



Maryland Chapter

December 7, 2020

Mr. Eddie DuRant
Regulatory and Compliance Engineer
Air and Radiation Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

Dear Mr. DuRant.

RE: Regulations for Controlling Methane from Municipal Solid Waste Landfills

We are writing on behalf of the Maryland Sierra Club, with more than 70,000 members and supporters, to urge the Maryland Department of the Environment (MDE) to adopt the strongest possible regulations to limit methane emissions from municipal solid waste landfills in Maryland. Thank you for this opportunity to comment.

Reducing methane emissions is critical for Maryland to meet the state's goal of reducing greenhouse gas emissions by 40 percent by 2030.¹ Half of all landfill gas emissions are methane (CH₄) and another 42 percent are carbon dioxide (CO₂). Municipal solid waste (MSW) landfills account for 18 percent of Maryland's methane emissions.² According to the Environment Integrity Project's (EIP) research, nine of the top ten methane-emitting facilities and 16 of the top 20 facilities in Maryland are MSW landfills.³ Methane is 86 times more potent than CO₂ in trapping heat in the atmosphere over 20 years, and 34 times more potent over 100 years.⁴ Methane is a "short-lived climate pollutant," remaining in the atmosphere for a much shorter time period than does CO₂ but with much greater potential for atmospheric warming. Thus, reductions in methane emissions will yield large benefits in a relatively short timeframe, compared with reduction of CO₂ emissions.⁵

As MDE noted at the September 21, 2020 stakeholder meeting, updating Maryland's landfill methane regulations to incorporate the new federal requirements will have little effect on methane emissions from Maryland's MSW landfills. However, this process presents a major opportunity for Maryland to adopt even more impactful regulations. We were shocked to

¹ 2016 Greenhouse Gas Emissions Reduction Act (GGRA).

² MDE powerpoint presentation, September 21, 2020. "MSW landfills are engineered facilities that are located, designed, operated, and monitored to ensure compliance with state and federal regulations." They manage solid waste generated from communities, commercial, and agricultural operations.

³ Leah Kelly and Ryan Durant, Environmental Integrity Project, letter to Eddie DuRant, MDE, on "Public Stakeholder Process for Setting New Air Quality Regulations for the Control of Methane Emissions from Municipal Solid Waste Landfills." October 15, 2020.

⁴ Ibid, citing the International Panel on Climate Change (2013).

⁵ <https://ccacoalition.org/en/content/short-lived-climate-pollutants-slcps>

learn from the EIP research that only four of Maryland's 37 MSW landfills operate collection and control systems that are subject to the operational standards and other requirements of the EPA's regulations promulgated under the federal Clean Air Act. The updated Maryland regulations should apply to *all* of Maryland's MSW landfills, improve the frequency of monitoring and the diversity of measurements, and impose the strongest possible regulations to reduce landfill methane emissions.

The EIP concluded that California currently has the strongest regulations governing landfill methane in the country and could serve as a model for Maryland. Similar regulations would expand the number of regulated landfills in Maryland to 30, and would strengthen methane controls on all of these landfills, including those currently subject to EPA regulations. We respectfully request that MDE collect evidence to address the following questions:

- Which of California's regulations will have the largest impact on reducing landfill methane emissions in Maryland?
- What total impact might we expect if all of the California regulations were adopted?
- Which of these measures are the most cost-effective (the largest impact per dollar spent)?

Notwithstanding the potential benefits from California's example, we respectfully request that MDE identify additional measures that Maryland could adopt to achieve even deeper reductions in landfill methane emissions. California's regulations were adopted in 2010, a decade ago. What have California and other states that strongly regulate landfill methane emissions identified as the next steps to strengthen their own programs?

Finally, we urge MDE to adopt regulations that would sharply reduce and eventually prohibit food and other organic waste at MSW landfills, since this is the main generator of landfill methane Is it possible to regulate the amount of food waste allowed in landfills as part of this update of MSW landfill methane regulations? At the same time, MDE could revisit existing regulations on composting operations to ensure that they are consistent with rapid expansion of such operations in Maryland and are conducted in a way to minimize any greenhouse gas emissions.

Thank you for launching this thorough regulatory process. Maryland is one of the states most impacted by climate change and sea-level rise. We'd like Maryland to set a new and even stronger national model for other states in reducing landfill methane emissions.

Sincerely,

Martha Ainsworth, Chair
Maryland Sierra Club Zero Waste Team
Martha.Ainsworth@mdsierra.org
301-262-8389

Josh Tulkin, Chapter Director
Maryland Sierra Club
Josh.Tulkin@mdsierra.org
301-277-7111

Ruth Alice White, Chair
Maryland Sierra Club Beyond Gas Team
Ruth.White@mdsierra.org
443-803-8546

Rosa Hance, Chair
Maryland Chapter Executive Committee
Rosa.Hance@mdsierra.org