



# PROPOSED RULE MAKING

**CR-102 (July 2022)**  
**(Implements RCW 34.05.320)**  
Do **NOT** use for expedited rule making

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STATE OF WASHINGTON  
FILED

DATE: October 30, 2023  
TIME: 8:20 AM

WSR 23-22-086

**Agency:** Department of Ecology AO #22-15

- Original Notice**
- Supplemental Notice to WSR** \_\_\_\_\_
- Continuance of WSR** \_\_\_\_\_

- Preproposal Statement of Inquiry was filed as WSR 23-01-010 ; or**
- Expedited Rule Making--Proposed notice was filed as WSR \_\_\_\_\_; or**
- Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or**
- Proposal is exempt under RCW \_\_\_\_\_.**

**Title of rule and other identifying information:** (describe subject) Ecology is proposing rule language for new Chapter 173-408 WAC – Landfill Methane Emissions. The purpose of this new chapter is to implement Reducing Methane Emissions from Landfills (Engrossed Second Substitute House Bill 1663, Chapter 179, Laws of 2022, codified as Chapter 70A.540 RCW).

For more information on this rulemaking visit: <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-408>

**Hearing location(s):**

Date:	Time:	Location: (be specific)	Comment:
December 6, 2023	10:00 a.m.	Webinar: Join online and see instructions: <a href="https://waecy-wa.gov.zoom.us/meeting/register/tZModOmvrzloGdlvgOc_AR8q0WV-INQGfOS">https://waecy-wa.gov.zoom.us/meeting/register/tZModOmvrzloGdlvgOc_AR8q0WV-INQGfOS</a> To join by phone: Call <a href="tel:253-215-8782">253-215-8782</a> Enter meeting ID: 875 3071 9236	Presentation, question and answer session followed by the hearing.

**Date of intended adoption:** April 1, 2024 (Note: This is **NOT** the effective date)

<p><b>Submit written comments to:</b></p> <p>Name: Bill Flagg</p> <p>Address: Send US mail to: Department of Ecology Air Quality Program PO Box 47600, Olympia, WA 98504-7600</p> <p>Or</p> <p>Send parcel delivery services to: Department of Ecology Air Quality Program 300 Desmond Dr. SE, Lacey, WA 98503</p> <p>Email: Submit comments by mail, online, or at the hearing</p>	<p><b>Assistance for persons with disabilities:</b></p> <p>Contact Ecology ADA Coordinator Phone: 360-407-6831</p> <p>Fax: N/A</p>
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Fax: N/A

Other: Online:

<https://aq.ecology.commentinput.com/?id=riShmbYcF>

By (date) December 13, 2023 (close of comment period)

TTY: For Washington Relay Service or TTY call 711 or 877-833-6341

Email: [ecyADAcordinator@ecy.wa.gov](mailto:ecyADAcordinator@ecy.wa.gov)

Other: Visit <https://ecology.wa.gov/About-us/Accessibility-equity/Accessibility> for more information.

By (date) November 29, 2023

**Purpose of the proposal and its anticipated effects, including any changes in existing rules:** Chapter 70A.540 RCW, Landfills – Methane Emissions, establishes requirements for municipal solid waste (MSW) landfills that received solid waste after January 1, 1992. Ecology is required to adopt rules to implement new requirements, including:

Technology and Performance Requirements:

- Gas collection and control system (GCCS) installation
- GCCS design plan
- Gas control system equipment requirements
- GCCS performance requirements
- Adopting methane destruction efficiency requirements for flares and energy recovery control devices
- Adopting requirements for open flare systems
- Adopting requirements for landfill gas treatment and processing
- Wellhead gauge pressure requirements
- Requirements for devices measuring gauge pressure
- Requirements for instruments used to measure methane
- Control device destruction efficiency calculation requirements
- Gas generation flow rate calculation requirements
- Source testing requirements for any gas control device or devices

Monitoring Requirements:

- Instantaneous and integrated surface emissions monitoring
- Surface monitoring design plan
- Remonitoring and corrective action(s) for methane limit exceedances
- Gas collection and control system (GCCS) component monitoring
- Adopting methane leak rate limits for treatment systems that process routed gas
- Wellhead gauge pressure monitoring
- Requirements for shutdown and removal of the GCCS

Reporting and Recordkeeping Requirements:

- Waste in place reporting
- Landfill gas heat input capacity calculation and reporting
- Surface emissions monitoring reporting
- Gas collection and control system (GCCS) operations reporting
- Records maintenance for monitoring, source testing, landfill operations, operation of the GCCS, methane level exceedances, and actions involving the disturbance or removal of areas of the landfill surface
- Reporting for capping of landfill gas collection wells, removal, or cessation of GCCS equipment
- Landfill closure reporting to Ecology or the local clean air agency

Other Requirements:

- Incorporating new statutory civil penalties for violation of the law and implementing rules
- Adopting maximum methane concentration limits for both owners and operators of active and closed MSW landfills
- Adopting exemptions for methane concentration limit exceedances due to activities defined in RCW 70A.540.050(3)
- Establishing a method for landfills to claim exemption from the rule
- Establishing alternative compliance measures
- Terms and definitions

Ecology's rulemaking must be informed by landfill methane regulations adopted by the California Air Resources Board, the Oregon Environmental Quality Commission, and the United States Environmental Protection Agency.

This rulemaking applies to owners and operators of MSW landfills that have received solid waste after January 1, 1992. This includes both active and closed MSW landfills as defined in RCW 70A.540.010. The proposed rule exempts the following types of landfills from these new requirements:

- Landfills that receive or received only hazardous waste(s).
- Landfills regulated under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Chapter 103 (CERCLA, also known as Superfund), if they meet the criteria for exemption set forth in the rule.
- Landfills that receive or received “only inert waste or non-decomposable wastes”, as defined in WAC 173-350-100.
- Limited purpose landfills, as defined in WAC 173-350-100.

**Reasons supporting proposal:** Chapter 70A.540 RCW states that no location on a MSW landfill surface may exceed the following methane concentration limits:

- Five hundred parts per million by volume as determined by instantaneous surface emissions monitoring; or
- An average methane concentration limit of 25 parts per million by volume as determined by integrated surface emissions monitoring.

The law requires these limits to go into effect beginning January 1<sup>st</sup> of the year following Ecology’s adoption of rules to implement Chapter 70A.540 RCW, or upon commencing operation of a newly installed GCCS or modification of an existing GCCS, whichever is later. In addition, Ecology may postpone the effective date of these limits to accommodate significant technological improvements, such as the installation of an energy recovery device or devices, for up to 24 months after Ecology’s adoption of these rules.

If Ecology does not adopt rules to implement the law, then the above statutory methane concentration limits cannot go into effect.

MSW landfills are the third-largest source of human-related methane emissions in the United States.<sup>1</sup> Methane is a potent greenhouse gas (GHG) that has approximately 83 times the global warming potential of CO<sub>2</sub> over a 20-year period: reducing methane emissions is one of the best strategies for mitigating the impacts of climate change in the near term.<sup>2</sup>

This legislation and rulemaking align with Washington State’s 2030, 2040, and 2050 GHG reduction goals. Based on current science and emissions trends, Washington must achieve these limits to support the global effort to mitigate the most significant impacts of climate change.

**Statutory authority for adoption:** Chapter 70A.540 RCW, Landfills – Methane Emissions

**Statute being implemented:** Chapter 70A.540 RCW, Landfills – Methane Emission

**Is rule necessary because of a:**

- |                         |                              |  |
|-------------------------|------------------------------|--|
| Federal Law?            | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Federal Court Decision? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| State Court Decision?   | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

If yes, CITATION:

**Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:**

**Type of proponent:**  Private  Public  Governmental

**Name of proponent:** (person or organization) Department of Ecology

**Name of agency personnel responsible for:**

	Name	Office Location	Phone
Drafting:	Bill Flagg	Lacey, WA	564-669-1385
Implementation:	Kathy Taylor	Lacey, WA	360-584-5104
Enforcement:	Kathy Taylor	Lacey, WA	360-584-5104

**Is a school district fiscal impact statement required under [RCW 28A.305.135](#)?**  Yes  No

If yes, insert statement here:

<sup>1</sup> [https://19january2021snapshot.epa.gov/lmop/basic-information-about-landfill-gas\\_.html](https://19january2021snapshot.epa.gov/lmop/basic-information-about-landfill-gas_.html)

<sup>2</sup> IPCC AR6, WG 1, The Physical Science Basis at 7-125.

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name:  
Address:  
Phone:  
Fax:  
TTY:  
Email:  
Other:

**Is a cost-benefit analysis required under [RCW 34.05.328](#)?**

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

Name: Bill Flagg  
Address: Department of Ecology  
Air Quality Program  
P.O. Box 47600  
Olympia, WA 98504-7600  
Phone: 564-669-1385  
Fax: N/A  
TTY: For Washington Relay Service or TTY, call 877-833-6341  
Email: [bill.flagg@ecy.wa.gov](mailto:bill.flagg@ecy.wa.gov)  
Other: N/A

No: Please explain:

**Regulatory Fairness Act and Small Business Economic Impact Statement**

Note: The [Governor's Office for Regulatory Innovation and Assistance \(ORIA\)](#) provides support in completing this part.

**(1) Identification of exemptions:**

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see [chapter 19.85 RCW](#)). For additional information on exemptions, consult the [exemption guide published by ORIA](#). Please check the box for any applicable exemption(s):

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.061](#) because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by [RCW 34.05.313](#) before filing the notice of this proposed rule.

This rule proposal, or portions of the proposal, is exempt under the provisions of [RCW 15.65.570](#)(2) because it was adopted by a referendum.

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(3). Check all that apply:

- |   |   |
|---|---|
| <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(b)<br>(Internal government operations) | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(e)<br>(Dictated by statute)  |
| <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(c)<br>(Incorporation by reference)     | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(f)<br>(Set or adjust fees)   |
| <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(d)<br>(Correct or clarify language)    | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(g)<br>(i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit) |

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(4) (does not affect small businesses).

This rule proposal, or portions of the proposal, is exempt under RCW \_\_\_\_\_.

Explanation of how the above exemption(s) applies to the proposed rule:

**(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:

<b>Date:</b> October 30, 2023	<b>Signature:</b> 
<b>Name:</b> Heather Bartlett	
<b>Title:</b> Deputy Director	