PROPOSED RULE MAKING



CR-102 (June 2024) (Implements RCW 34.05.320)

Do NOT use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER STATE OF WASHINGTON FILED

DATE: February 12, 2025

TIME: 7:36 AM

WSR 25-05-041

Agency: Departmen	t of Ecology /	AO#23-04		
□ Original Notice □ Original No				
□ Supplemental No	otice to WSR	l		
□ Continuance of \	WSR			
□ Preproposal State □ Preproposal State	tement of Ind	quiry was filed as WSR 23-1	<u>19-027</u>	; or
□ Expedited Rule I	/lakingProp	posed notice was filed as W	/SR	; or
□ Proposal is exen	npt under RO	CW 34.05.310(4) or 34.05.33	0(1) ; oı	r
□ Proposal is exen				
Title of rule and oth Program Rule), Offse			oject) (Chapter 173-446 WAC (Climate Commitment Act
,				
For more information rulemaking/rulemal			ogy.wa	.gov/regulations-permits/laws-rules-
Hearing location(s)		<u>5-440-0115615</u>		
Date:	Time:	Location: (be specific)		Comment:
March 25, 2025	1 p.m.	Hearing via webinar. Join a	and	Presentation and question and answer session,
		see instructions: https://wa	ecy-	followed by the hearing. We are holding this hearing via
		wa- gov.zoom.us/meeting/regis		webinar. This is an online meeting that you can attend from any computer with internet access.
		sd-yorTorE9BuetAq9Ex9b\		
		Ff6dN_T		
March 27, 2025	9 a.m.	1		Presentation and question and answer session,
		see instructions: https://wa	ecy-	followed by the hearing. We are holding this hearing via
		wa- gov.zoom.us/meeting/regis	ter/t7I	webinar. This is an online meeting that you can attend from any computer with internet access.
		scu2vrT4iGNzTVjZXSrFb-	1017121	literating compared with internet access.
		<u>EzqKvYaZdCM</u>		
Date of intended ad		9, 2025 (Note: This is N		effective date)
Submit written com				ance for persons with disabilities:
·			Contact Kayla Stevenson	
Address Departmen			Phone	(360) 972-0313
Climate Pollution Re P.O. Box 47600	duction Progi	ram		
Olympia, WA 98504-	760			
Email kayla.stevenson@ecy.wa.gov			Fax	
Fax			TTY 711 or (877) 833-6341	
Other https://ecology	y.commentin _l	put.com?id=Aj7DMGYHa	Email	ecyadacoordinator@ecy.wa.gov
Beginning (date and time) February 12, 2025, at 12 a.m.			Other	Accessibility & ADA - Washington State Department
By (date and time)	Δnril 4 202	5 at 11:50 n m	of Eco By (da	<u>logy</u> te) <u>March 21, 2025</u>
by (date and time)	77piii 4, 202	.ο, αι 11.ου μ.π.		· · · · · · · · · · · · · · · · · · ·

Purpose of the proposal and its anticipated effects, including any changes in existing rules: The purpose of the proposed rule amendments is to update the offset protocol for Ozone Depleting Substances (ODS) and add new ODS protocols. These will increase the potential variety of offset projects that can be developed within the Cap-and-Invest Program, as directed by RCW 70A.65.170(4)(b). This statute directs Ecology to conduct rulemaking that ensures that any updates or additions to the offset program are both based in the best available science and support the needs of landowners and communities in Washington state. The proposed rulemaking amendments restrict project invalidation liability for ODS projects (in reference to WAC 173-446-580:), adopt a new ODS protocol, and require all ODS offset projects commenced

after the effective date of the rule to use the new protocol. The proposed new protocol is based on a protocol that the California Air Resources Board previously adopted (Compliance Offset Protocol Ozone Depleting Substances), and incorporates the following changes:

- 1. Update Global Warming Potential values from AR4 to AR5.
- 2. Allow ODS sourced from the federal government.
- 3. Allow credit generation from Hydrochlorofluorocarbon-22 (HCFC-22).
- 4. Allow credit generation from medical aerosols and unused solvents
- 5. Revise to increase clarity of application in Washington's Cap-and-Invest Program.

Anticipated effects include increased technical standards, decreased obstacles to project development, and will reflect policy advances. These rule changes work in tandem with additional rules under the Climate Commitment Act to achieve the state's mandate of net-zero greenhouse gas emissions by 2050.

Reasons supporting proposal: The Climate Commitment Act states that Ecology shall consider adopting offset protocols that make use of aggregation (the grouping of multiple small projects into a single, larger offset project) and cost-effective provisions for monitoring, reporting and verification (RCW 70A.65.170). During the public comment period on our initial adoption of Chapter 173-446 WAC, Ecology received 28 comments from organizations, Tribal governments, and individuals recommending offset protocol revisions and additions. Ecology's response to those comments stated the agency's intent to consider new and revised offset protocols in a subsequent rulemaking. The purpose of this rulemaking is to broaden the scope of offset protocols available in the Cap-and-Invest Program. This rulemaking will increase the diversity of offset projects available to Cap-and-Invest Program participants, broadening the scope of potential greenhouse gas reductions in our state

Statutory author	ity for adoption: RCW	70A.65 (Greenhouse Gas Emissions—Cap-and-	-Invest Program		
Statute being im	plemented: RCW 70A.	65 (Greenhouse Gas Emissions—Cap-and-Inves	st Program		
Is rule necessary	y because of a:				
Federal La	Federal Law?				
Federal Co	☐ Yes ⊠ No				
State Court			☐ Yes ⊠ No		
If yes, CITATION:					
Agency commer matters: N/A	nts or recommendation	s, if any, as to statutory language, implement	ation, enforcement, and fiscal		
	ent: (person or organiza nt: □ Private. □ Publi	ntion) Department of Ecology c. ⊠ Governmental.			
Name of agency	personnel responsible	e for:			
	Name	Office Location	Phone		
Drafting	Jordan Wildish	Ecology HQ	(360) 280-6488		
Implementation	Jordan Wildish	Ecology HQ	360) 280-6488		
Enforcement	Jordan Wildish	Ecology HQ	360) 280-6488		
Is a school distri If yes, insert state	-	nent required under RCW 28A.305.135?	□ Yes ⊠ No		
The public may Name Address		chool district fiscal impact statement by contacting	j :		
Phone					
Fax					
TTY					
Email					
Other					
	analysis required und	er RCW 34.05.328?			

□ Yes: A preliminary cost-benefit analysis may be obtained by contacting:

Name Kayla Stevenson

Address Department of Ecology

Climate Pollution Reduction Program

P.O. Box 47600

Fa TT W Er Ot	Olympia, WA 98504-760 none (360) 972-0313 ax N/A TY People with speech disability may call TTY ashington Relay Service at 711 mail kayla.stevenson@ecy.wa.gov ther Please explain:	at 877-833	3-6341. People with impaired hearing may call
	Fairness Act and Small Business Economic overnor's Office for Regulatory Innovation and		Statement e (ORIA) provides support in completing this part.
This rule pro chapter 19.8 check the bo	35 RCW). For additional information on exempt ox for any applicable exemption(s):	tions, cons	requirements of the Regulatory Fairness Act (see ult the exemption guide published by ORIA. Please CW 19.85.061 because this rule making is being
adopted sole regulation thadopted.	ely to conform and/or comply with federal statu	te or regula	ations. Please cite the specific federal statute or escribe the consequences to the state if the rule is not
defined by <u>F</u> □ This rule	RCW 34.05.313 before filing the notice of this p	roposed ru	the agency has completed the pilot rule process the. e provisions of RCW 15.65.570(2) because it was
☐ This rule	proposal, or portions of the proposal, is exem	pt under <u>R</u>	CW 19.85.025(3). Check all that apply:
	RCW 34.05.310 (4)(b)		RCW 34.05.310 (4)(e)
	(Internal government operations)		(Dictated by statute)
	RCW 34.05.310 (4)(c)		RCW 34.05.310 (4)(f)
	(Incorporation by reference)		(Set or adjust fees)
	RCW 34.05.310 (4)(d)		RCW 34.05.310 (4)(g)
	(Correct or clarify language)	_	((i) Relating to agency hearings; or (ii) process
	(construction) language,		requirements for applying to an agency for a license or permit)
☐ This rule	e proposal, or portions of the proposal, is exemple proposal, or portions of the proposal, is exemple of how the above exemption(s) applies to the proposal of	pt under Ro	
statutes, or to (i.e., not executeria referalso be fully	federal laws. Where the proposed rule differs for empt from) analysis required under the Regulat enced in RCW 19.85.025(3) as defined by the	rom this ba cory Fairnes Administra	ements fully or partially specified by existing rules, iseline of existing requirements, it is typically subject to as Act (RFA; Chapter 19.85 RCW) based on meeting ative Procedure Act in RCW 34.05.310. The rule may les (i.e., it does not impose compliance costs on small
Baseline fo	r this rulemaking		
comparison For this rule Chapter 70A Chapter 173 The Californ	between the state of the world with and without making, the baseline includes: A.65 RCW Greenhouse Gas Emissions-Cap and B-446 WAC, Climate Commitment Act Program ia Air Resources Board, Compliance Offset Program is a second compliance of the complex of the com	nt the propo nd Invest Pr Rule otocol Ozo	
The propos	sed rule		
The propose	ed rule amendments would:		

Amend WAC 173-446-505 to adopt by reference: Ecology Compliance Offset Protocol Ozone Depleting Substances
Projects, version 1.0. All new ODS offset projects with a commencement date after the rule adoption date will be
required to use this protocol.

Baseline

Chapter 173-446 WAC currently adopts California's Air Resources Board's (CARB) protocol for the destruction of ODS: "Compliance Offset Protocol Ozone Depleting Substances, November 14, 2014".

Proposed

Ecology proposes to adopt a new protocol, named "Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0," which is based on the California protocol with modifications (as discussed below in sections 2.3.3 through 2.3.6). All new ODS offset projects with a commencement date after the rule adoption date will be required to use Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0.

Expected impact

Ecology's four proposed substantive changes will be considered as separate amendments below. The actual act of adoption of the new protocol will not have significant costs or benefits compared to the baseline aside from the proposed changes within the protocol.

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).

Restrict reasons for offset credit invalidation to events that directly impact ODS handling, destruction and emissions.
 (WAC 173-446-580(3))

Baseline

WAC 173-446-580(3)(b) lists potential reasons for invalidating an issued offset credit. It reads:

(b) The offset project activity(ies) or implementation of the offset project was not in accordance with all local, regional, state, and national environmental and health and safety laws and regulations that apply in the jurisdiction in which the offset project is located and that directly apply to the offset project, including as specified in the applicable compliance offset protocol during the reporting period for which the ecology offset credit was issued.¹

To date, Ecology has issued ODS offset credits for three projects and has thus far initiated no actions pertaining to their validity.²

Proposed

The amendment restricts reasons for offset credit invalidation to events that directly impact ODS handling, destruction and emissions. It adds the following, qualifying restriction to WAC 173-446-580(3)(b).

(i) For offset projects using the ozone depleting substances (ODS) protocol non-compliance events that do not directly impact ODS handling, destruction, and emissions from ODS processing will not be considered grounds for an initial determination of invalidation.

Expected impact

The amendment clarifies and restricts the reason an ODS offset credit might be invalidated, which would make it of no value. By restricting potential invalidation reasons to those directly impacting the gases involved, project developers would face a more certain regulatory environment. This should make them more willing to engage in developing offset projects for ODS. The restriction of the ability to invalidate offset credits to reasons directly pertaining to ODS handling weakens Ecology's regulatory authority to some degree. The proposed reduction in authority still maintains Ecology's ability to invalidate credits for reasons affecting their legitimacy, however.

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).

 The new protocol (Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0) adopted by reference would:

Add destruction of refrigerant HCFC-22 as a potential source of offset credits.

Baseline

The currently adopted protocol is titled "California Air Resource's Board Ozone Depleting Substances Projects Protocol, November 14, 2014". The protocol contains six refrigerants, the recovery and destruction of which can generate offset credits. They are all "CFCs" and are as follows: CFC-11, CFC-12, CFC-13, CFC-113, CFC-114, CFC-115. The 100-year global warming potential relative to CO2 of these gases range from 4,750 to 14,400 in the currently adopted California protocol. Proposed

The proposed amendment would add destruction of the refrigerant hydrochlorofluorocarbon-22 (HCFC-22), also known as R-22, or by the brand name Freon, as a potential source of offset credits. Within the proposed protocol the global warming

¹ WAC 173-446-580:, https://app.leg.wa.gov/WAC/default.aspx?cite=173-446-580

² Communications with Ecology's Climate Pollution Reduction Program, January 2025.

potential assigned to it is 1,789, its cumulative 10-year emission factor is 72%, and its substitute emissions factor is 389. The substitute emissions factor is the expected GWP of the refrigerant that would replace HCFC-22. The 10-year emissions factor is the expected percentage of the material to leak from equipment into the atmosphere over the next 10 years.

Expected impact

Of the 6.6 million pounds of ODS refrigerants reclaimed in 2022, 5.7 million (86 percent) were HCFC-22. The relatively large amount of HCFC-22 as a fraction of total ODS refrigerants reclaimed suggests considerable opportunity for the generation of offset credits. However, this is complicated by the relatively strong market for its reuse. At current prices for carbon allowances and offset credits, it is unclear how much if any HCFC-22 will be diverted for destruction versus reuse. If higher prices for compliance instruments (carbon allowances and offsets) materialize, HCFC-22 could become a significant source of ODS offset credits.

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).

• The new protocol (Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0) adopted by reference would:

Add medical aerosols and solvents as a potential source of offset credits.

Baseline

CARB's protocol, Compliance Offset Protocol Ozone Depleting Substances, November 14, 2014, allows ODS to be sourced from only the following:

- (1) Refrigerants from industrial, commercial or residential equipment, systems, and appliances or stockpiles;
- (2) ODS blowing agents extracted and concentrated from appliance foams;
- (3) Intact foam sourced from building insulation.

Ecology understands some medical aerosols and solvents contain ODS but are currently unsellable. This material, though not large in amount, resides in stockpiles and warehouses. Overtime, the ODS in this material will leak out into the atmosphere. Proposed

In the proposed protocol, ODS that were marketed as medical aerosols and solvents can be used as a potential source of offset credits. They must be in unused condition.

Expected impact

Combined with sourcing from federal facilities, we expect this amendment to generate additional offset credits. We currently lack information as to the amount of material in this specific category, but when combined with material from federal facilities and agencies, one offset program developer reported an anticipated 50,000 to 70,000 additional credits per year might be generated. In addition to expanding the availability of offset credits, the destruction of these gases will prevent damage to the ozone layer, which is showing signs of repair following the coordinated international efforts embodied in the Montreal Protocol.

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).

• The new protocol (Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0) adopted by reference would: Add material sourced from the federal government or agencies as a potential source of offset credits.

Baseline

CARB's protocol, Compliance Offset Protocol Ozone Depleting Substances, November 14, 2014, allows ODS to be sourced from only the following:

- (1) Refrigerants from industrial, commercial or residential equipment, systems, and appliances or stockpiles;
- (2) ODS blowing agents extracted and concentrated from appliance foams:
- (3) Intact foam sourced from building insulation.

Ecology understands ODS material currently recovered from federal facilities is currently being sold into the reuse market. There had been an expectation that the federal government would facilitate destruction of this material, but this has not happened.

Proposed

The proposed rule would allow material sourced from the federal government or agencies as a potential source of offset credits.

Expected impact

Adding this source of ODS gases to the proposed protocol should expand the number of offset credit projects developed and ODS destroyed.

Combined with sourcing from unused medical aerosols and solvents, we expect this to generate additional offset credits. There is currently little information about the amount of material in this specific category, but when combined with material from aerosols and solvents, one offset program developer reported an anticipated 50,000 to 70,000 additional credits per year might be generated. In addition to expanding the availability of offset credits, the destruction of these gases will prevent marginal damage to the ozone layer, which is showing signs of repair following the coordinated international efforts embodied in the Montreal Protocol.

Informed by input provided by the ODS working group, Ecology determined that:

"Federal facilities and auctions represent a potentially significant supply of ODS which, unless destroyed, will eventually leak out into the atmosphere. Sourcing ODS from federal sources, as opposed to sourcing from private businesses or state or local government does not impact the integrity of the offset credits generated."

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).

• The new protocol (Ecology Compliance Offset Protocol Ozone Depleting Substances Projects, version 1.0) adopted by reference would: Update the assigned global warming potential values for eligible gases.

Baseline

CARB's protocol, Compliance Offset Protocol Ozone Depleting Substances, November 14, 2014, assigns global warming potential (GWP) values to the gasses eligible for offset credits. Those values come from the Intergovernmental Panel on Climate Changes Assessment Report 4 (AR-4), published in 2007. The assigned 100-year global warming potential for the CFCs in the currently adopted protocol are:

Table 1: Current Global Warming Potential (GWP) Values

ODS Gas	100-year GWP
CFC-11	4,750
CFC-12	10,900
CFC-13	14,400
CFC-113	6,130
CFC-114	10,000
CFC-115	7,370

Proposed

The proposed rule would update the assigned global warming potential values for previously eligible gases.

Whereas the current values are from the Intergovernmental Panel on Climate Change's 2011 Assessment Report 4 (AR4), the proposed values are from Assessment Report 5 (AR5), published in 2014.

The AR4 values would still be applied to offset projects that commenced before the adoption of the proposed rule.

The new values and the relative change are indicated in the table below.

Table 2: Proposed changes In GWP values

ODS	Change	Proposed value (AR5)	Current value (AR4)
CFC-11	-90	4,660	4,750
CFC-12	-700	10,200	10,900
CFC-13	-500	13,900	14,400
CFC-113	-310	5,820	6,130
CFC-114	-1,410	8,590	10,000
CFC-115	300	7,670	7,370

Expected impact

The average result is the reduction of GWP values by around five percent. For this set of gases, the same amount of work collecting, transporting and destroying the gases will yield slightly fewer offset credits. The annual variation in the value of those credits, however, is likely to be greater. The price change in California's offset credits from early November 2025 until early January 2026 for example was more than 10 percent.

The ODS protocol technical working group, formed by Ecology to inform this rulemaking states the following impacts: "Switching to AR5 makes the protocol more up-to-date, more conservative, and also aligns with Ecology's adopted [hydrofluorocarbon (HFC)] rule (WAC 173-443-030) which uses AR5 values except where substances are otherwise covered by WAC 173-441... AR5 values have now been adopted by all voluntary offset registries with relevant comparable protocols: [American Carbon Registry (ACR)], the Climate Action Reserve, and Verra."

By using the more widely adopted values, Ecology and offset developers would join a broader consensus as to the value of ODS destruction. This may impart greater confidence in the value of the issued credits.

Relevant Exemptions: RCW 19.85.025(4) (does not affect small businesses).
(2) Scope of exemptions: Check one. ☑ The rule proposal: Is fully exempt. (Skip section 3.) Exemptions identified above apply to all portions of the rule proposal. ☐ The rule proposal: Is partially exempt. (Complete section 3.) The exemptions identified above apply to portions of the rule proposal, but less than the entire rule proposal. Provide details here (consider using this template from ORIA): ☐ The rule proposal: Is not exempt. (Complete section 3.) No exemptions were identified above.
(3) Small business economic impact statement: Complete this section if any portion is not exempt.
If any portion of the proposed rule is not exempt , does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?
□ No Briefly summarize the agency's minor cost analysis and how the agency determined the proposed rule did not impose more-than-minor costs □ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses and a small business economic impact statement is required. Insert the required small business economic impact statement here: The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:
Name
Address Phone
Fax
TTY Email
Other
Date: February 12, 2025 Signature:
Name: Heather Bartlett
Title: Deputy Director