/ton of cooling, etc.
- 4) **Simplified estimation methods.** A reporter may use simplified estimation methods for sources that meet the requirements of WAC 173-441-115. Simplified estimation methods are not considered tiered methods and emissions calculated using simplified estimation methods must be reported separately.
- 5) **Global warming potential factors for converting emissions of greenhouse gases to CO₂e values.** The following global warming potential factors in Table 3 and Table 4 must be used when converting emissions of greenhouse gases to CO₂e values. To convert to CO₂e values, multiply the quantity of each greenhouse gas in metric tons by the listed GWP. If a refrigerant blend is not listed in Table 4 but contains a greenhouse gas listed in Table 3, then use the GWPs in Table 3 to calculate the GWP for the blend. If the refrigerant blend contains a greenhouse gas not listed in Table 3, then use zero for that greenhouse gas's GWP when performing the calculation. The refrigerant blend's GWP is calculated by multiplying

the percentage of each greenhouse gas in the blend by its GWP and adding all of the greenhouse gas's GWPs together.

Table 3: Global Warming Potential Factors for Required Greenhouse Gases

<u>Common Name</u>	<u>Formula</u>	<u>Chemical Name</u>	<u>GWP</u>
Carbon dioxide	CO ₂		1
Methane	CH ₄		21
Nitrous oxide	N ₂ O		310
Sulfur hexafluoride	SF ₆		23,900
<u>Hydrofluorocarbons (HFCs)</u>			
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 ₂ F ₇	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*
<u>Perfluorocarbons (PFCs)</u>			
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.

Table 4: Global Warming Potential Factors for Required Refrigerant Blends

<u>Refrigerant Blend</u>	<u>Global Warming Potential</u>	<u>Refrigerant Blend</u>	<u>Global Warming Potential</u>
R-401A	18	R-413A	1,774
R-401B	15	R-414A	0
R-401C	21	R-414B	0
R-402A	1,680	R-415A	25
R-402B	1,064	R-415B	105
R-403A	1,400	R-416A	767
R-403B	2,730	R-417A	1,955
R-404A	3,260	R-418A	4
R-406A	0	R-419A	2,403
R-407A	1,770	R-420A	1,144
R-407B	2,285	R-500	37
R-407C	1,526	R-501	0
R-407D	1,428	R-502	0
R-407E	1,363	R-503	4,692
R-408A	1,944	R-504	313
R-409A	0	R-505	0
R-409B	0	R-506	0
R-410A	1,725	R-507 or R-507A	3,300
R-410B	1,833	R-508A	10,175
R-411A	15	R-508B	10,350
R-411B	4	R-509 or R-509A	3,920
R-412A	350		

Source: ASHRAE Standard 34 via Chapter 16 of The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008)

WAC 173-441-110. Quantification methods for on-road motor vehicles. A reporter of emissions from on-road motor vehicles must use the following quantification methods to calculate its emissions.

1) **Direct greenhouse gas emission calculations.**

- a) **Quantifying CO₂ emissions from on-road motor vehicles.** Direct CO₂ emissions from on-road motor vehicles must 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.** Direct CH₄ and N₂O emissions from on-road motor vehicles must 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(2).

- c) **Quantifying fugitive emissions from refrigeration and air conditioning from on-road motor vehicles.** Fugitive emissions from refrigeration and air conditioning from on-road motor vehicles must 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 on-road motor vehicles.
 - d) **Quantifying direct combustion emissions from auxiliary power units.** Direct emissions from the combustion of fuels in auxiliary power units that are associated with on-road motor vehicles must be calculated using one of the tiered methods in The Climate Registry's General Reporting Protocol, Version 1.1 (May 2008) Chapter 12 or Chapter 13.
- 2) **Biomass.** All reporters must account for and separately report greenhouse gas emissions from the combustion of biomass.
 - a) **Quantifying of biomass emissions for on-road motor vehicle fuels with greater than or equal to fifty percent biomass content.**
 - i) A reporter must report the percentage of fuel derived from biomass for all fuels that are fifty percent or more biomass.
 - ii) A reporter must adjust the emission factors of any fuel that is fifty percent or more biomass by reporting the fuel in two components. The biomass portion of the fuel must be calculated using the emissions factor for the pure biomass fuel and the non-biomass portion of the fuel must be calculated using the emissions factor for the corresponding pure non-biomass fuel.
 - b) **Quantifying of biomass emissions for on-road motor vehicle fuels with less than fifty percent biomass content.**
 - i) A reporter may report the percentage of fuel derived from biomass for all fuels that are less than fifty percent biomass.
 - ii) A reporter may choose to report all emissions as non-biomass for any fuel with less than fifty percent biomass content. Alternately, the reporter may adjust the fuel's emission factors by reporting the fuel in two components. The biomass portion of the fuel may be calculated using the emissions factor for the pure biomass fuel and the non-biomass portion of the fuel may be calculated using the emissions factor for the corresponding pure non-biomass fuel.
 - c) **Corresponding fuel types for on-road motor vehicles.**
 - i) Biodiesel is considered the biomass fuel corresponding to diesel.
 - ii) Ethanol is considered the biomass fuel corresponding to gasoline.
 - iii) For all other fuels use the same emissions factors for both biomass and non-biomass fuel components.
- 3) **Simplified estimation methods.** A reporter may use simplified estimation methods for sources that meet the requirements of WAC 173-441-115(2). Simplified estimation methods are not considered tiered methods and emissions calculated using simplified estimation methods must be reported separately.
- 4) **Converting emissions of greenhouse gases to CO₂e values.** The global warming potential factors found in WAC 173-441-100(5) must be used when converting emissions of greenhouse gases to CO₂e values.

WAC 173-441-115. Exclusion de minimis and simplified estimation methods. A reporter may use the following exclusion de minimis and simplified estimation methods when reporting its emissions.

- 1) **Exclusion de minimis.** A reporter may choose not to report emissions from each site with total emissions of greenhouses less than five metric tons of CO₂e. The five metric ton limit must be applied separately to direct and indirect emissions.
 - a) **Direct emissions.** A reporter may choose not to report direct emissions from each site with total direct emissions less than five metric tons of CO₂e per year.
 - b) **Indirect emissions.** A reporter may choose not to report indirect emissions from each site with total indirect emissions less than five metric tons of CO₂e per year.
- 2) **Simplified estimation methods.** A reporter may use simplified estimation methods to calculate emissions from one or more sources or greenhouse gases that do not exceed the limits established in (a) through (c) of this subsection. Simplified estimation methods are an alternative to the methods required in WAC 173-441-100 and WAC 173-441-110, and permit a reporter to develop its own untiered calculation methodologies. Simplified estimation methods must use upper-bound assumptions that err on the side of overestimating rather than underestimating emissions.
 - a) **Direct emissions.** A reporter may use simplified estimation methods for the direct emissions of one or more sources or greenhouse gases that collectively emit no more than five percent of its total direct CO₂e emissions.
 - b) **Indirect emissions.** A reporter may use simplified estimation methods for the indirect emissions of one or more sources or greenhouse gases that collectively emit no more than five percent of its total indirect CO₂e emissions.
 - c) **Combining simplified estimation methods emissions from direct and indirect emissions.** A reporter must account for direct and indirect emissions separately when applying the five percent simplified estimation methods limit for sources or greenhouse gases. The combined total direct and indirect emissions calculated using simplified estimation methods must not exceed 10,000 metric tons CO₂e.
 - d) **Verification.** If verification of the emissions report is required by this rule, then the selection of any simplified estimation method is subject to the concurrence of the verification body that the use of such methods provides reasonable assurance that the emissions so designated do not exceed the applicable simplified estimation methods limits as described in (a) through (c) of this subsection.
 - e) **Reporting.** The reporter must separately identify and include in the emissions report the emissions from sources calculated using simplified estimation methods.

WAC 173-441-120. Report content and submission requirements. A reporter subject to the requirements of this Chapter must submit an annual greenhouse gas emissions report, certified by the designated representative, to the department's registry of greenhouse gas emissions. The emissions report must be submitted according to the schedule established in WAC 173-441-080. Reporters must report emissions separately for each site, fleet of mobile sources, or fleet of on-road mobile vehicles.

- 1) **General information.** A reporter must report the following information for each site, fleet of mobile sources, or fleet of on-road motor vehicles:

- a) Reporter identification information including reporter name(s), business name(s), business mailing addresses and the Washington state Unified Business Identifier(s);
 - b) Designated representative contact name, mailing address and telephone number(s);
 - c) Identification information including the name of each site, fleet of mobile sources, or fleet of on-road motor vehicles and the associated North American Industrial Classification System (NAICS);
 - d) An owner or operator with multiple sites, fleets of mobile sources and/or fleets of on-road motor vehicles that are required to report under this Chapter must report the emissions from all of these sources under one account. The account must include the corporate identification, including business name, mailing address and business identifiers. The owner or operator must describe the organizational relationship between each site, fleet of mobile sources and/or fleet of on-road motor vehicles;
 - e) Name and contact information including mailing address and telephone number of the person primarily responsible for preparing the emissions report;
 - f) Submittal information including reporting year and the date of submittal;
 - g) Tiers employed for each source, including disclosure of all relevant assumptions made, data sources used, and identification of any changes to the data, inventory boundary, methods or other relevant factors relative to this or a prior-year report;
 - h) Document if the reporter uses the exclusion de minimis provision in WAC 173-441-115(1);
 - i) Identify sources and greenhouse gases calculated using simplified estimation methods and the resulting annual emissions quantities of each greenhouse gas, expressed in metric tons and CO₂e quantity expressed in metric tons; and
 - j) A signed and dated certification statement provided by the designated representative.
- 2) **Mobile sources.** A reporter must report the following information for mobile sources of emissions, in addition to the general reporting requirements under subsection 1 of this section:
- a) A reporter must report the following information for fleets of on-road motor vehicles:
 - i) Fleet characteristic information and activity data including but not limited to fuel use and fuel type;
 - ii) Annual greenhouse gas combustion emission quantities by fuel type or activity type, expressed in metric tons of CO₂e for each greenhouse gas; Emission quantities from biomass must be reported separately;
 - iii) Annual greenhouse gas emission quantities of fugitive emissions expressed in metric tons of CO₂e including, but not limited to those from refrigeration, air conditioning, or other auxiliary units; and
 - iv) Annual total emissions of greenhouse gases expressed in metric tons of CO₂e.
 - b) A reporter of emissions from fleets of mobile sources operating beyond the boundaries of a single site must report total emissions of greenhouse gases from each fleet of mobile sources that is subject to the reporting requirements of this Chapter. Emissions from each fleet of aircraft, fleet of marine vessels, fleet of rail equipment, and fleet of other land based mobile sources must be reported separately. For each fleet of mobile sources identified, the reporter must report the following information:
 - i) Fleet characteristic information and activity data including but not limited to fuel use and fuel type;

- ii) Annual quantities of emissions of each greenhouse gas by fuel type or activity type expressed in metric tons of each greenhouse gas. Emission quantities from biomass must be reported separately;
 - iii) Annual greenhouse gas emission quantities of each greenhouse gas from combustion of fuels expressed in metric tons of CO₂e;
 - iv) Annual greenhouse gas emission quantities of fugitive emissions including but not limited to those from refrigeration, air conditioning, or other auxiliary units;
 - v) Annual indirect emission quantities of CO₂e, expressed in metric tons associated with the purchased of electricity, steam, heating or cooling; and
 - vi) Annual total emissions of greenhouse gases expressed in metric tons of CO₂e.
- c) A reporter of emissions from on-road motor vehicles, aircraft, marine vessels, or other land based mobile sources operating exclusively within the boundaries of the site must report these emissions separately from other stationary or mobile source types. For all mobile sources operating exclusively within the boundaries of a single site, the reporter must report the following information:
- i) Mobile source characteristic information and activity data including but not limited to fuel use and fuel type;
 - ii) Annual greenhouse gas emission quantities by fuel type or activity type of each greenhouse gas for the fleet of mobile sources or fleet of on-road motor vehicles by fuel type expressed in metric tons of each greenhouse gas. Emission quantities from biomass must be reported separately;
 - iii) Annual quantities of emissions of each greenhouse gas from combustion of fuels expressed in metric tons of CO₂e;
 - iv) Annual quantities of fugitive emissions including but not limited to those from refrigeration, air conditioning, or other auxiliary units;
 - v) Annual total emissions of greenhouse gases expressed in metric tons of CO₂e; and
 - vi) Identify the site in which the mobile source exclusively operates.
- 3) **Stationary sources.** A reporter of stationary sources of emissions from a site must report total emissions of greenhouse gases from each site that is subject to the reporting requirements of this Chapter. For each site identified, the reporter must report the following information in addition to the general reporting requirements under subsection 1 of this section:
- a) Location address, mailing address, if different from the reporter address, North American Industrial Classification System (NAICS) primary and secondary codes, the EPA Facility Site ID (if applicable), and geographic coordinates;
 - b) Activity data and measurement based data associated with direct and indirect emissions;
 - c) Annual quantities of emissions of each greenhouse gas by fuel type or activity type of each greenhouse gas expressed in metric tons of each greenhouse gas. Emission quantities from biomass must be reported separately;
 - d) Annual quantities of emissions of each greenhouse gas from combustion of fuels expressed in metric tons of CO₂e;
 - e) Annual quantities of fugitive emissions of each greenhouse gas, expressed in metric tons of CO₂e;

- f) Annual quantities of process emissions of each greenhouse gas expressed in metric tons of CO₂e;
 - g) Annual quantities of indirect greenhouse gas emissions associated with the purchase of electricity, steam, heating or cooling expressed in metric tons;
 - h) Annual total greenhouse gas emission quantities expressed in metric tons of CO₂e; and
 - i) Emissions data and other information specified in Appendices A-1 through A-8 and Appendix B, as applicable.
- 4) **Submission of greenhouse gas emissions report.** The annual greenhouse gas emissions report must be submitted to the department's registry of greenhouse gas emissions in the format specified by the department.
- 5) **Greenhouse gas emissions report revisions.** The reporter may revise a previously submitted emissions report under the circumstances specified in this section. The reporter must maintain documentation to support any revisions made to a previously submitted emissions report. Documentation for all emissions report revisions must be retained by the reporter for seven years.
- a) If, after the report submittal is complete, a report not subject to verification is found to contain an error, or accumulation of errors, resulting in a material misstatement of reported emissions the reporter must revise and resubmit an emissions report within thirty days of the finding. A revised report will be accepted only if approved by the department.
 - b) If, after the report submittal is complete, a report not subject to verification is found to contain an error, or accumulation of errors, not resulting in a material misstatement of reported emissions the reporter may revise and resubmit an emissions report within thirty days of the finding. A revised report will be accepted only if approved by the department.
 - c) If during the course of receiving verification services and prior to completion of a verification statement, a reporter chooses to make a correction or improvement to the report.
 - d) If, after the verification is completed, a report subject to verification is found to contain an error, or accumulation of errors, resulting in a material misstatement of reported emissions the reporter must revise and resubmit an emissions report within sixty days of the finding. A revised report will be accepted only if verified according to WAC 173-441-090 and approved by the department.
 - e) If a reporter makes a change in reporting methodologies that results in a change of five percent or larger in either the reporter's total direct or total indirect CO₂e emissions, then the reporter must adjust emissions reports from previous years to account for the change according to WAC 173-441-060. If the report is subject to verification, the revised reports will be accepted only if verified according to WAC 173-441-090 and approved by the department. If the activity data needed to use the new method is not available for previous emission years, then the reporter must clearly describe the change in methodology and document the lack of activity data in the emissions report, but is not required to recalculate emissions for previous years. All changes and documentation relating to previous emission years must be submitted as part of the current year's reporting activities. A reporter that voluntarily chooses to

correct errors of five percent or less in total emissions of greenhouse gases, expresses as CO₂e, reported may do so according to the following requirements:

- i) For reports subject to verification, a revised report will only be accepted if verified according to WAC 173-441-090 and approved by the department.
- ii) For reports not subject to verification, a revised report will be accepted if approved by the department.

WAC 173-441-125. Document retention and record keeping requirements.

- 1) The reporter must establish and maintain procedures for document retention and record keeping. The reporter must retain all documents regarding the design, development and maintenance of the greenhouse inventory in paper, electronic or other usable format for a period of not less than seven years following submission of each emissions report. The retained documents, including greenhouse gas emissions data, must be sufficient to allow for the verification of each emissions data report.
- 2) Upon request by the department the reporter must provide within fifteen business days all documents and data required to be retained under this section.
- 3) In addition to information submitted as part of the emissions report, each reporter must retain, at a minimum, the following information for at least seven years after the submission of the report:
 - a) A list of all greenhouse gas sources (i.e. sites, fleets, operations, processes, and activities) included in the emission estimates;
 - b) All activity data used to calculate emissions for each source, categorized by process and fuel or material type;
 - c) Documentation of the process for collecting emissions data;
 - d) Any greenhouse gas emissions calculations and methods used;
 - e) All emission factors used for emission estimates, including documentation for any factors not provided in this Chapter;
 - f) Documentation of biomass fractions for specific fuels;
 - g) All other data submitted to the department under this Chapter, including the greenhouse gas emissions report;
 - h) All computations made to gap-fill missing data;
 - i) Names and documentation of key facility personnel involved in emissions calculating and reporting;
 - j) Any other information that is required for the verification of the emissions report; and
 - k) A log to be prepared for each reporting year, beginning January 1, documenting all procedural changes made in greenhouse gas accounting methods and changes to instrumentation for greenhouse gas emissions estimation.
- 4) For measurement based methodologies, the following information also must be retained for at least seven years after the submission of the emissions report:
 - a) List of all emission points monitored;
 - b) Collected monitoring data;
 - c) A detailed technical description of the continuous measurement system, including documentation of any findings and approvals by federal, State or local agencies;
 - d) Raw and aggregated data from the continuous measurement system;
 - e) A log book of all system down-times, calibrations, servicing, and maintenance of the continuous measurement system; and

- f) Documentation of any changes in the continuous measurement system over time.
- 5) For sources required to use a method listed in Appendices A-1 through A-8 or Appendix B, a reporter must retain any additional information as required in the specific appendix.

WAC 173-441-130. Reporting fees.

- 1) **Fee determination.** Each reporter of emissions from an emissions source subject to this Chapter must pay a reporting fee. The department must establish reporting fees based on workload using the process outlined below. The fees must be sufficient to cover the department's costs to administer the greenhouse gas emissions reporting program.
- 2) **Fee eligible activities.** The costs of activities associated with administering this reporting program, as described in RCW 70.94.151(2), are fee eligible.
- 3) **Workload analysis and budget development.**
 - a) **Workload analysis.** The department must conduct a workload analysis projecting resource requirements for administering the reporting program, organized by categories of fee-eligible activities, for the purpose of preparing the budget. The department must prepare the workload analysis for the two-year period corresponding to each biennium. The workload analysis must identify the fee-eligible administrative activities related to the reporting program that it will perform during the biennium and must estimate the resources required to perform these activities.
 - b) **Budget development.** The department must prepare a budget for administering the reporting program for the two-year period corresponding to each biennium. The budget must be based on the resource requirements identified in the workload analysis for the biennium and must take into account the reporting program account balance at the start of the biennium.
- 4) **Allocation methodology.** The department must allocate the reporting program budget among the reporters required to report greenhouse gas emissions under this Chapter according to the following components:
 - a) **Flat component.** The flat component of a reporter's fee is calculated by the equal division of twenty percent of the budget amount by the total number of reporters in the greenhouse gas reporting program.
 - b) **Emissions component.** The emissions component of the reporting fee applies only to the following reporters and is calculated using the following methodology:
 - i) **Total emissions of greenhouse gases less than 25,000 metric tons of CO₂e.** For a reporter of emission from a source or combination of sources with total emissions of greenhouse gases reported of less than 25,000 metric tons of CO₂e, the emissions component of the reporting fee is calculated by dividing thirty percent of the total budget amount by the total number of reporters in this category.
 - ii) **Total emissions of greenhouse gases equal to or greater than 25,000 metric tons of CO₂e.** For a reporter of emission from a source or combination of sources with total emissions of greenhouse gases reported equal to or greater than 25,000 metric tons of CO₂e, the emissions component of the reporting fee is calculated by dividing fifty percent of the total budget amount by the total number of reporters in this category.

- 5) **Fleets of on-road motor vehicles.** The reporting fee for a reporter of emissions from a fleet of on-road motor vehicles required to report under this Chapter includes only the flat component of the fee.
- 6) **Source or combination of sources of emissions.** The reporting fee for a reporter of emissions from a source or combination of sources of emissions required to report under this Chapter includes the flat component and the applicable emissions component of the fee. If a reporter reports emissions for a fleet of on-road motor vehicles and from a source or combination of sources, the reporter pays the flat component of the reporting fee only once.
- 7) **Fee schedule.** The department must issue annually a fee schedule reflecting the administrative fee to be paid by each reporter. The fee schedule must be based on the budget and workload analysis conducted each biennium. The department must publish the fee schedule for the following year on or before October 31 of each year.
- 8) **Fee payments.** Fees specified in this section must be paid within thirty days of receipt of the department's billing statement. All fees collected under this Chapter must be made payable to the Washington department of ecology. A late fee surcharge of fifty dollars or ten percent of the fee, whichever is more, may be assessed for any fee not received after the thirty day period.
- 9) **Dedicated account.** All reporting fees collected by the department must be deposited in the air pollution control account.

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

- 1) The department must share any information reported to it under these rules with the local air authority in which the reporter operates.
- 2) The department must 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 173-441-150. Enforcement. The department may take any of the following regulatory actions to enforce this Chapter to meet the provisions of RCW 43.21B.300 which is incorporated by reference.

- 1) **Enforcement for first time violators.** The department will waive any fines or civil penalties for first-time reporting violations under this Chapter.
 - a) When the department waives a fine or penalty under this section, when possible it must require the reporter to correct the violation within a reasonable period of time, in a manner specified by the department. If correction is impossible, no correction may be required and failure to correct is not grounds for reinstatement of fines or penalties under this section.
 - b) Exceptions to the waiver requirement of this section may be made if the reporter committing the violation owns or operates, or owned or operated a different emissions source which previously violated a reporting requirement under this Chapter.
 - c) Any fine or civil penalty that is waived under this section may be reinstated and imposed in addition to any additional fines or penalties associated with a subsequent violation for noncompliance with a reporting requirement under this Chapter, or failure to correct the previous violation as required by the department in (a) of this subsection.

- 2) **Enforcement actions by the department -- notice to violators.** At least thirty days prior to the commencement of any formal enforcement action under RCW 70.94.430 and 70.94.431, the department shall cause written notice to be served upon the alleged violator or violators. The notice shall specify the provision of this Chapter or the rule or regulation alleged to be violated, and the facts alleged to constitute a violation thereof, and may include an order that necessary corrective action be taken within a reasonable time. In lieu of an order, the department may require that the alleged violator or violators appear before it for the purpose of providing the department information pertaining to the violation or the charges complained of. Every notice of violation shall offer to the alleged violator an opportunity to meet with the department prior to the commencement of enforcement action.
- 3) **Civil penalties.**
 - a) In addition to or as an alternate to any other penalty provided by law, any reporter who violates any of the provisions of Chapter 173-441 WAC may incur a civil penalty in an amount as set forth in RCW 70.94.431. Each such violation shall be a separate and distinct offense, and in case of a continuing violation, each day's continuance shall be a separate and distinct violation. Any person who fails to take action as specified by an order issued pursuant to this Chapter shall be liable for a civil penalty as set forth by RCW 70.94.431 for each day of continued noncompliance.
 - b) Penalties incurred but not paid shall accrue interest, beginning on the ninety-first day following the date that the penalty becomes due and payable, at the highest rate allowed by RCW 19.52.020 on the date that the penalty becomes due and payable. If violations or penalties are appealed, interest shall not begin to accrue until the thirty-first day following final resolution of the appeal. The maximum penalty amounts established in RCW 70.94.431 may be increased annually to account for inflation as determined by the state office of the economic and revenue forecast council.
 - c) Each act of commission or omission which procures, aids, or abets in the violation shall be considered a violation under the provisions of this section and subject to the same penalty. The penalties provided in this section shall be imposed pursuant to RCW 43.21B.300.
 - d) All penalties recovered under this section by the department shall be paid into the state treasury and credited to the air pollution control account established in RCW 70.94.015.
 - e) Public or private entities that are recipients or potential recipients of the department grants, whether for air quality related activities or not, may have such grants rescinded or withheld by the department for failure to comply with provisions of this Chapter.
 - f) In addition to other penalties provided by this Chapter, a reporter knowingly under-reporting emissions or other information used to set fees, or a reporter required to pay emission or permit fees who are more than ninety days late with such payments may be subject to a penalty equal to three times the amount of the original fee owed.
- 4) **Compliance orders.** The department may issue a compliance order in conjunction with a notice of violation. The order shall require the recipient of the notice of violation either to take necessary corrective action or to submit a plan for corrective action and a date when such action will be initiated.

- 5) **Criminal penalties.** Any reporter who knowingly violates any of the provisions of Chapter 173-441 WAC is guilty of a gross misdemeanor and upon conviction thereof shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for not more than one year, or by both for each separate violation.

WAC 173-441-160. Confidentiality.

- 1) Emissions data submitted to the department under this section are public information and must not be designated as confidential.
- 2) Any reporter 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 must be handled in accordance with the procedures specified in RCW 43.21A.160.

WAC 173-441-170. Consistency with federal regulations. Should the federal government adopt rules sufficient to track progress toward the emissions reductions required by RCW 70.235.020, the department must amend this Chapter, as necessary, to seek consistency with the federal rules to ensure duplicate reporting is not required.

WAC 173-441-180. Severability. If any provision 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.