

WAC 173-441-120 Calculation methods for facilities. This section establishes the scope of reportable GHG emissions under this chapter and GHG emissions calculation methods for facilities. Owners and operators of facilities must follow the requirements of this section to determine if they are required to report under WAC 173-441-030(1). Owners and operators of facilities that are subject to this chapter must follow the requirements of this section and all sub-parts of 40 C.F.R. Part 98 listed in Table 120-1 of this section when calculating emissions. If a conflict exists between a provision in WAC 173-441-010 through 173-441-110 and 173-441-140 through 173-441-170 and any applicable provision of this section, the requirements of those sections must take precedence.

(1) **Source categories and calculation methods for facilities.** An owner or operator of a facility subject to the requirements of this chapter must report GHG emissions, including GHG emissions from biomass, from all applicable source categories in Washington state listed in Table 120-1 of this section using the methods incorporated by reference in Table 120-1. Table 120-1 and subsection (2) of this section list modifications and exceptions to calculation methods adopted by reference in this section.

**Table 120-1:
Source Categories and Calculation Methods
Incorporated by Reference from 40 C.F.R. Part 98 for Facilities**

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria^{+#}
General Stationary Fuel Combustion Sources	C	
Electricity Generation	D	
Adipic Acid Production	E	
Aluminum Production	F	
Ammonia Manufacturing	G	
Cement Production	H	
Electronics Manufacturing	I	In § 98.91, replace "To calculate total annual GHG emissions for comparison to the 25,000 metric ton CO ₂ e per year emission threshold in paragraph § 98.2 (a)(2), follow the requirements of § 98.2(b), with one exception" with "To calculate GHG emissions for comparison to the emission threshold in WAC 173-441-030(1), follow the requirements of WAC 173-441-030 (1)(b), with one exception."
Ferrous Alloy Production	K	
Fluorinated Gas Production	L	In § 98.121, replace "To calculate GHG emissions for comparison to the 25,000 metric ton CO ₂ e per year emission threshold in § 98.2 (a)(2)" with "To calculate GHG emissions for comparison to the emission threshold in WAC 173-441-030(1)."
Glass Production	N	
HCFC-22 Production and HFC-23 Destruction	O	
Hydrogen Production	P	
Iron and Steel Production	Q	
Lead Production	R	
Lime Manufacturing	S	
Magnesium Production	T	

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria ^{+#}
Miscellaneous Uses of Carbonate	U	
Nitric Acid Production	V	
Petroleum and Natural Gas Systems	W	§ 98.231(a) should read: "You must report GHG emissions under this subpart if your facility contains petroleum and natural gas systems and the facility meets the requirements of WAC 173-441-030(1)."
Petrochemical Production	X	
Petroleum Refineries	Y	
Phosphoric Acid Production	Z	
Pulp and Paper Manufacturing	AA	
Silicon Carbide Production	BB	
Soda Ash Manufacturing	CC	
Electrical Transmission and Distribution Equipment Use	DD	§ 98.301 should read: "You must report GHG emissions under this subpart if your facility contains any electrical transmission and distribution equipment use process and the facility meets the requirements of WAC 173-441-030(1)." See subsection (2)(f) of this section.
Titanium Dioxide Production	EE	
Underground Coal Mines	FF	
Zinc Production	GG	
Municipal Solid Waste Landfills	HH	CO ₂ from combustion of landfill gas must also be included in calculating emissions for reporting and determining if the reporting threshold is met. § 98.346 (i)(13) should read: "Methane emissions for the landfill (i.e., the subpart HH total methane emissions). If the quantity of recovered CH ₄ from Equation HH-4 of this subpart is used as the value of G _{CH₄} in Equation HH-6, use the methane emissions calculated using Equation HH-8 as the methane emissions for the landfill." Otherwise use the higher methane emissions value from Equation HH-6 or Equation HH-8 of this subpart unless otherwise instructed by ecology.
Industrial Wastewater Treatment	II	CO ₂ from combustion of wastewater biogas must also be included in calculating emissions for reporting and determining if the reporting threshold is met.
Geologic Sequestration of Carbon Dioxide	RR	§ 98.441(a) should read: "You must report GHG emissions under this subpart if any well or group of wells within your facility injects any amount of CO ₂ for long-term containment in subsurface geologic formations and the facility meets the requirements of WAC 173-441-030(1)."
Electrical Equipment Manufacture or Refurbishment	SS	§ 98.451 should read: "You must report GHG emissions under this subpart if your facility contains an electrical equipment manufacturing or refurbishing process and the facility meets the requirements of WAC 173-441-030(1)."
Industrial Waste Landfills	TT	CO ₂ from combustion of landfill gas must also be included in calculating emissions for reporting and determining if the reporting threshold is met.

Source Category	40 C.F.R. Part 98 Subpart*	Exceptions to Calculation Method or Applicability Criteria ^{+#}
Injection of Carbon Dioxide	UU	§ 98.471 should read: "(a) You must report GHG emissions under this subpart if your facility contains an injection of carbon dioxide process and the facility meets the requirements of WAC 173-441-030(1). For purposes of this subpart, any reference to CO ₂ emissions in WAC 173-441-030 means CO ₂ received."

* Unless otherwise noted, all calculation methods are from 40 C.F.R. Part 98.

+ Modifications and exceptions in subsection (2) of this section and WAC 173-441-010 through 173-441-110 and 173-441-140 through 173-441-170 also apply.

Whenever the use of verification software is required or voluntarily used, the file generated by the verification software must be submitted with the facility's annual GHG report.

(2) Modifications and exceptions to calculation methods adopted by reference. Except as otherwise specifically provided:

(a) Wherever the term "administrator" is used in the rules incorporated by reference in this chapter, the term "director" must be substituted.

(b) Wherever the term "EPA" is used in the rules incorporated by reference in this chapter, the term "ecology" must be substituted.

(c) Wherever the term "United States" is used in the rules incorporated by reference in this chapter, the term "Washington state" must be substituted.

(d) Wherever a calculation method adopted by reference in Table 120-1 of this section or a definition adopted by reference from 40 C.F.R. Part 98.6 refers to another subpart or paragraph of 40 C.F.R. Part 98:

(i) If Table 120-2 of this section lists the reference, then replace the reference with the corresponding reference to this chapter as specified in Table 120-2.

(ii) If the reference is to a subpart or subsection of a reference listed in Table 120-2 of this section, then replace the reference with the appropriate subsection of the corresponding reference to this chapter as specified in Table 120-2.

(iii) If the reference is to a subpart or paragraph of 40 C.F.R. Part 98 Subparts C through UU incorporated by reference in Table 120-1, then use the existing reference except as modified by this chapter.

(e)

Use the following method to obtain specific version or date references for any reference in 40 C.F.R. Part 98 that refers to any document not contained in 40 C.F.R. Part 98:

(i) If the reference in 40 C.F.R. Part 98 includes a specific version or date reference, then use the version or date as specified in 40 C.F.R. Part 98.

(ii) If the reference in 40 C.F.R. Part 98 does not include a specific version or date reference, then use the version of the referenced document as available on the date of adoption of this chapter.

(f) For electrical transmission and distribution equipment use facilities where the electrical power system crosses Washington state boundaries, limit the GHG report to emissions that occur in Washington state using one of the following methods:

(i) Direct, state specific measurements;

(ii) Prorate the total emissions of the electric power system based upon either nameplate capacity or transmission line miles in the respective service areas by state using company records. Update the nameplate capacity or transmission line miles factor each reporting

year and include the data used to establish the nameplate capacity or transmission line miles factor with your annual GHG report;

(iii) Prorate the total emissions of the electric power system based upon population in the respective service areas by state using the most recent U.S. Census data. Update the population factor each reporting year and include the data used to establish the population factor with your annual GHG report.

**Table 120-2:
Corresponding References in 40 C.F.R. Part 98 and
Chapter 173-441 WAC**

Reference in 40 C.F.R. Part 98		Corresponding Reference in Chapter 173-441 WAC	
Section	Topic	Section	Topic
40 C.F.R. Part 98 or "part"	Mandatory Greenhouse Gas Reporting	Chapter 173-441 WAC	Reporting of Emissions of Greenhouse Gases
Subpart A	General Provision	WAC 173-441-010 through 173-441-100	General Provisions
§ 98.1	Purpose and scope	WAC 173-441-010	Scope
§ 98.2	Who must report?	WAC 173-441-030	Applicability
§ 98.2(a)	Applicability: Facility reporting	WAC 173-441-030(1)	Applicability: Facility reporting
§ 98.2 (a)(1)	Applicability: Facility reporting Table A-3	WAC 173-441-030(1)	Applicability: Facility reporting
§ 98.2 (a)(2)	Applicability: Facility reporting Table A-4	WAC 173-441-030(1)	Applicability: Facility reporting
§ 98.2 (a)(3)	Applicability: Facility reporting source categories that meet all three of the conditions listed in this paragraph (a)(3)	WAC 173-441-030(1)	Applicability: Facility reporting
§ 98.2 (a)(4)	Applicability: Facility reporting Table A-5 source categories	WAC 173-441-030(1)	Applicability: Facility reporting
§ 98.2(b)	Calculating emissions for comparison to the threshold	WAC 173-441-030 (1)(b)	Calculating facility emissions for comparison to the threshold
§ 98.2(i)	Reporting requirements when emissions of greenhouse gases fall below reporting thresholds	WAC 173-441-030(5)	Reporting requirements when emissions of greenhouse gases fall below reporting thresholds
§ 98.3	What are the general monitoring, reporting, recordkeeping and verification requirements of this part?	WAC 173-441-050	General monitoring, reporting, recordkeeping and verification requirements
§ 98.3(c)	Content of the annual report	WAC 173-441-050(3)	Content of the annual report
§ 98.3(g)	Recordkeeping	WAC 173-441-050(6)	Recordkeeping
§ 98.3 (g)(5)	A written GHG monitoring plan	WAC 173-441-050 (6)(e)	A written GHG monitoring plan
§ 98.3(i)	Calibration accuracy requirements	WAC 173-441-050(8)	Calibration and accuracy requirements
§ 98.3 (i)(6)	Calibration accuracy requirements: Initial calibration	WAC 173-441-050 (8)(f)	Calibration accuracy requirements: Initial calibration
§ 98.4	Authorization and responsibilities of the designated representative	WAC 173-441-060	Authorization and responsibilities of the designated representative
§ 98.5	How is the report submitted?	WAC 173-441-070	Report submittal
§ 98.5(b)	Verification software	WAC 173-441-070(1)	Facility report submittal
§ 98.6	Definitions	WAC 173-441-020	Definitions
§ 98.7	What standardized methods are incorporated by reference into this part?	WAC 173-441-080	Standardized methods and conversion factors incorporated by reference
§ 98.8	What are the compliance and enforcement provisions of this part?	WAC 173-441-090	Compliance and enforcement
§ 98.9	Addresses	WAC 173-441-100	Addresses
Table A-1 to Subpart A of Part 98—Global Warming Potentials, Table A-1 of this part, or Table A-1 of this subpart	Global Warming Potentials	Table A-1 of WAC 173-441-040	Global Warming Potentials
Table A-2 to Subpart A of Part 98—Units of Measure Conversions	Units of Measure Conversions	Table A-2 of WAC 173-441-080	Units of Measure Conversions

(3) **Calculation methods for voluntary reporting.** GHG emissions reported voluntarily under WAC 173-441-030 (5) must be calculated using the following methods:

(a) If the GHG emissions have calculation methods specified in Table 120-1 of this section, use the methods specified in Table 120-1.

(b) If the GHG emissions have calculation methods specified in WAC 173-441-122 or 173-441-124, use the methods specified in WAC 173-441-122 or 173-441-124.

(c) For all GHG emissions from facilities not covered in Table 120-1 of this section or persons supplying any product other than those listed in WAC 173-441-122 or 173-441-124, contact ecology for an appropriate calculation method no later than 180 calendar days prior to the emissions report deadline established in WAC 173-441-050(2) or submit a petition for alternative calculation methods according to the requirements of WAC 173-441-140.

(4) **Alternative calculation methods approved by petition.** An owner or operator may petition ecology to use calculation methods other than those specified in Table 120-1 of this section to calculate its facility GHG emissions. Such alternative calculation methods must be approved by ecology prior to reporting and must meet the requirements of WAC 173-441-140.

(5) **Emissions subject to reporting, but not subject to the reporting threshold.** Facilities that supply CO₂ as described in WAC 173-441-122 (3)(b) required to report or voluntarily reporting under WAC 173-441-030 (1) or (5) based on GHG emissions calculated under subsections (1) through (4) of this section must report supplied CO₂ using the 40 C.F.R. Part 98 Subpart PP methods described in WAC 173-441-122 (3)(b) as part of their facility report as described in that section regardless of the amount of GHG emissions. Those emissions do not count towards the reporting threshold in WAC 173-441-030(1).

[Statutory Authority: RCW 70A.15.2200. WSR 22-05-050 (Order 21-07), § 173-441-120, filed 2/9/22, effective 3/12/22. Statutory Authority: Chapters 70.94, 70.235 RCW. WSR 16-19-047 (Order 15-10), § 173-441-120, filed 9/15/16, effective 10/16/16; WSR 15-04-051 (Order 13-13), § 173-441-120, filed 1/29/15, effective 3/1/15. Statutory Authority: 2010 c 146, and chapters 70.235 and 70.94 RCW. WSR 10-24-108 (Order 10-08), § 173-441-120, filed 12/1/10, effective 1/1/11.]