

## Contamination Threshold Limits

- What options at solid waste facilities should Ecology consider for preventing physical contaminants in food waste/other organic feedstocks and finished compost?
  - At solid waste facilities, Ecology should encourage any contaminant removal method(s) established prior to grinding feedstocks.
  - Prior to solid waste facilities, Ecology should minimize the co-mingling of food waste and yard waste.
    - Commercial food waste often has higher contamination levels. That, combined with the significant moisture, makes this feedstock more conducive for contaminant removal processes that are found prior to anaerobic digestion.
    - Yard waste handled without food waste still has contamination, but the levels are manageable, so the quality of finished compost improves, opening new markets.
- Currently, a facility must reject feedstock loads that appear to have 5% or more by volume or else have a plan for removing contaminants prior to composting. Finished compost must have less than or equal to 1% by weight and not to exceed 0.25% by weight of film plastics.
  - How should the amount of physical contaminant be measured?
    - Standardizing contamination metrics consistently by either weight or volume would resolve discrepancies where film plastics represent minimal weight but significant volume, creating compliance challenges across the industry.
  - What is an appropriate threshold for contamination in incoming feedstocks?
    - The thresholds that the state established are comparable, if not more stringent than other states (and some advanced countries).
  - What is an appropriate contamination limit in finished compost products?
    - The comment on the above question applies here, too.

## Slaughter Waste

- Slaughter waste generators have found it increasingly difficult to find processing options for their material, prompting more generators to consider onsite management. This waste stream can cause significant impacts if managed incorrectly.
  - As Ecology reviews permit structures and existing permit exemptions, what factors would you like us to consider regarding slaughter waste?
    - The biggest factor here seems to be pathogen mitigation, especially considering recent examples of animal to human transfer. But slaughter waste from a slaughterhouse appears less of a concern for disease than mortalities derived on-farm. Nuance should be examined if one is able to avoid handling costs by transferring obligation to the other.
  - How should on-farm slaughter fit in with agricultural practices?
    - On-farm slaughter should be handled within the boundaries of agricultural practices (exemptions?) with the caveat that laboratory analysis of the

finished product is reported (frequency by quantity produced) if being transacted.

### **Pre-processing Operations**

- There are currently no specific standards for depackagers. As a result, depackagers are currently operating under the material recovery facility standards. Ecology proposes creating pre-processing standards for such operations and other organic pre-processing. One way to address such types of operations could be a minimum recovery rate that gets recycled.
  - What should Ecology consider as we develop standards for these facilities?
    - It seems that multiple frameworks can accomplish the goal of allowing these facilities to operate so long as they have regular (standardized) quality testing, transparent recordkeeping/reporting, and some implementation/documentation of process controls (operations plan) to accomplish the minimum recovery rate.

### **Recordkeeping and Reporting**

- What level of recordkeeping and reporting should be required for various facility types, including exempt facilities if they export finished organics off site?
  - If a facility is exporting material offsite and a transaction occurred, then regardless of exemption, a facility should report a full compost laboratory analysis that demonstrates the level of pathogens and stability of the material being sold. I'm not advocating that exempt facilities need to certify their material for organic use, but if a level of processing is taking place, it should meet some parameters if it is being sold/used beyond the processors operational scope.

### **Training at Facilities**

- Currently, facility supervisors responsible for daily operation at compost facilities must have specific training, and a trained supervisor may provide training for other employees.
  - What level of training, such as additional/on-going training, should be required, and what would be the desired outcome from such training?
    - All facilities should have a supervisor that has received certified training.
    - Permitted facilities should always have a trained supervisor onsite (during operating hours).
    - Certified supervisors can train operators/employees.
    - Annual continuing education should be promoted to stay current with evolving best practices and regulatory requirements.
  - What level of training should be required at different organic management facility types, including some under permit exemption exporting finished materials offsite?
    - Permitted facilities should require comprehensive supervisor certification (USCC, WORC, etc.).

- Exempt facilities, exporting materials should require basic training covering testing requirements and contamination management.
  - On-farm operations should consider modified training focused on agricultural applications and pathogen reduction (ex. WORC + nutrient management training).
- If no certification or training for managing organic wastes via vermiculture or other organic management technologies exists, what would you recommend?
  - Develop standardized curriculum through partnership with extension services and industry experts. Until formal certification exists, operators should demonstrate competency through operations plans with documented process controls and periodic verification testing.

## Permit Exemptions

- The current rule has conditional permit exemptions for several organic material management facilities. Some permit exemptions are in state law while others are instances where Ecology determined an exemption provides sufficient oversight. Only low risk operations should qualify for exemption. It is important that the rule creates a fair and equitable business landscape and neither overburdens exempt facilities, nor allows exempt facilities to excessively undercut standards required for permitted operations.
  - What new exemptions, if any, are desired?
    - Small-scale community composting operations under 100 cubic yards deserve exemption because they process minimal volumes typically with clean feedstocks while providing education and supporting local sustainability.
    - Research/educational facilities with limited throughput
  - What exemptions, if any, need revisions?
    - On-farm composting regulations need clearer definitions of acceptable feedstocks to address inappropriate materials being composted on farms, which have created both regulatory confusion and potential environmental risks affecting soil and water quality
- Ecology sees a need for a permit exemption for yard debris drop off locations where yard debris is transferred to an organic management facility within a reasonable time. One type of drop-off location is a retail landscaping material yard where landscapers may bring full loads throughout the day for consolidation into a larger load. We are considering time and volume limits for this permit exemption to ensure materials move regularly to a compost or other type of processing facility.
  - What time limitation would be appropriate for this exemption?
    - The 7-10 day maximum storage time for yard debris drop-off locations balance operational flexibility with risk management, as industry experience shows extended storage beyond this period significantly increases odor generation, vector attraction, and spontaneous combustion risk.

- What volume limit would be appropriate?
  - ~250 cubic yards

## Other

- What requirements should be placed on digestate to be beneficially used (liquid and solids, combined or separated)?
  - Pathogen testing using industry standards creates regulatory consistency for digestate without imposing new testing burdens on facilities already familiar with these protocols that have successfully protected public health for decades.
  - Nutrient analysis to inform application rates
- Ecology must update the definitions section of chapter 173-350 WAC with certain organic-related terms in statute.
  - What organic related terms would you like to see clarified or added to the rule?
    - The distinction between "pre-processing" and "processing" should be clarified to properly categorize depackaging facilities, which is critical for enabling effective food waste diversion.
- What other changes to the organic waste standards have we not considered?
  - Technology-neutral performance standards rather than prescriptive requirements where regulations focus on measurable outcomes instead of mandating specific methods or equipment
  - Legislation to curb organics from landfills appears to be marching forward. But the economics of correctly implementing any waste handling pre-processing, processing, and/or finishing technologies is challenging if not prohibitive for current/new facilities. Where can a small business go to get millions of dollars in investment/grants/loans to facilitate inconsistent waste streams that result in finished products of exaggerated value to then be sold in an under-developed market? Compost user incentives are noticeable (WSDA's reimbursement program) but do not provide enough security for long-term investment.