National Waste & Recycling Association℠
Collect. Recycle. Innovate.

1550 Crystal Drive, Suite 804
Arlington, VA 22202
T: 800-424-2869
T: 202-244-4700
F: 202-966-4824

March 30, 2021

Via electronic submission: gap-rule@ecy.wa.gov

Ms. Fran Sant
Rulemaking Lead
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Draft Greenhouse Gas Assessment for Projects Rule

Dear Ms. Sant:

The National Waste & Recycling Association (NWRA) appreciates the opportunity to provide comments on the Washington Department of Ecology's (Ecology) draft Greenhouse Gas Assessment for Projects rule (GAP rule). NWRA is a trade association that represents private-sector waste and recycling companies in the United States, and manufacturers and service providers who do business with those companies. NWRA's members operate in all fifty states and the District of Columbia. NWRA provides leadership, education, research, advocacy, and safety expertise to promote North American waste and recycling industries, serve as their voice, and create a climate where members prosper and provide safe, economically sustainable, and environmentally sound services.

NWRA members are interested in the proposed action as they own waste and recycling collection, processing, and disposal facilities within the State of Washington. This includes landfills, recycling, and composting/organics management facilities. We are hopeful to collaborate with Ecology to gain clarity on how the waste sector would implement the GAP rule. As such, NWRA offers the following comments that are specific to our sector's operations.

Comment 1. *Coordinate reviews under the GAP rule and the State Environmental Policy Act (SEPA)*

Ecology proposes that the GAP rule will apply when a project requires an environmental review under SEPA and meets certain applicability criteria. The GAP rule, existing as a separate reviewed triggered by SEPA, creates a redundant, lengthier process. It is

NWRA's preference that the GAP rule be incorporated into the SEPA process to avoid the potential for overlap and confusion between these two environmental review processes. Barring that, NWRA recommends that Ecology work closely with stakeholders in developing a final rule that establishes a coordinated process to align these parallel sets of requirements and evaluate unique challenges for key stakeholders, such as opportunities for mitigation within the waste sector.

Comment 2. *Recognize that landfill gas emissions and reductions cannot be quantified precisely*

Ecology should recognize the challenges associated with precisely quantifying landfill emissions as it evaluates emissions mitigation requirements within the waste sector. A portion of the emissions produced within a landfill will escape through the landfill surface, resulting in the release of fugitive emissions to the atmosphere. The measurement of fugitive landfill emissions is an active and challenging area of research, made particularly challenging given that landfills are dynamic biological systems covering large areas, have significant variations in topography and climate, and contain different waste compositions. Even the weather and climate effect landfill emissions.

As a result, currently, there is no accepted method for the direct measurement of landfill emissions. Instead, unlike some emissions that can be continuously measured, landfill gas generation and emissions are modeled based on assumed default values for several different parameters. As NWRA repeatedly has advised the U.S. Environmental Protection Agency (EPA) in preparation of its annual Inventory of U.S. Greenhouse Gas Emissions and Sinks, the agency's modeling overestimates the quantity of emissions that landfills actually emit. Indeed, the field research performed to date using a variety of measurement techniques has shown significant discrepancies between measured and modeled values. Therefore, NWRA requests that Ecology avoid establishing numeric emissions calculation or reduction requirements that are inherently unverifiable.

Comment 3. *Recognize that the landfill sector already has achieved significant reductions in emissions*

It is important for Ecology to recognize that the landfill sector has made significant financial investments that have resulted in substantial reductions in emissions. Landfill gas collection systems have been widely installed in the landfills operating in Washington. Indeed, new and expanded landfills must incorporate landfill gas collection and control technologies (e.g., horizontal and vertical collection wells, flares, landfill gas-to-electricity capabilities, renewable natural gas facilities, etc.) into their designs and operations. These efforts have already achieved substantial emissions reductions from landfills since 1990. For example, the draft Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2019, issued by EPA in February 2021, shows that nationwide landfill greenhouse gas emissions have decreased approximately 32 percent, or 64 MMtCO2e, from 1990 to 2019. This work to manage landfills efficiently and to support emission reductions remains ongoing today.

The industry has significantly reduced greenhouse gases for our collection, landfilling, organics and recycling operations. However, given the current methodologies by which landfill gas emissions are determined, there is limited opportunities to demonstrate emissions reductions.

Comment 4. *Require separate reporting for biogenic and anthropogenic emissions*
In landfills, anaerobic bacteria digest organic materials that are derived from biomass sources—including food scraps, yard trimmings, paper, and wood—to produce landfill gas that is composed of methane and carbon dioxide. Landfill gas typically is collected and flared in order to break down the methane molecules into water and carbon dioxide. A portion of the landfill gas produced within a landfill nevertheless will escape through the landfill surface, resulting in the release of fugitive methane emissions to the atmosphere. Although the carbon dioxide emissions naturally would occur from these materials due to natural degradation, the methane emissions would not, and therefore methane emissions are considered anthropogenic. NWRA supports Ecology's recognition that the carbon dioxide portion from landfill gas is considered to be biogenic, and we recommend that Ecology segregate reported emissions between biogenic and non-biogenic for all sources consistent with US EPA and global approaches.

Comment 5. *Coordinate with the waste sector on mitigation issues*
NWRA supports Ecology's position that mitigation be real, permanent, enforceable, verifiable, and additional. As stated in Comment 2, it is challenging to verify emissions reductions from landfills. Given that, we recommend that while Ecology should maintain the use of existing protocols, they should also allow for future protocol development as technology advances. Potential future protocol development could include carbon capture or automation/efficiency improvements. While individual mitigation measures are not discussed, NWRA recommends that composting, landfill sequestration, carbon capture, and recycling be explicitly considered for both reducing emissions as well as actively removing greenhouse gas emissions from the environment. We would like to work with Ecology to facilitate offsets for our sector.

Comment 6. *Clarify prioritization efforts*
Ecology states that mitigation projects will be prioritized for various enumerated communities. We recommend that on-site mitigation also be prioritized. In addition, we recommend that Ecology develop maps for each of the enumerated communities so that there is no confusion on how to delineate these communities.

Comment 7. *Provide examples relevant to the waste sector in Appendix B*
Ecology provides examples in Appendix B on how the GAP rule might be applied. We appreciate these examples. However, our members operate landfills which have area source emissions that change over time. An example targeted to our industry would be appreciated. We understand that landfill permit renewals or new cell development will not trigger the GAP rule because these actions are not subject to SEPA. However, it would be helpful to clarify under what circumstances the GAP analysis would be required for certain types of permits routinely sought by our sector.

Comment 8. *Harmonize the GAP rule with EPA's Greenhouse Gas Reporting Program (GHGRP) methodology*

NWRA supports that the GAP rule will be consistent with the federal GHGRP. While not explicitly stated, we assume that any future changes will be incorporated into the GAP rule since the federal GHGRP is adopted by reference. If not, we recommend that the GAP rule ensure that the harmonization with the federal GHGRP is maintained regardless of any future modification.

Comment 9. *Clarify that other sources of organic waste managed through other facilities produce biogenic emissions*

Municipal solid waste includes yard waste and food waste. Increasingly, these waste streams are managed separately through composting facilities or anaerobic digestion. While the Product Table for Initial Screening is not meant to be exhaustive, NWRA recommends adding these waste streams to the Table with the acknowledgement that they, too, are sources of biogenic emissions.

NWRA appreciates the opportunity to comment on the GAP rule and we look forward to continuing to work with your office on this matter. Should you have any questions, please call Anne Germain at 202-364-3724 or e-mail at agermain@wasterecycling.org.

Very truly yours,

Darrell K. Smith, PhD
President & CEO