



State of Oregon Department of Environmental Quality

Policy Primer - Meeting Materials 3

Landfill Gas Emissions Rulemaking 2021

Advisory committee meeting #1

Policy Primer

Why this rulemaking?

Climate change is already impacting Oregon's environment, outdoor recreation, air and water quality, as well as our economy, and most vulnerable communities. Effects of climate change are now evident in Oregon with reduced snowpack, sea level rise, more frequent and intense wildfires, drought and more.

Without major reductions in global greenhouse gas emissions, it is increasingly likely that society will face more severe impacts and potentially irreversible changes. Global reductions in greenhouse gas emissions can slow the speed of future climate change and associated public health, environmental, and economic impacts. Analysis of scientific studies indicate that, to avoid the most catastrophic effects of climate change, we must reduce GHG emissions to the levels identified in Governor Brown's Executive Order 20-04.

Methane emissions from landfills represent an important element of Oregon's overall greenhouse gas (GHG) emissions. Methane is a natural byproduct of the decomposition of organic material in landfills. In 2017, six of the twenty-five largest stationary sources of GHG emissions in Oregon were landfills. Methane is a potent greenhouse gas, far more effective than CO₂ at trapping heat in the atmosphere. Over a 100-year period, the International Panel on Climate Change (IPCC) estimates methane has 28 times the global warming potential as carbon dioxide. However, in a 20-year period, IPCC estimates methane has 84 times the global warming potential¹. This is because methane has a relatively short lifetime in the atmosphere (approximately 12 years). This also means that decreases in methane emissions can have a more significant impact in the short term.

Executive order 20-04 and climate action in Oregon

On March 10, 2020, Governor Brown signed Executive Order 20-04. The order directs a number of state agencies, including the Environmental Quality Commission (EQC) and the Department of Environmental Quality (DEQ) to consider a variety of actions within existing authorities to reduce emissions and include climate change in agency planning. Each agency is conducting its own process to implement the executive order and is coordinating with other agencies for a statewide effort to take action on climate in Oregon. In addition to implementing the executive order, many agencies have been and will continue to develop and run programs to reduce emissions, transition to cleaner energy, and do so in a just and equitable way.

¹ IPCC, 2014: *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

Existing Authorities

DEQ will develop new landfill gas regulations within the scope of its existing authority to regulate air pollution. The Environmental Quality Commission (EQC) is DEQ's policy and rulemaking board. The Oregon Legislature authorizes the Environmental Quality Commission via the Oregon Revised Statutes. The primary statutes for DEQ's Air Quality Program are provided in [ORS chapter 468A](#).

Oregon Revised Statutes:

- **ORS 468.020 Rules and standards** - authorizes the EQC to adopt rules.
- **ORS 468A.025 Air purity standards; air quality standards; treatment and control of emissions; rules** - authorizes the EQC to adopt air purity standards and factors to consider in adopting the standards.
- **ORS 468A.040 Permits; rules** –authorizes the EQC to require permits for air contamination sources.
- **468A.050 Classification of air contamination sources; registration and reporting of sources; rules; fees** – authorizes the EQC to classify air contamination sources in different levels and types.
- **468A.200-260 – Climate Change. (Oregon Global Warming Commission)** - These statutes do not provide any additional authority; however, they establish a priority in Oregon to reduce greenhouse gas emissions and establishes the Oregon Global Warming Commission.

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.