



DEPARTMENT OF
ECOLOGY
State of Washington

Rule Implementation Plan Chapter 173-408 WAC, Landfill Methane Emissions

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Rule Implementation Plan
Chapter 173-408 WAC
Landfill Methane Emissions

Air Quality Program
Washington State Department of Ecology
Olympia, Washington

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Purpose

The Washington State Department of Ecology (Ecology) provides the information in this implementation plan to meet agency and Administrative Procedure Act (RCW 34.05.328) requirements related to rule adoptions.

Introduction

On May 13, 2024, Ecology adopted Chapter 173-408 WAC, Landfill Methane Emissions (AO # 22-15). The purpose of this rule implementation plan is to inform those who must comply with Chapter 173-408 WAC about how Ecology intends to:

- Implement and enforce the rule.
- Inform and educate persons affected by the rule.
- Promote and assist voluntary compliance for the rule.
- Evaluate the rule.
- Train and inform Ecology staff about the new or amended rule.

Also included in this plan is information about:

- Supporting documents that may need to be written or revised because of the new rule or amended rule.
- Other resources where more information about the rule is available.
- Contact information for Ecology employees who can answer questions about the rule implementation.

Implementation and Enforcement

This rule applies to all municipal solid waste (MSW) landfills that have received solid waste after January 1, 1992, and third-party owners and operators who operate all or a portion of a gas collection and control system (GCCS) or energy recovery device.

Ecology Air Quality Program staff and local clean air agencies will implement and enforce this rule. Local clean air agencies manage air regulations in 21 of Washington's 39 counties, and Ecology manages air quality in most other areas. More information on agency jurisdictional boundaries can be found [here](#).¹

Beginning on June 13, 2024, the following requirements must be met within 90 days:

- Each owner or operator of a MSW landfill that received solid waste after January 1, 1992, must submit an initial waste in place report to the department in accordance with Washington Administrative Code (WAC) 173-408-170(1).
- Each owner or operator of an active or inactive MSW landfill having waste in place of 450,000 tons or greater, or a closed MSW landfill having waste in place of 750,000 tons or greater, must submit an initial landfill gas heat input capacity (HIC) report to the department in accordance with WAC 173-408-170(2).

Beginning on January 1, 2025, or upon the conditions stated in the Revised Code of Washington (RCW) 70A.540.050(1), all active, closed, and inactive MSW landfills must meet additional requirements, including the following:

- No location on a MSW landfill surface may exceed the methane concentration limits specified in [RCW 70A.540.050\(1\)\(a\) and \(b\)](#).²

Owners and operators of MSW landfills must submit reports that will be reviewed for compliance purposes. Ecology is currently creating an electronic reporting platform, Methane Emissions Monitoring and Reporting (MEMR), that will be utilized for some of the rule's reporting requirements.

Ecology and local clean air agencies have authority under the Washington Clear Air Act, Chapter 70A.15 RCW, to conduct on-site inspections and to require access to records, books, files, and other information specific to the control, recovery, or release of methane at MSW landfills subject to this rule. Local clean air agencies may conduct onsite inspections at MSW landfills within their jurisdiction without the assistance of Ecology.

The owner or operator of a MSW landfill which is required to obtain an air operating permit will also be required to submit for approval a compliance plan addressing the applicable requirements in Chapter 173-408 WAC.

Ecology will provide technical assistance, when requested, to all local clean air agencies

¹ <https://ecology.wa.gov/About-us/Accountability-transparency/Partnerships-committees/Clean-air-agencies>

² <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.540.050>

Informing and Educating Persons Affected by the Rule

Throughout the rulemaking process, Ecology informed affected parties and other interested persons through the following actions:

- Emailed rulemaking announcement, proposal, and adoption notices to the Air Quality [Rules and SIPs email list](#)³ and [WACtrack email list](#)⁴;
- Emailed the above rulemaking notices plus draft rule language and other meeting material to the Landfill Methane Emissions email list and the Washington State Waste Plan email list;
- Issued press releases for the announcement, proposal, and adoption of the rule;
- Highlighted the goals of this rulemaking via social media;
- Hosted presentations at advisory committee meetings, technical sessions, and other events;
- Posted information on Ecology’s [Landfill Methane Emissions rulemaking webpage](#)⁵;
- Published informative and educational blogs on [Ecology's webpage](#)⁶; and
- Held three stakeholder meetings and a public hearing via webinar and held individual meetings with stakeholders as requested.

Ecology will continue to notify interested persons about the adopted rule through the [Landfill methane emissions email list](#)⁷.

Air Quality program staff will also issue specific guidance documents for aspects of the rule as they are developed, and when additional trainings are developed and ready to offer.

³ https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_68

⁴ https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_60

⁵ <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-408>

⁶ <https://ecology.wa.gov/blog>

⁷ https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_265

Promoting and Assisting Voluntary Compliance

Actions described in the previous section regarding informing and educating stakeholders will help to promote voluntary compliance. Other activities we anticipate offering to further promote voluntary compliance are:

- Developing guidance;
- Offering webinars to introduce the electronic reporting system;
- Posting the regulations and guidance documents on Ecology's webpage;
- Targeted outreach informing affected parties of the regulations and guidance documents;
- Offering technical assistance;
- Promote available grant funding;
- Training Ecology staff on new and amended regulations so they can answer questions; and
- Maintaining a file for comments and suggestions for improving regulations to be reviewed during subsequent rulemaking. These suggestions can come from Ecology staff, local clean air agencies, the regulated community, and other interested stakeholders.

Evaluating the Rule

Ecology will monitor the impacts of the rule and evaluate its effectiveness. Key points Ecology Air Quality program staff will perform:

- Offer assistance to owners or operators of MSW landfills;
- Offer assistance to third-party owners or operators required to comply with the rule;
- Regularly connect with local clean air agencies responsible for implementing and enforcing requirements of the rule;
- Consider future rulemaking to amend the rule based on the rule's effectiveness in meeting the intent of the authorizing statute;
- Conduct onsite inspections at facilities;
- Review and analyze required electronic reports on the MEMR platform, as well as other report submittals, to assist in compliance and in determining effectiveness of the rule;
- Review and analyze other records to assist in compliance and in determining effectiveness of the rule; and
- Analyze the effectiveness and equitability of the rule to determine if changes are needed to help regulated entities comply.

Training and Informing Ecology Staff

Air Quality program staff involved in the development of the rule are responsible for rule implementation. Headquarters staff will work with regional Air Quality program staff to assist in rule implementation. The Air Quality program will continue to utilize staff meetings, the agency website, the agency intranet, and email to educate staff.

List of Supporting Documents that May Need to be Written or Revised

Ecology is developing or revising guidance documents. The main documents include:

- Implementation guidance to help regulated entities understand how to comply with rule requirements;
- Guidance on heat input capacity calculation methodology;
- Guidance on waste in place calculation methodology;
- Guidance for OTM-51 monitoring methodology; and
- Methane Emissions Monitoring and Reporting (MEMR) guidance and templates.

Additional guidance documents and other resources will be developed as needed based on questions from landfill owners and operators, technology improvements or changes, and industry best practices.

The [Landfill Methane Emissions rulemaking webpage](https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-408)⁸ also provides many technical assistance documents and resources including slides from stakeholder meetings as well as the public hearing. It also contains draft rule language, presentations, information from the public hearing, and other documents. Once the rulemaking is complete, Ecology will launch additional web pages to support implementation.

⁸ <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-408>

More Information

- [Rulemaking webpage](#)⁹
- [Chapter 70A.540 RCW](#)¹⁰
- [Landfill methane emissions email list](#)¹¹

⁹ <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-408>

¹⁰ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.540>

¹¹ https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_265

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