

# Landfill Gas Emissions 2021 Rulemaking

## Summary

### Advisory Committee Meeting #1

Tuesday, Jan. 19, 2021, 12 p.m. to 2 p.m. (originally scheduled until 4 p.m.)  
Web-based meeting

#### List of RAC member attendees

Michael Guebert	Metro
Patrick S. Sullivan	SCS Engineers
Commissioner Steve Kramer	Association of Oregon Counties
Amelia Schlusser	Green Energy Institute
Jennifer Stuber	Oregon Refuse & Recycling Association
Jesse Berger	Lane County
Damon Motz-Storey	Oregon Physicians for Social Responsibility
Tori Heroux	Neighbors for Clean Air

#### List of DEQ team attendees

Heather Kuoppamaki	DEQ team
Ali Mirzakhali	DEQ team
Michael Orman	DEQ team
Daniel Defehr	DEQ team
Karen Williams	DEQ team
Matt Steele	DEQ team

#### List of handouts and presentation notes

- Committee Charter
- Agenda
- Meeting Presentation
- Policy Primer
- Landfill Gas Primer
- Rule Comparison Document

Time	Topic
12 p.m.	Introductions and agenda review
12:25 p.m.	Advisory Committee Business
12:35 p.m.	Overview of rulemaking – purpose, schedule, objectives
12:45 p.m.	Landfill basics
12:55 p.m.	Rule comparison
1:05 p.m.	Discussion and next steps
2 p.m.	Adjourn meeting



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*DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.*

# Meeting Summary

Jamie Damon, lead facilitator welcomed the RAC members and shared the purpose of the meeting. She asked the attendees to go once around the virtual table and share their name, affiliation, and any additional information they would like to share with the group.

Heather Kuoppamaki shared that she is a Senior Air Quality Engineer at the Department of Environmental Quality (DEQ) and that she is the lead on the Landfill Gas Emissions rule making.

Matt Steele shared that he is a Greenhouse Gas Reporting Specialist at DEQ and that he will be following the rule making.

Karen Williams shared that she is a Policy Analyst and Air Quality Planner, and that she will be supporting Heather Kuoppamaki in the Landfill Gas Emissions rulemaking.

Daniel Defehr shared that he is a Rule Writer at DEQ and that he will be supporting Heather Kuoppamaki in the Landfill Gas Emissions rule making.

Ali Mirzakhilili shared that he is the Air Quality Administrator at DEQ. He welcomed the RAC to the rulemaking and shared the importance of the process in reducing Oregon's greenhouse gas emissions. He informed the attendees that he will be supporting the process and thanked them for their time.

Wasco County Commissioner Steve Kramer shared that he spent 12 years as a hauler, and now chairs the Tri County Household Hazardous Waste & Recycling Program. He informed the group that he looks forward to helping where he can.

Michael Guebert shared that he works for Metro in Portland, OR and that his professional duties include overseeing the St. John's Landfill as well as a small City of Portland landfill. He continued, sharing that he oversees the Portland region's solid waste program. Michael informed the group that he is looking forward to supporting the rule making process.

Patrick Sullivan shared that he is the national expert for the Clean Air Act at SCS Engineers, and that he looks forward to lending his expertise to the rule making process.

Amelia Schlusser shared that she is a Staff Attorney with the Green Energy Institute at Louis and Clark Law School. She shared her experience working in policy under the Clean Air Act and expressed her excitement around working on methane regulation.

Jenifer Stuber shared that she is participating on behalf of Oregon Refuse & Recycling Association, where she is the General Manager for Dry Creek Landfill. She shared that she is excited to be serving on the RAC.

Damon Motz-Storey shared that he is participating on the RAC on behalf of Oregon Physicians for Social Responsibility and that he is happy to join the rulemaking process.

Tori Heroux shared that she is an attorney and a Program Director at Neighbors for Clean Air, and that she is looking forward to working on the rulemaking process.

Jesse Berger shared that he is an Engineer Analyst at Lane County Public Works where he looks after two landfills.

Jamie thanked the attendees for sharing and reviewed the public input process. The group determined that public comment would be accepted in the Q&A function as well as verbally at the end of the meeting.

Jamie reviewed the following agenda items, 1) Introductions and agenda review, 2) Advisory Committee Business, 3) Overview of rulemaking – purpose, schedule, objectives, 4) Break, 5) Landfill basics, 6) Break, 7) Rule comparison, 8) Discussion and next steps.

Jamie reviewed the background reading materials including the Advisory Committee Charter, the Policy Primer, the Landfill Gas Primer, and the Rules Comparison. Heather notified the attendees that the documents will be made public on the DEQ website.

Heather provided a review of the RAC meeting topics, sharing that RAC #1 would cover background, introduction to landfill gas and rule concepts, RAC #2 would cover draft rules, implementation, and equity, and RAC #3 would cover fiscal impact.

Heather shared that DEQ is engaging in the rulemaking process to reduce Oregon's Greenhouse Gas (GHG) emissions, make use of existing authority, and respond to a state Executive Order to reduce methane emissions. She included that there is added impetus for this project as Oregon is falling far behind the GHG reduction goals the Oregon Legislature adopted in 2007.

Heather provided an overview of the ongoing Oregon GHG emission reduction efforts and shared a list of statutes providing DEQ with the authority to regulate methane emissions. She shared the anticipated timeline of the rule making process, starting with the Advisory Committee Meetings moving through the Notice of Rulemaking, Public Comment, EQC and Outreach/Implementation.

Patrick Sullivan requested information regarding any litigations on the governor's executive order. Michael Orman, DEQ Air Quality Section Manager, shared that there are ongoing discussions and that DEQ is pursuing the rule making because of existing authority. Patrick commented that the RAC could use more information on existing regulations for landfills. Heather responded, notifying the RAC that regulations would be covered later in the meeting.

Heather shared data depicting anthropogenic emission produced by Municipal Solid Waste Landfills as well as Industrial Landfills. She provided a brief overview of the schematics of a landfill and shared details on GHG emissions produced at landfills over time. Heather identified landfill gas control methods and shared potential benefits that landfills can bring.

Amelia Schlusser requested clarification on the efficiency of the active gas collection methods used at landfills. Heather responded, sharing that models assume ~75% is collected. Patrick Sullivan added that there are wide ranges depending on the system and the system's intent.

Heather provided a look at the existing regulations in bordering states and then shared the existing Oregon regulations. She provided a side-by-side comparison of the current Oregon rules and potential Oregon rules, based off of the existing California standards. She shared a summary of potential impacts to Oregon landfills under the current California rules.

Amelia Schlusser requested information regarding the emissions produced at the smaller landfills that would be regulated under the California rules, but are not captured under the current Oregon rules. Heather responded that the numbers for assessing emissions at smaller landfills are based on their solid waste reporting and that emissions estimates are assumed based off of standard waste.

Patrick Sullivan shared that the last round of EPA rules for landfill regulations referenced the California rules and that their process might prove helpful to the Oregon rulemaking. Heather thanked Patrick for his comment and shared that the Oregon rules will seek to include the most stringent state and federal rules.

Amelia Schlusser requested that the DEQ staff provide the RAC members with a map depicting the locations of Oregon landfills. Heather responded, notifying the RAC members that they would be provided with that map.

An audience member requested feedback on adding food diversion as a tactic for reducing methane emissions at landfills. Heather responded that it is a consideration, but would be difficult to regulate. Patrick Sullivan shared that the California rules had considered including food diversion, but opted against it as a strategy. Heather shared that she is interested in hearing more ideas for reducing methane emissions at landfills.

Heather provided a brief overview of the next steps for the rule making process.

Patrick Sullivan posed a fiscal impact question, asking if there is a threshold for cost of compliance with new rules. Karen Williams responded that questions in the fiscal review do not have a quantitative threshold, but that significant adverse impact is considered and mitigated. She shared that there would be more detail on that topic in March.

Amelia Schlusser posed a question about Oregon's emission standards and asked for clarification on the 'lower explosive limit' term. Heather shared that the term refers to the consideration of too much methane in buildings or other enclosed spaces at landfills and the resulting potential risk of explosion. Patrick Sullivan provided a detailed description of explosive limits.

Heather thanked the RAC members for their comments and shared links to the rulemaking website and GovDelivery signup. Daniel Defehr shared that GovDelivery is a resource for the community to receive updates on the rulemaking process.

Jamie Damon opened the meeting for public comment.

An audience member asked if the meeting was recorded and would be made public. Jamie responded that it will be on the DEQ website along with the slides and background documents.

Heather responded to a question asking if DEQ is considering alternative ways of monitoring methane emissions. Heather shared that DEQ must be at least as stringent as the federal rules, but that she is interested in hearing any ideas.

Jamie provided a summary of the next steps sharing that the next meeting is expected to occur at the end of February 2021.

Amy Schlusser requested follow up information regarding how the California rules apply to new landfills opened after the implementation of the rules. Heather responded that it is rare to get a new landfill due to land use laws, but that landfill size is often predetermined during construction and collection methods would likely be implemented during construction.

Heather and Jamie thanked the attendees for their time and notified them that the project team will be reaching out to schedule the RAC #2 meeting for the end of February or early March.

**Alternative formats**

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).