McKenna Morrigan (McKenna Morrigan)

Please see comments in attached letter.

Seattle Public Utilities

December 12, 2025

Re: WAC 173-350 Organics Rule Revision Draft as of October 2025

Department of Ecology,

Thank you for the opportunity to submit informal comments for the draft rulemaking process for WAC 173-350. Our comments and suggested language, as applicable, on each section of the draft rule revision published in October are provided in the following pages.

Sincerely,

McKenna Morrigan
Strategic Advisor – Waste Prevention and Product Stewardship
Solid Waste Planning & Program Management Division
Seattle Public Utilities

WAC 173-350-020 – Applicability.

New language has been proposed under 173-350-020 (2)(aa) to state that this chapter does not apply to:

> *"Organic materials, in packaging or unpackaged, as defined in WAC 173-250-100, used for animal feed or to create animal feed."*

We have concerns that adding an exemption for food "in packaging" could create a loophole where someone could claim they are sending material to animal feed could start hauling highly contaminated organic materials. Guardrails are needed to ensure it is indeed food or other specific organic materials that are appropriate for animal feed, and not other materials going to these operations. Moreover, we have concerns about saying that organic materials "in packaging" is used for animal feed. You can't use packaged food to create animal feed. It would need to go through pre-processing first, and then whatever the animal feed output is on the other side could be considered exempt from solid waste. But the process of depackaging will inevitably create solid waste, so solid waste rules should still apply to the depackaging step. For these reasons, **we do not support the inclusion of the new language proposed in this section and we request that Ecology retain the original wording of this rule section.**

WAC 173-350-025 – ~~Owner~~ Entity responsibilities for solid waste.

We appreciate Ecology's interest in clarifying the entity responsible for rejected loads, and we strongly support Ecology's additional language around expectations for containers to collect recyclables at sites of generation under (3) of this section.

However, we have concerns that the new language proposed under (2) of this section undermines the existing legal framework around the waste generator's responsibility for ensuring proper management of solid waste, and believe the language proposed may conflict with the statutory language in RCW 36.58.060:

> *"**RCW 36.58.060** – **Solid waste disposal—Ownership of solid wastes—Responsibility for handling.** Ownership of solid wastes shall be vested in the person or local jurisdiction managing disposal and/or resource recovery facilities upon the arrival of said solid wastes at said facility: PROVIDED, That the original owner retains ownership of the solid wastes until they arrive at the disposal site or transfer station or detachable container, and the original owner has the right of recovery to any valuable items inadvertently discarded: PROVIDED FURTHER, That the person or agency providing the collection service shall be responsible for the proper handling of the solid wastes from the point of collection to the disposal or recovery facility."*

We strongly encourage Ecology to adjust the language under subsection (2) to ensure that a commercial waste generator remains the legal owner and therefore legally responsible for delivery of solid waste to an appropriate facility, and does not transfer their legal responsibility to the entity they hire to collect and transport it. That entity should be additionally responsible for proper handling, as is described in RCW 36.58.060. But establishing that additional responsibility should not allow for a situation in which a commercial waste generator can claim that they are not responsible for where their materials ended up because they transferred their legal ownership / responsibility to the collector, even if they knew that collector was likely not complying with state or local requirements.

WAC 173-350-100 – Definitions.

“Livestock mortalities”
The definition for “Livestock mortalities” references “routine livestock mortalities.” It appears that this is used to connect to the use of the term “routine livestock mortalities” in the definition of “agricultural wastes,” but we believe that using both terms within the definition of “livestock mortalities” is confusing, and **we recommending adjusting this definition to be “routine livestock mortalities” or adding a separate definition of “routine livestock mortalities” for clarity.**

“Low-grade wood waste”
We appreciate the adoption of “low-grade wood” definition in place of “wood-derived fuel.” However, the definition for “Low-grade wood” still references “wood derived fuel” which is confusing. We also believe that the definition would be more appropriate to frame around what is intended to be used for fuel, rather than “used as” because the determination about whether a material qualifies as “low-grade wood” must be made prior to use, which means whether it is actually used as a fuel or sent for disposal has not yet been determined. Given the volatility of the hog fuel market, we understand that this material may, under certain circumstances, be sent for disposal, even if it was initially collected and separated with the intent to market it for use as a fuel for boilers. To clarify these issues, **we recommend the following adjustments**:

> *"Low-grade wood" means wood pieces or particles separated for use ~~used~~ as a fuel for boilers or energy recovery, which contain paint, bonding agents, or creosote. Low-grade wood ~~Wood derived fuel~~ does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthenate, or copper-chromearsenate.*

"Manufactured organics"
The definition of “manufactured organics” refers to “wood derived fuel” and “wood waste.” **We suggest that these references be changed to “low-grade wood” and “clean wood waste” in accordance with the other definition changes proposed.**

“Organic materials pre-processing”
We have three significant concerns with the proposed definition of “organics materials pre-processing”. First, definitions should not, themselves, contain numerical standards. Second, as we will describe in greater detail in our comments on proposed sections 173-350-220, 173-350-225, 173-350-250, and 173-350-320, there is no standard methodology for determining contamination on a volumetric basis, which means that the standard being proposed would not be defensible in court should a significant problem arise. Third, the definition of “organic feedstocks,” which is embedded within this definition, is incompatible with the concept of “organic material pre-processing.” Indeed, the need for pre-processing suggests that organic materials being received by such a facility are not yet “*suitable for vermicomposting, composting, anaerobic digestion, and other processes that transform organic materials into usable or marketable materials.*” The purpose of “organic materials pre-processing” is to take source-separated organic materials with high levels of contamination and packaged food and to remove the non-organic material in order to turn it into organic feedstock acceptable for organic materials management.

To clarify these issues, we recommend adjusting the draft definition as follows:

> *"Organic materials pre-processing" means the processing of ~~organic feedstocks~~ source separated organic materials and/or of packaged food to remove physical contaminants ~~to achieve two percent or less physical contamination~~ by volume ~~to recover organic materials~~ prior to organic materials management.*

"Recyclable materials"
Ecology's proposed rule language adds "organic materials" to the definition of "recyclable materials." We believe this has the potential to create significant conflict with underlying statutory references to "recyclable materials" and is unnecessary, given that the Legislature has clearly defined and delineated "organic materials" throughout statute. **Rather than include "organic materials" within the definition of "recyclable materials", we recommend that Ecology add reference to "organic materials" alongside "recyclable materials" where it is functionally required in this rule.**

"Source separation"
We do not agree with the example language related to the commingling of packaged and unpackaged food that has been added to the existing definition, and do not believe the example is supported by underlying statute. The state's existing definition of "source separation" rests on the concept of separating *different kinds* of solid waste from one another, regardless of whether the separated solid waste is intended for recycling or disposal. We understand and agree with Ecology's interpretation of this definition. However, we disagree with the assertion that packaged and unpackaged foods are not different kinds of solid waste.

The state's own statutory definitions of "food waste" and "organic materials" do not include packaging or other types of non-organic material, suggesting that they are, in fact, different kinds of solid waste. Ecology staff confirmed this interpretation at the public meeting on November 5. Similarly, the existing statutory definition of "organic feedstocks" is limited to "source separated organic material," which suggests that packaging would not be allowed to be included in loads considered to be "source separated organic material" because it is a different kind of solid waste.

It is our interpretation that, while the separation of packaged food from other solid waste may be considered "source separation," the commingling of "food waste" (which is not allowed to contain non-organic material) and packaged food together may not.

Furthermore, while the state's parameters for "source separation" are relatively broad, Seattle's municipal code uses similar terminology but with much narrower and directive language that requires the source separation of food waste and of recyclable materials, including some types of packaging, by the waste generator. We are concerned that if the packaged food example is included in the state rule, it could create confusion for waste generators and others around what is allowed or not allowed within Seattle relative to other parts of the state.

Given the disagreement about statutory intent and interpretation here, and because this newly proposed language is not essential for Ecology to carry out the legislative directive of this rulemaking, **we request that**

Ecology remove the example related to packaged food in the definition. We also offer some additional edits to the definition to enhance clarity:

> ***"Source separation"*** *means the separation of different kinds of solid waste at the place where the waste originates. Examples of source separation include but are not limited to a household that places recyclable materials, ~~yard waste~~ organic materials, and trash into separate carts, a construction site that places designated recyclable construction debris to be recycled in one container and nonrecyclable construction debris and other solid wastes to be disposed in another, ~~a grocery store that places packaged or unpackaged food for purposes of recovery of the organic materials within in another container, and other solid wastes the store generates in separate containers,~~ or a lumber mill that separates wood ash to be disposed at a wood ash landfill in one container and other solid wastes destined for a municipal solid waste landfill in another.*

"Worm castings"
The definition for "worm castings" uses the term within the definition, which is confusing. Please consider the following revisions to the proposed definition:

> ***"Worm castings"*** *or* ***"vermicast"*** *means the end product from a complete vermiculture process that has converted organic feedstocks into worm ~~castings~~ excrement ready for use to enhance soil health. Worm castings free of physical contaminants may be managed as manure.*

"Yard debris"
The "**Yard debris"** definition needs a couple of minor grammatical edits for it to read as intended. The second sentence of the definition should read as follows:

> *"Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, ~~and~~ vegetable garden debris, non-flocked~~,~~ and undecorated holiday trees, and tree prunings that are four inches or less in diameter."*

WAC 173-350-215 – Organic materials pre-processing

We have several significant concerns with the proposed rule language related to organic materials pre-processing.

Section (2) Organic materials pre-processing facilities – Permit exemptions
As described in detail in our comments on section 173-350-220, **we strongly urge Ecology to adjust the draft rule language to set physical contamination limits on a weight basis, and not on a volume basis, and to consider using a physical contaminant limit that is above 2.0% by weight.**

Section (6) Organic materials pre-processing facilities – Permit requirements – Operating
We appreciate that the rulemaking is focused on contamination reduction, but we also want to emphasize that legislative intent of the underlying statute is to keep organic materials, especially food waste, from going to disposal. Pre-processing technologies vary widely in efficiency, and we are seriously concerned that the lack of a performance standard or yield rate requirement for organic materials pre-processing facilities could result in avoidable disposal of food waste.

Composting facilities are very efficient at recovering organic materials, which keeps these materials out of the landfill and produces composted materials with many benefits. Without any performance standards, pre-processing facilities could be allowed to operate at very low levels of efficiency, and send a significant portion of organic materials handled to landfill as residuals as a result.

If, under stricter contamination limits, composting facilities are forced to stop accepting certain types of organic materials—for example, loads of food waste from commercial generators—and those loads are instead sent to organics pre-processing facilities that achieve very low levels of recovery of organic materials, there is a significant risk that the recovery rate of food waste from commercial generators will go down rather than up. This may not be a concern for other parts of the state where commercial organics collection is not yet widely adopted, but in Seattle, where commercial waste generators have been required to separate food waste and send it for composting for over a decade, this is a serious concern. A reduction in food waste recovery rates from commercial generators in Seattle would been counter to the state's overall organics recovery goals.

In addition, we have significant concerns that recyclable materials could be lost to landfill if pre-processing facilities that handle packaged food are not held to recovery standards or required to separate and recover readily recyclable materials.

We urge Ecology to avoid this potential negative outcome by setting a minimum recovery rate standard for organic materials handled by pre-processing facilities, and by either setting a minimum recovery rate standard or separation requirements for recyclable materials received at pre-processing facilities that handle packaged food.

Draft rules proposed by the state of Vermont have addressed this issue by proposing to require that a depackaging facility "*shall provide sufficient staffing to manually remove outer film wraps, boxboard, cardboard and other non-food containing outer materials prior to processing in the depackager. Materials shall be recovered for recycling to the extent possible*."

Seattle supports the inclusion of this or similar language along with additional requirements to, at minimum, recover for recycling all metal packaging, whether or not it is in direct contact with packaged food received.

Subsection (6)(a)(i)
The definition of "organic materials pre-processing facility" establishes the types of materials that such a facility is intended to be used for. We have suggested edits to those definitions but in concept we agree that the allowable types of waste should be source-separated organic materials and packaged food. As drafted, however, the rule language does not explicitly limit these facilities to those types of solid waste. This raises a significant concern for us that a facility could be permitted under this proposed language and receive mixed solid waste. **We strongly urge Ecology to specify the allowable types of waste for facilities permitted under this category to receive and to limit those categories to "source-separated organic materials" and "packaged food."**

Additionally, due to the concerns we noted above related potential yield losses associated with certain types of pre-processing technologies, we urge Ecology to prohibit the utilization of mechanical depackaging for source-organic materials that meet the allowable contamination limits for organic feedstocks at organics management facilities.

Subsection (6)(a)(iv)
This section states:

> "*A description of representative sample collection procedures of organic materials after physical contaminants have been removed, testing frequency to be every three months or 5,000 cubic yards, whichever is more frequent, use of test method XYZ (or as updated), and use of a Washington-accredited laboratory.*"

Testing feedstocks is tricky, especially because the material is so heterogeneous. We agree with spelling out the test method for sampling, and **we suggest citing TMECC method 03.06**. **We also suggest allowing for the use of any lab accredited in the US Composting Council's CAP program**, as opposed to a "Washington-accredited laboratory". Testing compost and compost feedstocks is highly specialized and not standard, and there are currently only 10 labs nationally that are part of this program, only one of which is in WA state. This will allow facilities to use a laboratory that specializes in this work and provides for resiliency should the one lab in WA close or stop participating, or should a WA-accredited lab charge an exorbitant fee for this test because it is not standard and they have a monopoly on this testing market. Also, incoming feedstocks are tracked and permitted by weight, not volume, and therefore, **we suggest changing the 5,000 cubic yards to a weight measurement.**

Subsection (6)(b)
For Seattle, having accurate data about the amounts and types of solid waste generated within our jurisdiction that is taken outside of our jurisdiction is essential for effective solid waste management and flow control enforcement. We do not believe that the current proposed language on reporting by pre-processing facilities will provide a sufficient level of detail to enable effective oversight. **We request that Ecology specify that quantities of inbound source-separated organic materials and packaged food must be reported separately. We also request that Ecology require reporting on any recyclable materials recovered, in addition to reporting on organic feedstocks recovered and residuals disposed.**

WAC 173-350-220 – Composting facilities

(2) Composting facilities – Permit exemptions.
Table 220-A Exemptions: Lines (7) Agricultural wastes, and (9) Manure and bedding from zoos.
We suggest adding that all material except bulking agents must be generated on-site.

Subsection (2)(f)
As noted in our comments on the definition of "organic materials pre-processing" above, there is no standard methodology for determining contamination of organic feedstocks on a volumetric basis. The only published and accepted methods for testing contamination are on a weight basis, and contamination limits for the finished product are already set to a weight basis. The lack of a standard methodology for determining contamination of organic feedstocks on the volumetric basis proposed in the draft language means that this rule would not be able to be consistently enforced and such enforcement would likely not be legally defensible should it be challenged. **We strongly urge Ecology to adjust the draft rule language to set physical contamination limits on a weight basis, and not on a volume basis.**

We also strongly encourage Ecology to consider using a physical contaminant limit that is above 2.0% by weight. Seattle's most recent organics composition study suggests that source-separated organic materials collected from both residential (including single-family and multifamily residences) and non-residential customers in the city have an average contamination rate of 2.1%, by weight. The majority of these

materials are sent for processing at a composting facility that reports producing a finished product with contamination levels below the state's new proposed standards of 0.5% or less physical contaminants, and not to exceed 0.1% film plastics, by dry weight. This suggests that a standard of 2.0% by weight is lower than necessary to achieve the finished product requirements when processed at a facility with appropriate operating conditions. Adopting such a standard would therefore create undue burden on existing compost facility operators.

We encourage Ecology to consider setting the physical contamination limit at 5.0% by weight. This would allow existing facility operators to focus pre-processing on the most heavily contaminated loads but would not require pre-processing of all source-separated organic materials, including loads predominantly containing yard debris, which would be extremely costly if required to be directed to pre-processing and reduce the economic feasibility of incorporating food waste into existing yard debris collection programs.

(4) Composting facilities – Permit requirements - Design

Subsection (4)(e)

Subsection (4)(e) is related to operating conditions rather than facility design, and we recommend moving this language to section (6) "Permit requirements – Operating."

Subsection (4)(h)

Subsection (4)(h) includes new language that would require compost in the curing phase to be placed on an impervious pad, which might be cost-prohibitive for many composters in the state, especially for new facilities or those seeking to increase their throughput. As this requirement would increase barriers to operation for compost facilities, and we know that our state needs to increase organics processing capacity, we suggest removing this new requirement.

(6) Composting facilities – Permit requirements – Operating

Subsection (6)(a)(iv)(F) – page 103 of the .pdf

Please correct the citation for the TMECC, per City of Seattle's previous comments. The WAC currently uses an incorrect citation for the TMECC in several places throughout the rule, so please use this as an opportunity to update that citation. These are the correct elements for that citation:

> *"Year: 2015, Title: Test Methods for the Examination of Composting and Compost (TMECC), Publisher(s): The US Composting Council Research and Education Foundation & United States Department of Agriculture, Authors/Editors: Thompson, W. H., Leege, P. B., Millner, P. D., & Watson, M. E. (Eds.)."*

Table 220-B

In Table 220-B, we support the proposed reduction in the physical contamination limits.

Subsection (6)(a)(vi)(A) – page 105 of the .pdf

Please add The Compost Research and Education Foundation to the list of training organizations, as they are the organization offering the hands-on training often given credit to the US Composting Council; they are affiliated, but separate organizations.

> "*Appropriate compost training can be obtained through organizations such as the Washington Organic Recycling Council, the Solid Waste Association of North America, the U.S. Composting Council, the Compost Research and Education Foundation, or other training as approved by the jurisdictional health department.*"

Subsection (6)(a)(vi)(B) – page 105 of the .pdf
We support the new requirement for continuing education for facility supervisors.

WAC 173-350-225 – Other organic materials handling activities

Subsection (1)(f) – page 128 of the .pdf
As noted in our comments on 173-350-220, we believe that the physical contamination limit for organic feedstocks should be set on a weight basis rather than a volume basis to ensure the standard can be reasonably and consistently enforced. We also believe that the contamination limit should be set at a level above 2.0% and encourage Ecology to increase the limit to 5.0% by weight.

Subsection (6)(a)(iv)(B)(I) – page 135 of the .pdf
Please add language stating that digestate must meet quality standards related to pathogen reduction, vector attraction reduction, and heavy metals limits, in addition to the language related to contamination limits. Using the same information and parameters in Table 220-B would also work.

Subsection (6)(a)(vii) – page 137 of the .pdf
Please update the language to ensure that the training requirements mirror those for compost facilities, as it is not reasonable to create more lenient training standards for other types of organics handling facilities.

WAC 173-350-250 – Anaerobic digesters

(2) Anaerobic digesters – Permit exemptions
Subsection (2)(f) – page 164 of the .pdf
As noted in our comments on 173-350-220 and 173-350-225, we believe that the physical contamination limit for organic feedstocks should be set on a weight basis rather than a volume basis to ensure the standard can be reasonably and consistently enforced. We also believe that the contamination limit should be set at a level above 2.0% and encourage Ecology to increase the limit to 5.0% by weight.

(4) Anaerobic digesters – permit requirements – Design.
Subsection (4)(e) – page 168 of the .pdf (note that there appear to be two subsections (4)(d) in the draft)
New language added in this subsection states:

> *"The surface must be durable enough to withstand <u>the composting process</u>, weight of materials, and equipment."*

Is the reference to the composting process intentional in this section? Referring to the anaerobic digestion process seems to make more sense here.

(6) Anaerobic digesters – permit requirements – operating.
Subsection (6)(a)(v) – page 178 of the .pdf
Please add language stating that digestate must meet quality standards related to pathogen reduction, vector attraction reduction, and heavy metals limits, in addition to the language related to contamination limits. Using the same information and parameters in Table 220-B would also work.

Subsection (6)(a)(vi) – page 180 of the .pdf
Please update the language to ensure that the training requirements for anaerobic digestion facilities mirror those for composting facilities or are more rigorous, given the significantly higher level of safety concerns

associated with biogas production. Moreover, it is not reasonable or fair to create more lenient training standards for other types of organics handling facilities.

Subsection (6)(a)(vii) – page 182 of the .pdf
Please add a subsection stating that the AD facility shall implement and document pathogen reduction activities, similar to 173-350-220 Subsection (6) Composting facilities – Permit requirements – Operating (vii). Alternatively, the language can mirror WAC 173-308-170 for Class A biosolids "Alternative 1: Time and Temperature."

WAC 173-350-320 – Piles used for storage or treatment.

(2) Piles used for storage or treatment – Permit exemptions.
Subsection (2)(a)(iv) – page 195 of the .pdf
As noted in our comments on 173-350-220, 173-350-225, and 173-350-250, we believe that the physical contamination limit for organic feedstocks should be set on a weight basis rather than a volume basis to ensure the standard can be reasonably and consistently enforced. We also believe that the contamination limit should be set at a level above 2.0% and encourage Ecology to increase the limit to 5.0% by weight.