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Response to Comments on

Proposed Composting Facility Regulations

COMAR 26.04.11

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## Background

Environment Article, § 9-1725, Annotated Code of Maryland, requires the Maryland Department of the Environment ("the Department" or "MDE") to adopt regulations governing construction and operation of composting facilities. The Department initially proposed regulations on January 10, 2014.[1] Comments were received and revisions to the original proposal were made in response to comments. On December 12, 2014, the original proposal was withdrawn and revised composting facility regulations were proposed.[2] The public comment period ended January 12, 2015. The Department received comments from five individuals and organizations. The following combines and summarizes the comments by topic, along with the Department's responses.

## Comments and Responses

1. **COMMENT**: A significant portion of Maryland poultry farms are "no-land" operations, meaning they lack cropland on which to use poultry litter and animal mortalities. Instead they export these materials off site for application on other farms. No-land operations often compost animal mortalities and mix the resulting compost with poultry litter prior to export. The exemption for on-farm composting facilities in proposed Regulation .06C should be revised to allow for use of compost off site at other farms. Poultry farmers should not be required to obtain a Composting Facility (CF) Permit.

   **RESPONSE**: The situation described in the comment is unlikely to require a CF Permit under the proposed regulations. There are four exemptions from the CF Permit that potentially apply to on-farm composting facilities. While the exemption in proposed Regulation .06C does not allow for distribution of finished compost to other farmers, the other exemptions do. Appendix A summarizes the four exemptions applicable to on-farm composting.

   As shown in Appendix A, on-site animal mortality composting with distribution of the finished compost would be exempt under Regulation .06D if the area used in support of composting is no more than 40,000 square feet and the facility operates under the agricultural plans listed in Regulation .06D(2). Alternatively, animal mortality composting with distribution of finished compost would be exempt under Regulation .06E if the area used in support of composting is no more than 5,000 square feet and the facility meets the pile height restrictions in Regulation .06E(3). Finally, temporary emergency composting of larger quantities of animal mortalities would be exempt under Regulation .06F if approved by Maryland Department of Agriculture (MDA).

   Mortality composters are often installed under cost-share and in accordance with Natural Resources Conservation Service (NRCS) design standards. These composters are roofed structures

[1] 41:1 Md. R. 47 — 59 (January 10, 2014).
[2] 41:25 Md. R. 1531 – 1544 (December 12, 2014).

consisting of either bins or long channels.[3] NRCS and University of Maryland Extension guidelines for sizing poultry mortality composters suggest that even large poultry operations could conduct routine mortality composting using less than 5,000 square feet of area.[4] Comments from MDA and University of Maryland Extension on the initial January 2014 proposal also stated that routine animal mortality composting ordinarily uses less than 5,000 square feet.

Only areas used in support of composting are included in the size thresholds for the exemptions.[5] Simply storing poultry litter temporarily prior to export does not constitute composting. In addition, litter storage areas are not considered "areas used in support of composting" solely because finished mortality compost may be mixed with the uncomposted litter prior to export.

Because routine animal mortality composting with export of finished compost would typically fall within the exemptions in Regulation .06D or E, no change to the proposed regulations is necessary.

2. **COMMENT**: If an existing composting facility chooses to operate under a Refuse Disposal (RD) Permit under proposed Regulation .05E, when must the permittee submit an application for modification of the RD Permit to include conditions related to the composting activity?

   **RESPONSE**: In order to avoid immediately being subject to the CF Permit requirement, an existing composting facility must either comply with one of the CF Permit exemptions or submit the Existing Facility Notification (EFN) by no later than 60 days after the effective date of the regulations.[6] To comply with the exemption in Proposed Regulation .05E a composting facility must be covered under a RD Permit that contains conditions specific to the composting activity. This can be achieved by modifying an existing RD Permit. The Department recommends that existing composting facilities intending to operate under the Regulation .05E exemption submit both an EFN and an application for modification of the RD Permit by the 60-day deadline. That way, the facility will remain in compliance while the RD Permit modification is being processed by the Department, and in the event that the RD Permit modification is denied, the facility will still have until January 2017 to obtain the CF Permit.

3. **COMMENT**: The Composting Facility Operations Plan (CFOP) is required to include an emergency preparedness plan for responding to and minimizing the occurrence of fires, explosions,

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[3] MDA, MACS Manual, Dead Bird Composting Facility, http://mda.maryland.gov/resource_conservation/Documents/macs_manual/2/318_dead_bird_compost.pdf

[4] See University of Maryland Extension, Fact Sheet 537, "Composting Dead Birds," http://extension.umd.edu/sites/default/files/_docs/articles/fs537_CompostingDeadBirds.pdf (estimating that a farm with 93,333 birds using a 2-stage system would require 6 primary treatment bins sized 5 feet wide and 7 feet long, with an equal capacity for secondary treatment); NRCS, Agricultural Waste Management Field Handbook, Chapter 10, Agricultural Waste Management System Component Design, ftp://ftp.wcc.nrcs.usda.gov/wntsc/AWM/handbook/ch10.pdf

[5] "In support of composting" is defined in Proposed Regulation .02B(21).

[6] Proposed Regulation .07B and D.

and releases.[7] Nowhere in any literature we have identified is there discussion of explosions from composting facilities. Including a discussion on how the facility plans to minimize explosions may cause undue alarm in the public reviewing such a plan. Please remove the reference to explosions.

**RESPONSE**: The risk of explosion at a Tier 1 or 2 composting facility would generally be limited to the spread of fire to explosive fuels that may be used in equipment on site. This concern is addressed through the required plan for responding to and minimizing the occurrence of fires. The separate reference to explosions is therefore duplicative and will be deleted. The same change will be made where fire and explosion prevention were required to be addressed in the individual CF Permit application.[8]

4. **COMMENT**: Proposed Regulation .09B(1)(a)(xiii) requires the CFOP to include procedures for handling "unacceptable wastes" delivered to the composting facility. A compost facility, unless it has a RD Permit, cannot accept waste. The more appropriate term would be "unacceptable feedstocks." For instance, waxed cardboard, known for its very slow breakdown, may be an acceptable feedstock at some Tier 1 or Tier 2 facilities that plan to screen and re-compost their overs, but may be considered unacceptable at other facilities. Use of the term "unacceptable feedstocks" is preferred.

   **RESPONSE**: The definition of solid waste includes organic material capable of being composted that is not composted in accordance with the proposed regulations.[9] A compostable material such as waxed cardboard is a waste when handled at a composting facility that does not compost that material. The other reason to use the term "waste" rather than "feedstock" is that the provision was intended to also address noncompostable materials, such as plastic, that may be inadvertently received at a facility. For these reasons, the Department believes the broader term "waste" is more appropriate than "feedstocks."

5. **COMMENT**: A Tier 2 composting facility should be allowed to compost omnivore manure and bedding from a research facility. The bedding sent for composting would be separated from any bedding that may contain drugs, chemicals, or pathogens not naturally occurring in the animal.

   **RESPONSE**: Under the proposed regulations, Tier 2 facilities may compost Type 1 and Type 2 feedstocks. Type 2 feedstocks include "Department-approved animal manure and bedding, with Department approval based on factors such as moisture content and pathogen risk." In general, omnivore manure and bedding that does not have excessive moisture content and that comes from a research facility with an established procedure for excluding waste with research-related pathogens and pharmaceuticals would be treated as a Type 2 feedstock. The time and temperature requirements in Proposed Regulation .09B(10) are intended to address pathogens normally

[7] Proposed Regulation .09B(1)(a)(viii).
[8] Proposed Regulation .10B(2)(h)(vi).
[9] Environment Article, §9-101(j), Annotated Code of Maryland.

expected in animal manure and bedding. All compost must be registered by MDA before being sold or distributed in Maryland. MDA's regulations allow it to require additional testing parameters and to place limitations on the registration, including the allowable uses for the compost. As a result, the finished compost may be subject to pathogen testing in order to obtain MDA registration. Compost that is high in pathogens may be designated for limited use or prohibited from distribution altogether. A commercial composting facility producing compost that is not registered by MDA would be unable to comply with MDE's proposed regulations (for example, because the facility could not meet time limits on storage of finished compost). As a result, the facility would be required to cease accepting the feedstock that resulted in unregistered compost. Any "compost" that does not meet MDA standards is a solid waste and must be properly disposed.

## Appendix A: On-Farm Composting Exemptions[10]

| Citation | Size | Allowable Feedstocks | Use of Finished Compost | Other Conditions |
|---|---|---|---|---|
| .06C | No limitation | Materials generated on site or at another farm controlled by the same operator. | Compost used on site or on a farm controlled by the same operator. | |
| .06D | ≤ 40,000 $ft^2$ used in support of composting | Any of the following:<br>• Materials generated on site or at another farm controlled by the same operator (including animal mortalities);<br>• Animal manure and bedding, regardless of place of generation;<br>• Type 1 feedstocks, regardless of place of generation. | No limitation | Must operate in accordance with a nutrient management plan (if required) and either a soil conservation and water quality plan or agricultural waste management system plan that addresses certain aspects of the composting process (see .06D(2)(b)). |
| .06E | ≤ 5,000 $ft^2$ used in support of composting | Any Type 1 and Type 2 (including animal mortalities). | No limitation | Must comply with certain pile height restrictions (see .06E(3)). |
| .06F | No limitation | Animal mortalities generated as a result of a non-routine, catastrophic die-off. | No limitation | Must be approved by Maryland Department of Agriculture (MDA). |

[10] In addition to the conditions included in this table, all composting facilities, including those exempt from the CF Permit, are required to comply with general restrictions in Regulation .04B.