**Washington Department of Ecology**
**Chapter 173-350 WAC – Organics Management Rulemaking**
**Divert, Inc. Response**

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Solid Waste Management Program Rule Coordinator
Organicsrule@ecy.wa.gov

Thank you for the opportunity to comment on the latest organic materials rulemaking concepts to address the contamination in food waste feedstocks and finished products at organic processing facilities. Divert is a circular economy company on a mission to prevent food from being wasted. Since 2007, we've worked with prominent retailers like Kroger, Albertsons, Safeway, Target, and CVS to ensure that food is prevented from going to waste, rescued for communities in need, diverted from landfills, and transformed into renewable energy by utilizing a mix of infrastructure and technology solutions.

Divert currently operates 14 facilities across the U.S. and supports nearly 8,000 customer locations in the food manufacturing and food retail industry. Divert works across the food supply chain, helping customers manage unsold food products responsibly through training, data, and sophisticated depackaging technology. We provide insights that enable them to change behaviors and ultimately reduce waste. For inedible food, we have created the first FDA Food Safety Modernization Act (FSMA)-compliant reverse logistics process to aggregate inedible pre-consumer food from retail food stores. Once aggregated, we transform these inedible products into carbon negative renewable energy.

Divert is very appreciative that the Department of Ecology has considered feedback from so many stakeholders involved in the organics management space. It's critically important that our industry is provided with sufficient opportunity to innovate. If the Department and our industry are going to make strides in wasted food prevention and diversion, then it cannot limit the state's waste generators from accessing capabilities beyond what the Washington legacy collection, hauling, and processing community offer. As such, we must ensure that new regulations reflect the varying degrees of capabilities within the industry. Incoming feedstock regulations should discourage organics processors that do not have sufficient pre-processing capabilities from taking on incoming feedstock loads where it is difficult to extract or separate inorganic solid waste from organic material. Likewise, the regulations should encourage waste generators to access organics processors that have sufficient pre-processing capabilities, to ensure that difficult to process organic material is no longer landfilled. Finally, all parties involved in organics processing should be responsible in ensuring that that their finished organics products meet strict contamination standards to ensure they won't cause environmental harm by introducing plastic and other contaminants into the agricultural supply chain.

Divert is generally supportive of the concepts laid out in its June 2025 “Draft Concepts” document, and we offer additional insights and commentary on select portions of the initial revisions under consideration. We look forward to an ongoing dialogue with the Department of Ecology as this rulemaking unfolds.

**“Definitions WAC 173-350-100": “Organic Materials” and “Organic Materials Management” and how it relates to “Recyclable Materials”, “Solid Waste”, and “Residuals that must be managed as MSW” in the “Housekeeping and Miscellaneous” section**

The Department notes that definitions for “organic materials” and “organic materials management” will be adopted from statute. Due to the nature of this rulemaking’s focus on contamination, Divert believes that it is also important for the Department to offer greater clarity around how “organic materials” and “organic materials management” differ from “recyclable materials” and “solid waste”.

As one example, clarification on these definitions and on when these materials become solid waste would help organics processors, regulators, and local jurisdictions determine when a contaminant or residual becomes a solid waste material and must be managed as MSW and transported by UTC licensed haulers, as noted in the “Housekeeping and Miscellaneous” section. It would also help determine which local jurisdiction has appropriate regulatory or flow control authority for any material that is ultimately discarded as solid waste and needs disposal services.

It is Divert’s interpretation that incidental packaging that comes in direct contact with food products is considered source-separated organics for the purposes of pre-processing. Both the Department of Ecology and Utilities and Transportation Commission have been very clear to Divert that its interpretation and its process are compatible with their legal interpretations of source-separated organics. Despite this clarity, Divert continues to see varying degrees of interpretation when it comes to local jurisdiction inquiries about whether these food products are considered to be solid waste. Some stakeholders have said that the food products Divert performs analytics and processing on are subject to local flow control requirements. They’ve said that these food products should go to a local jurisdiction's waste provider, despite Divert’s retail food customers wanting to choose a service provider that is equipped with appropriate pre-processing capabilities and helping these retailers address the root cause of wasted food. Other stakeholders have said that because the organics portion of food products is attached directly to packaging that will ultimately become solid waste, that the entire portion of the food products are subject to a local jurisdiction’s solid waste requirements, even if the food products were not discarded as solid waste, and even if the packaging in question is of a de minimus amount. WAC 173-350-021 addresses the “Determination of Solid Waste” and makes it clear that this incidental packaging material becomes solid waste at the point of processing, where it would become separated from the valuable organic material and then “discarded, abandoned, or disposed of”. The issue Divert often encounters is at what point in time does that residual

material actually become solid waste. Since these definitions directly relate to removing contamination from incoming feedstocks and/or finished organic products, it would be especially helpful if the Department offered clarity to Divert and other stakeholders. This will help local jurisdictions, Divert, and other service providers better determine which local jurisdiction has appropriate governance applicability, and which UTC-licensed hauler would be obligated to transport the residual MSW portion of these food products.

**"Definitions WAC 173-350-100": "Physical contamination" (expand from applying only to compost to all organic management types)**

Divert strongly agrees with the Department's intention to expand this definition to apply to all types of finished products that are a result of organics management processing operations. During Divert's 18 years in operation, we have learned that there is no simple way to address physical contamination in commercially generated wasted food – contamination is always present even when incidental packaging is not permitted to enter into a processing operation. In earlier Divert facilities in locations where it did not yet have sophisticated pre-processing equipment in place, Divert's customer contracts limited incoming food products to include unpackaged food only to ensure that subsequent processing steps could manage more limited amounts of incidental contamination. This limited what types of customers' organic material could be successfully diverted, and many retailers simply had to landfill food products with incidental packaging attached to it. Divert's reasoning was that contamination from hard-to-process organic material has significantly higher levels of contamination, and until Divert had more sophisticated processing technology in place, contamination could not be effectively dealt with. Divert did not want its process to result in more environmental harm to agricultural systems than the harm from the methane emissions it was preventing.

Unfortunately, not everyone shares this philosophy. Divert has encountered many local jurisdictions and privately-operated companies that have haphazardly addressed physical contamination through a variety of means. Incorporating an off-the-shelf depackaging unit in an organics processing operation does not equate to effective contamination removal. As more local jurisdictions and privately operated organics processing companies begin to address increased food scrap feedstock, especially from commercial sources, this is a trap they often fall into. They believe that the purchase of simple depackaging equipment will enable them to take on commercially generated wasted food, which always contains far higher rates of incidental contamination than residentially generated food scraps. Unfortunately, a simple $5-10M investment in depackaging equipment does not necessarily mean contamination standards will be met.

Widely available research confirms this. The following paper, "Comparison of two mechanical pre-treatment systems for impurities reduction of source-separated biowaste[1]", was cited by the State of Vermont when it implemented a moratorium on depackaging until it could implement a process to ensure finished products are free of physical contaminants. The paper discussed the limitations of standard depackaging systems and how various types of physical contaminants

are often found in finished compost products and co-digestion processes. It demonstrates that after initial depackaging, the downstream processes aren't designed to deal with microplastics. “Results showed that, although 99% of the incoming plastics were efficiently removed....the impurities concentration was still too high to meet the legal standards of plastics concentration in the final product.” Likewise, the stakeholder group that convened in Vermont to assess next steps agreed that “fragmentation of certain types of plastic packaging through the mechanical de-packaging process” is a risk that needed to be addressed through a variety of means (see Figure 1 below).

This is a problem our leaders addressed through Divert’s own proprietary processing solution. This solution incorporates significantly more steps than a typical off-the-shelf depackaging unit, and is significantly more expensive. Our depackaging system is far more advanced than one of these units and our digestion process is set up to screen any additional microplastics that could escape the initial process. Also, ours is more efficient at organics extraction because it uses hydraulic friction and has three levels of progressive screening for plastics and impurities. Ours is not polluting with microplastics and rescues the nutrients in food to drive circularity. This process results in a very clean intermediate digestate product. Through third-party testing at a laboratory used by the Department of Ecology, the digestate byproduct from Divert’s anaerobic digestion process performed better than the finished compost products that it is being added to.

Because there are so many different ways to design an effective depackaging system, we concur with Ecology’s decision to not specify what types of depackaging equipment should or should not be specified or what types of wasted food is or is not appropriate for it. The best way to ensure organics processors are taking responsible action is to put stringent screening standards in place for those who do not have pre-processing equipment and put stringent finished product testing standards in place for those that do have processing equipment to take on hard-to-recycle organics. We continue to believe that Ecology is taking a responsible approach in addressing this and getting well out front of the challenges that Vermont had to deal with in its moratorium.

*Microplastics from depackaged food waste. Photo courtesy of the University of Vermont*

Figure 1: Microplastics from improperly depackaged wasted food products

**"Definitions WAC 173-350-100": "Organic Pre-processing" (add and expand in section)**

Divert strongly agrees with adding this definition to ensure that organics processors not meeting the 2% contamination inspection threshold are implementing pre-processing operations to ensure that physical contamination is not present in finished organic products. If Ecology had continued to not call out the need for pre-processing to ensure all organic materials can be recovered, then confusion would continue to persist amongst the marketplace about what type of food products are allowed to be taken to organics processing facilities. As a result, difficult-to-recycle food products would continue to be landfilled.

Divert commends the Department for ensuring that pre-processing is in place if the responsible parties along the chain of custody are unable to address contamination to sufficient levels. In current practice, some organics processing facilities suggest that they only accept "clean" source-separated organic material, where the waste generator is instructed to manually separate all packaging and incidental contamination. In theory, this keeps them from needing to take additional mechanical or manual depackaging steps to separate any incidental contamination from the organic material. This process generally results in lower contamination rates for residentially collected post-consumer organic materials that have already been "consumed". However, accepting "clean" source-separated organic material is far more challenging for commercially generated wasted food products, and especially pre-consumer food waste, where packaging comes in an almost infinite variety of materials, shapes, weights, and densities, from tiny produce stickers to airtight cucumber sleeves, mesh produce bags, and everything in between. In practice, the complexity of different types of packaging makes it difficult to depackage that food by hand; even the most well-trained teams will likely not be able to achieve 100% purity of source-separated organics, and in many cases, the results are significantly less. As a result, organics processors that try to accept this supposedly "clean" material while not deploying pre-processing equipment to address it, are perpetuating this contamination problem.

Divert agrees that it's critical for Ecology to provide flexibility for organics processors to implement pre-processing standards, including manual and automated sort lines, depackaging, and other technologies. However, Divert cautions that simply implementing a pre-processing operation does not ensure that finished organic products will be contaminant-free. It's important that testing of finished organic products for beneficial use applies to all of these products, regardless of whether they went through a pre-processing operation.

**Land Application (173-350-230) Requirement**

Divert strongly agrees with the Department's decision to add a requirement for Land Application with a physical contaminants analysis when the source of material could contain contamination. Finished organic products should be subject to the same limits, regardless of how they are

processed. In Divert's experience, its digestate byproduct has been used for direct land application and as an intermediate production step in finished compost. When it's been used in the latter format, it's perceived as highly beneficial as an additive to finished compost because it has the benefit of already going through a complex physical contamination removal process and still has high nutrient levels due to the nature of its undigested food material makeup.

**Contamination Limits (-220, -225, -230, -250)**

Divert strongly agrees with the Department's decision to limit incoming contamination at compost facilities, anaerobic digesters, and other organic material handling to 2%, unless feedstocks can undergo pre-processing to remove contamination at co-located or offsite locations to meet the 2% standard. Citizens in our state have been negatively impacted from contaminants not removed from finished compost products. As noted above, Divert cautions that simply implementing a pre-processing operation does not ensure that finished organic products will be contaminant-free. It's important that testing of finished organic products for beneficial use applies to all of these products, regardless of whether they went through a pre-processing operation.

Unfortunately, some composters have been accepting contaminated material without having adequate infrastructure in place to remove contamination. The amount of feedstock, especially feedstock from commercial food waste, is increasing as more and more waste generators take action to comply with Washington's new Organics Management Laws. As a result, an ongoing contamination problem will likely get worse if organic products that intend to improve soil health introduce more plastics, glass, and metal that are not removed during the composting process. The Department has a responsibility to address this persistent problem during the rulemaking process. If our industry is going to increase circularity by ensuring that the byproducts from wasted food products can be reintroduced into our agricultural supply chain, then the public must be able to trust that we can do this responsibly. This rulemaking process presents an opportunity to open the compost and soil amendment market back up to consumers and those in the agricultural industry that have avoided compost and soil amendment products in recent years due to the failure of some organics processors to address the contamination problem.

Divert values the steps that the Department of Ecology is taking to make this rulemaking successful. We are committed to engaging further with the committee on the topics raised here thank you for your time and consideration of this important issue.

Chris Thomas
Vice President of Public Affairs
Divert Inc.