SB0483 - Organics Recycling and Waste Diversion - Food Residuals

Senate Environment and Transportation Committee February 10, 2020

Position: Favorable

Dear Chairman Pinsky and Members of the Committee,

Food waste is a persistent problem, with over 25% of the overall food supply at the retail and consumer level going uneaten and wasted. Disposing of our organic material in landfills and incinerators squanders potential benefits of compost as a climate mitigation and adaptation strategy, soil additive, and job creator. Composting turns discarded organic material into a nutrient-rich product that helps sequester carbon while improving soil health and resiliency, and employing Marylanders.

SB483 uses a phased approach to gradually require large generators of organic waste to divert their waste if facilities exist nearby that could take their waste. This allows the compost industry to build up to meet the waste generated and does not create a scramble for food waste generators. By tackling large generators who generally have waste contracts, this legislation efficiently focuses on waste streams that are already separated and heavily compostable. Compared to households, which generally produce less organic waste, are more likely to mix it in with other trash, and must have their waste individually collected by trucks, large generators produce and process their waste in one location and can more easily keep their organic waste separated. Focusing on large food waste generators as Maryland's compost business sector is developing will lead to more organic waste being diverted for less investment of time and resources.

Climate: Composting is an effective tool to reduce CO2 and methane emissions, and even to proactively sequester carbon in the ground instead of emitting it into the air. When organic waste is burned in a trash incinerator, it releases CO2 into the atmosphere, and in a landfill that organic waste becomes methane. Both gases are potent greenhouse gases that contribute to climate change. Diverting organic waste to compost instead of landfilling reduces greenhouse gases by more than 50%.¹ Compost also improves the carbon sequestration potential of soils.²

When compost is added into soil, it can actually benefit stormwater management improving resiliency efforts by absorbing stormwater runoff and filtering pollutants.³

¹ Project Drawdown. "Food Composting." <u>https://www.drawdown.org/solutions/food/composting</u>

² University of California - Davis. "Compost key to sequestering carbon in the soil: Study dug deep to uncover which agricultural systems store the most carbon." ScienceDaily. ScienceDaily, 14 August 2019.

³ Platt, Brenda. "The Benefits of Composting and Compost Use." Institute of Local Self-Reliance. 24 April 2016. <u>https://ilsr.org/benefits-composting-compost/</u>

Soil Health: Compost as a soil amendment also has significant improvements for soil health. Soil health has been in decline, in part due to our broken food system. We extract nutrients when we grow plants in soil, but if we do not put those nutrients back into the system, then the soil becomes depleted. Adding compost to our soil strategy replenishes the soil microbiome and improves soil health.

Healthy soils have a multitude of benefits, including protecting against desertification and soil erosion, increasing soil fertility, higher carbon content, enhancing natural soil suppressives - reducing the prevalence of disease and the resistance of the plant to the disease⁴, and reducing the need for pesticides and fertilizers by creating a resistant, nutritious soil biome.

Job Creation: Expanding composting and local compost use could support almost 1,400 new full-time jobs in Maryland, according to a 2013 study by the Institute for Local Self Reliance.⁵ Expanding compost would support not just new and existing compost facilities, but also Maryland businesses that use compost for soil erosion control, stormwater management, green infrastructure, and other purposes. Maryland's existing compost facilities employ 4.1 full-time equivalent jobs per 10,000 tons per year of material composted, compared to just 1.2 FTE jobs per 10,000 tons per year of material and 2.1 FTE jobs per 10,000 tons per year of material incinerated and 2.1 FTE jobs per 10,000 tons per year businesses and landfills. Diverting waste from incinerators and landfills to compost facilities will spur in-state construction and permanent jobs, project development, and businesses.

Prolongs Life of Landfills: Much of Maryland's waste that is currently filling up our landfills could be composted, prolonging the life of those landfills as well as bringing all of the benefits listed above. Montgomery County's 2017 Waste Characterization Study found that 43% of the trash generated in the county was organic waste.⁶ Prince George's County found that 23% of the waste delivered to its landfill from commercial sources could be composted, and 28% of the waste from schools.⁷ In Baltimore City, a seasonal waste sort study in summer 2019 found that 22% of commercial waste was food scraps, yard waste, or clean wood;⁸ an NRDC analysis found

⁴ Bonilla, N., Gutiérrez-Barranquero, J. A., de Vicente, A., & Cazorla, F. M. (2012). Enhancing Soil Quality and Plant Health Through Suppressive Organic Amendments. Diversity (14242818), 4(4), 475–491. https://doi-org.proxy-hs.researchport.umd.edu/10.3390/d4040475

⁵ Platt, Brenda, Bell, Bobby, and Cameron Harsh. "Pay Dirt: Composting in Maryland to Reduce Waste, Create Jobs, and Protect the Bay." May 2013. Institute for Local Self-Reliance. https://ilsr.org/paydirt/

⁶ SCS Engineers. "2017 Waste Characterization Study Summary of Results." January 2018.

https://www.montgomerycountymd.gov/SWS/Resources/Files/studies/waste-composition-study-2017.pdf ⁷ SCS Engineers. "Waste Characterization Study Summary of Results, 2014/2015." June 2016.

https://www.princegeorgescountymd.gov/DocumentCenter/View/17262/Waste-Characterization-Report---FINAL-2 016JUN07?bidId=

⁸ Geosyntec. "Results from Second Seasonal Waste Sort." September 2019. <u>https://publicworks.baltimorecity.gov/sites/default/files/LWBBTask0SummerWasteSortReportFinalnoatt.pdf</u>

that 72,348 tons of food waste are generated by large commercial businesses in Baltimore City.⁹ Diverting these compostable materials to compost facilities would significantly prolong the life of Maryland's existing landfills.

Conclusion: Diverting waste from a trash incinerator or landfill is a potent tool that will have many benefits across Maryland, from sequestering carbon to improving soil health to spurring the local economy to prolonging the life of our existing landfills. We thank you for your consideration and urge a favorable report.

Thank you,

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⁹ RRS & ILSR. "Food Scrap Recycling 2019 Landscape Assessment, Baltimore MD." <u>https://www.nrdc.org/sites/default/files/baltimore-food-scrap-recycling-assessment-report.pdf</u>