

## Cleaning Up Maryland Landfills: Tackling the Strongest Greenhouse Gas

### *Fighting for Climate Justice by Reining In Methane*

Maryland has a big landfill problem. If you've spent an afternoon at Monocacy National Battlefield, dropped your child off at Sandymount Elementary, or watched the Southern Maryland Blue Crabs hit a home run at Regency Stadium, you may have had your senses assaulted by one of Maryland's 40 municipal landfills. But landfills are not just smelly. They're also Maryland's largest source of methane pollution – an extremely powerful greenhouse gas.



### **An Unexpected Driver of Global Warming**

We knew that Maryland's landfills were a big source of greenhouse gas emissions. We didn't know just how bad the problem was—until a couple years ago, when the Environmental Integrity Project found that Maryland's 40 municipal solid waste landfills are producing four times more methane and carbon dioxide than the state thought.<sup>1</sup> The problem is so bad that **landfills are now Maryland's number one source of methane emissions—even more than the gas industry—and it's not even close!**

Methane is a potent greenhouse gas that is more than 80 times more effective at heating the planet than CO<sub>2</sub>.<sup>2</sup> Cutting short-lived climate pollutants like

methane is an effective strategy to achieve significant greenhouse gas reductions in the near term.

### **A New Rule**

Thankfully, the Maryland Department of Environment has released a draft new rule to rein in methane in Maryland. The rule will:

- **Act on climate**, reining in the powerful greenhouse gas methane by up to 50% in landfills
- **Protect public health**, cutting down on other toxic pollutants
- **Make Maryland a leader** on the East Coast on this long-overlooked issue

This regulation is long overdue. Only about half (21 of 40) of Maryland's landfills currently operate any kind of gas collection or control systems, and only four of these must comply with any government standards to ensure that they work.<sup>3</sup> The time to cut greenhouse gasses and slow the devastating effects of climate change is now!

### **Take Action**

Sign our online petition: <https://tinyurl.com/MDmethane>

To get involved as a volunteer, contact Nat Reid at [natallia@chesapeakeclimate.org](mailto:natallia@chesapeakeclimate.org)

## ***The New Methane Regulation Will:***

### **Act On Climate**

The General Assembly has set an ambitious goal of achieving 60% reductions in greenhouse gas emissions by 2031, and Maryland cannot achieve that goal without tackling methane from landfills.

MDE's draft rule will require a greater number of Maryland landfills to operate gas control systems and, importantly, will establish more stringent requirements for the operation of those systems as well as monitoring and reporting of emissions data and other important information. MDE estimates that the draft rule will reduce greenhouse gasses from the 32 affected landfills by 25-50% when fully implemented.<sup>4</sup>



### **Protect Public Health**

Methane contributes to the formation of ground-level ozone, a human health hazard and greenhouse gas in its own right. Breathing ozone can aggravate or even cause asthma and other lung diseases. Further, the landfill gas produced during the decomposition of organic materials also contains small amounts of other compounds, including a variety of toxic air pollutants, including benzene, toluene, and xylenes, that can cause cancer, respiratory issues, and other health problems.<sup>6</sup>

Unless a landfill has controls in place, most of the gas seeps out of the landfill and escapes into the atmosphere.

### **Make Maryland a Leader on the East Coast**

Over the past two years, the States of Oregon and Washington have passed landfill methane standards that are much stronger than the federal requirements set by the U.S. EPA. Oregon and Washington have built on the approach pioneered in California over a decade ago. It is time for Maryland to join these other states in assuming climate leadership on this important issue. And that is what Maryland is doing with this draft rule. With these new regulations, Maryland will be the first state on the East Coast to follow the stronger regulatory approach that has been taken in California, Oregon, and Washington so far. We'll set an important precedent for our neighboring states.

### ***What's Next***

Of course, the best way to reduce emissions from landfills is to reduce the amount of waste that ends up in the landfills. Food is the most prevalent type of waste in Maryland's landfills, and it is the breakdown of this organic waste that produces methane in the first place. Maryland has not done enough to prevent food from entering its landfills. So we're supporting efforts to divert organic waste away from landfills through composting and other programs.

In the meantime, this is an important first step. Stay tuned for more.

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## **Works Cited**

1. Greenhouse Gases from Maryland's Landfills: Underestimated and Under Regulated. Report from Environmental Integrity Project, June 9, 2021
2. International Panel on Climate Change, Climate Change 2013, the Physical Science Basis: Anthropogenic and Natural Radiative Forcing, p. 714,  
[http://www.climatechange2013.org/images/report/WG1AR5\\_Chapter08\\_FINAL.pdf](http://www.climatechange2013.org/images/report/WG1AR5_Chapter08_FINAL.pdf)
3. Greenhouse Gases from Maryland's Landfills: Underestimated and Under Regulated. Report from Environmental Integrity Project, June 9, 2021
4. MDE, Appendix A to Technical Support Document.
5. Climate change, methane and ozone. Interest Group Environmental Chemistry, Met Office, [January 2007](#)
6. EPA, Office of Air and Radiation, Regulatory Impact Analysis for the Proposed Revisions to the Emission Guidelines for Existing Sources and Supplemental Proposed New Source Performance Standards in the Municipal Solid Waste Landfills Sector, EPA-452, at Ch. 2, 21-24, Ch. 4, 1-35 (Aug. 2015); see also Environmental and Energy Study Institute, Fact Sheet – Landfill Methane (Apr. 26, 2013), available at <https://www.eesi.org/papers/view/fact-sheet-landfill-methane>.