Written Testimony of Anne Germain, PE, BCEE Chief Operating Officer & SVP of Regulatory Affairs National Waste & Recycling Association Before the U.S. Senate Committee on Environment and Public Works

Chairman Carper, Ranking Member Capito, and Members of the Environment and Public Works Committee, thank you for allowing me to testify today on opportunities to avoid, detect, and reduce landfill methane emissions. My name is Anne Germain, and I serve as Chief Operating Officer & Senior Vice President of Regulatory Affairs at the National Waste & Recycling Association, a not-for-profit trade association representing the private-sector waste and recycling industry.

Landfills protect the environment by responsibly managing society's waste. Our sector is subject to extensive federal, state, and local environmental requirements, including stringent design, operation, monitoring, and closure and post-closure standards established under RCRA as well as landfill gas collection and control requirements under the Clean Air Act. Beyond regulatory obligations, our sector has made significant advancements in landfill gas capture and clean energy production. We have invested heavily in surface cover, landfill capping, and landfill gas collection systems that meet or exceed regulatory requirements. Moreover, we closely monitor emissions from our landfills and engage in corrective actions swiftly and efficiently. We also are actively deploying infrastructure that transforms yesterday's waste into renewable energy, which can power communities, fuel vehicles, and support progress in offsetting the impacts of climate change.

Recently, a narrative has emerged that air emissions from landfills have increased. **Based on** data from the EPA, however, municipal solid waste landfill air emissions have declined by nearly 45 percent between 1990 and 2021, all while landfilled waste volumes increased 5 percent during the same time period. We are proud of this progress and are not aware of any other industry which has achieved even remotely comparable improvements. We are committed to reducing climate impacts even further, consistent with the goals of the Global Methane Pledge and the Administration's commitment to reduce methane emissions from the waste sector by at least 15 percent by 2030. Achieving these goals necessitates the development of more accurate measurement methods to quantify these emissions.

Our members are actively assessing how various aerial and ground-based methane emissions measurement methods developed for other sectors may be applicable for landfill applications. Translating direct measurement to quantification of landfill methane is challenging because landfill emissions fluctuate frequently—even daily—as influenced by the age and quantity of waste in place, waste composition, cover type and location, landfill gas operations, waste placement activities, and weather. These dynamic conditions greatly impact modeling assumptions that drive emission estimates.

Aerial emissions monitoring is gaining attention and encompasses a variety of technologies, including satellite imagery and aerial flights from manned aircraft and drones. Aerial emissions monitoring has limitations, however, as it is not continuous and only captures individual moments in

time when emissions could be temporarily higher or lower than normal. One area where both aerial monitoring and on-the-ground sampling can be used for immediate benefit is in identifying the location and concentration of site emissions. This enables landfill operators to take immediate action to investigate and repair suspected leaks. Further work will be necessary before these technologies will be able to calculate landfill methane emissions accurately, however, and we would benefit from additional funding from Congress to accelerate progress around emissions monitoring, calculation, and reporting. The oil and gas and agriculture sectors have benefited from substantially greater levels of funding for methane emissions reduction research and development in comparison to the solid waste sector, and we recommend that Congress recognize this disparity as EPA moves forward with its rulemaking effort.

We also wish to highlight certain policies that, if addressed, would incentivize landfills to capture greater amounts of landfill methane beyond levels mandated by regulatory requirements. Of immediate consequence is the Department of Treasury's proposed rule on the expanded investment tax credit for "qualified biogas property," as enacted under the Inflation Reduction Act. Our sector worked hard to advocate for this tax credit and has relied on the availability of it in planning multi-billion-dollar investments in biogas processing infrastructure. Consequently, we were surprised by Treasury's recent proposal to virtually eliminate landfill biogas processing facilities from credit eligibility and, in turn, disincentivize methane abatement solutions within our sector. We therefore ask for your support in requesting that Treasury reverse course and return to Congress's goal of driving economy-wide investments consistent with the Administration's climate objectives.

The landfill sector also is facing other threats to its plans to invest in technology to detect and capture landfill emissions. For example, although landfills are incentivized to capture methane emissions through EPA's implementation of the Renewable Fuel Standard program, the agency has received a petition to revisit the annual standards that it recently finalized. Granting the petition would disrupt the long-term stability needed for continued investment in landfill gas collection and renewable energy production. Overcoming challenges such as this are among the most significant regulatory opportunities available to EPA to incentivize landfill operators to make capital investments in beneficial use infrastructure and capture greater levels of methane emissions, thereby supporting broader climate solutions and public policy objectives.

Our sector acknowledges that action to address the climate crisis is more necessary than ever, and we look forward to working with Congress, the Administration, and other stakeholders in the evaluation of meaningful policy solutions to capture greater amounts of methane that results from our industry's provision of necessary and vital public services. I appreciate the opportunity to appear before this Committee and look forward to answering any questions you may have.