Response to Comments on

Draft General Composting Facility Permit

CF – GP01

March 28, 2016

Background

On December 31, 2015, the Maryland Department of the Environment (the Department) published a Draft General Composting Facility (CF) Permit under Environment Article, §9-1725, Annotated Code of Maryland and Code of Maryland Regulations (COMAR) 26.04.11.11. Requests for a public meeting on the Draft General CF Permit were due by the close of business on January 20, 2016 and written public comments were due by the close of business on February 1, 2016.

The Department received no requests for a public meeting. The Department received written comments from three commenters. The following combines and summarizes the comments by topic, along with the Department's responses.

Comments and Responses

1. **COMMENT:** Under Part II.A.5, add the underlined text: "Copies of all other applicable permits required under local, State, or federal laws, including the General Permit for Stormwater Discharges Associated with Industrial Activity and **an Air Permit**, if required." This is valuable information because grinders with more than 500 brake horsepower require an air permit and applicants may not be aware of this.

   RESPONSE: A reference to the air Permit to Construct and Permit to Operate will be added.

2. **COMMENT**: Under Part III.A.3.e, add the underlined text: "Manufactured organic materials such as waxed **and non-waxed** corrugated cardboard, non-coated paper, and compostable products **including bioplastics**;" The list could be made simpler by just stating compostable products, since COMAR 26.04.11.02B(8) defines compostable products.

   RESPONSE: The existing language is taken from the definition of Type 2 feedstocks in COMAR 26.04.11.02B(39)(e). It is not necessary to add "non-waxed corrugated cardboard" because this is included within "non-coated paper." The term "bioplastics" should not be added because that term is undefined and is not used elsewhere in the permit or regulations. Only certain types of compostable plastics are included in the definition of "compostable products" in COMAR 26.04.11.02B(8)(d), so including "bioplastics" without qualification may be misleading.

3. **COMMENT:** Under Part III.E, add the following sentence: "If authorized by local zoning laws, the following activities are not considered operating for purpose of the prohibition on operating outside of the posted hours of operation: administrative tasks, indoor equipment maintenance, environmental monitoring or other activities not associated with handling or processing of feedstocks, compost, contact water or use of heavy equipment."

   RESPONSE: This clarification will be added. Conditions related to operating hours would more logically be located under Part III.D, Hours of Operation. The requirements related to operating hours under Part III.E will be reworded and combined with Part III.D and the requested clarification will be added there.

4. **COMMENT:** Under Part III.H.2, The permit uses the term "*de minimis* quantities" when discussing contaminants in feedstocks. This is not specific. According to COMAR 15.18.04.05B(1), compost containing up to 2% plastic film by weight is still considered "General Use Compost." Based on 300 lbs/cy dry weight, this would mean about 6 lbs of contaminants in a typical cubic yard of compost. This quantity of shredded plastic bags may not appear to be a "*de minimis* quantity" in feedstocks but will meet the most stringent standard for compost according to Maryland Department of Agriculture (MDA). As written, Part III.H.2 leaves a large degree of discretion to the MDE inspector and for that reason it should be revised.

   RESPONSE: The Department does not believe it would be possible to specify an appropriate maximum numerical limit for contamination applicable to all incoming feedstocks at all facilities. A general permit must address a variety of situations. The permit conditions related to unauthorized materials are intended to prevent and address problems related to excessive accumulation of unauthorized materials while allowing the flexibility for various types of composting.

   The quantities and types of unauthorized material expected to arrive at a composting facility would vary based on the feedstock types, sources of material, and collection method. Appropriate thresholds and procedures for addressing unauthorized materials would also vary with these factors. For example, a residential yard waste facility that accepts curbside material in plastic bags will need to consider how to prevent plastic from blowing off site and how to address the discovery of physical contaminants that were initially hidden in opaque bags. A composting facility that accepts post-consumer food scraps from restaurants should expect to address non-compostable food serviceware, such as plastic cups, bottles, cans, utensils, etc. Differences also exist in the nature of the contaminants. Some types of unauthorized materials are compostable, such as food unintentionally commingled with yard waste at a Tier 1 facility, while others are non-compostable and will need to be screened, stored, and recycled or disposed.

   In determining whether more than de minimis quantities of unauthorized materials have been accepted at a facility, the Department will look to the operator's approved CFOP. Under Part III.H.1, the operator must develop a plan to visually inspect each incoming load, determine the portion of each load that is composed of unauthorized materials, determine whether unauthorized materials are present in significant quantities, and take actions to address the contamination if determined to be present in significant quantities. These procedures must approved by the Department as part of the CFOP.

   In reviewing the CFOP, the Department will evaluate, among other things, the proposed quantity of unauthorized materials in a load that would trigger rejection by the operator. The ability to meet MDA product quality standards is one consideration, but the plan must also be sufficient to prevent other problems associated with excess accumulation of unauthorized materials. This includes operational problems related to space and workload demands of separating, storing, and removing unauthorized materials, nuisances, harborage of disease vectors, and contact water runoff from stockpiles of unauthorized material.

If an operator has accepted more than de minimis quantities of unauthorized materials, including quantities exceeding the threshold specified in the operator's approved CFOP, the Department has the authority to set its own maximum threshold over which the load must always be rejected. This condition exists as an additional safeguard to address instances in which the operator's process for monitoring and responding to contamination is not working as intended.

5. **COMMENT:** Under Part III.I.2, the requirement to surround each pile of feedstocks, active composting material, curing material, compost, and solid waste by an all-weather fire lane of at least 12 feet in width, capable of supporting emergency equipment, is excessive and should be removed. One commenter suggested that the width and location of the fire lane should instead be approved by the local or State fire marshal. Another commenter stated that it would cost tens of thousands of dollars to add the required fire lanes between each of the piles and not all of the fire lanes would be necessary to allow fire department access to the piles.

   RESPONSE: The purpose of Part III.I.2 was to ensure that all piles of material on the site are accessible to emergency equipment in the event of a fire or other emergency. Part III.I.1 states that the facility shall have all-weather access roads "sufficient to provide emergency equipment with access to all piles of feedstocks, active composting material, curing material, and compost." Part III.I.2 elaborates on this, stating that the facility must have fire lanes at least 12 feet in width, unless wider lanes are required by the State or local fire marshal.

   The State Fire Code requires certain piles of material to be subdivided by fire lanes of at least 30 feet in width, including piles of wood chips stored outside and piles of wood chips, hogged material, fines, compost, and raw products produced at yard waste facilities.[1] Any State and local requirements must be followed in addition to the requirements in the General CF Permit. Part III.I will be revised to remove the reference to a 12 foot fire lane and to clarify that composting facilities must comply with the requirement to have emergency access to piles under Part III.I.1 and with any applicable State and local requirements.

6. **COMMENT:** Under Part III.J.3, the requirement for feedstock storage piles to be located in an area that is visually screened from adjoining properties or in an enclosed building is important, but this issue is case-specific and should be left up to local zoning and land use authority.

   RESPONSE: Part I.H states that nothing in the General CF Permit authorizes the construction of the facility in violation of local government laws or regulations, including planning, zoning, and land use requirements. Some local governments may have screening requirements applicable to composting facilities. The General CF Permit does not prevent a local government from imposing or enforcing such a requirement.

   Part III.J.3 ensures there is adequate screening even where the local government has not specifically addressed the issue. While screening may be partly a local land use issue, it is also a State issue. State law authorizes the Department to adopt regulations establishing design

[1] NFPA 1 §§ 31.3.6.3 (as incorporated and modified under COMAR 26.06.01.08BBB and CCC) and 31.3.7 (as incorporated under COMAR 29.06.01.08).

requirements for composting facilities to protect the environment and minimize nuisances.[2] State regulations specifically prohibit a composting facility from operating in a manner likely to create a nuisance.[3] Screening helps reduce the potential for nuisances by buffering views, noise, and dust. Vegetative screening can also help address odors.[4] In addition to nuisances, screening helps prevent materials such as plastic bags from blowing off site and entering storm drains, water bodies, and trees. A similar screening requirement is included in the Natural Wood Waste Recycling Facility (NWWRF) General Permit. The Department agrees that the importance of screening in preventing nuisances may vary with the location and configuration of the facility. In order to introduce more flexibility, the Department will add an exception where an approved CFOP authorizes alternative nuisance prevention measures and screening is not required by local requirements.

7. **COMMENT**: Under Part III.K.1, add the underlined language: "Active windrows or piles shall be composed only of Type 1 feedstocks, Type 2 feedstocks, and compost **and/or carbon rich materials**."

   RESPONSE: No change is needed. Carbon rich materials may only be included in active windrows or piles if they are Type 1 or Type 2 feedstocks. The definitions of Type 1 and Type 2 feedstocks provide guidance as to which carbon rich materials would be classified in each of the feedstock types. For example, wood chips would be classified as a Type 1 feedstock.

8. **COMMENT**: Under Part III.L.3, delete "in a manner that prevents contamination of curing material by pathogens." If the focus is contact water, the shorter sentence will suffice. If the focus is pathogen contamination of the material after it has met PFRP, then the focus is beyond COMAR 26.04.11 and is a product quality issue better addressed under Maryland Department of Agriculture (MDA) regulations.

   RESPONSE: This condition will be clarified. The intent was to prevent contamination of curing materials by the pathogens potentially contained in contact water. Contact water, by definition, has contacted raw or active materials that have not yet undergone pathogen reduction. Unless curing material, which has already undergone pathogen reduction, is physically separated from contact water from other areas of the site, the curing material can become re-contaminated with pathogens from raw or active materials. The intent was not to address contamination of curing material from pathogens that may be present in the environment more generally.

9. **COMMENT**: Under Part III.N.2, delete the word "log" in "record log." Composting systems may record continuous temperature readings on a graph. These are electronically recorded but may be printed. The information is not written down in a "log" per se, but a record of the information exists and may be displayed for a regulatory inspection.

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[2] Environment Article, §9-1725(b)(2)(iii).
[3] COMAR 26.04.11.04B(1).
[4] Coker, Craig, Controlling Composting Odors, Biocycle February 2016, Vol. 57, No. 2, p. 18, https://www.biocycle.net/2016/02/16/controlling-composting-odors/ ("Plan on a thickly vegetated buffer of fully developed vegetation in [the direction of sensitive receptors] so that vegetative surfaces can intercept and filter particulate matter that may contain odorous compounds. Orient the site so that odor-producing activities are sheltered by trees, hills, buildings, walls and other features that break up the wind pattern to create turbulence.")

RESPONSE: Nothing in the provision as written requires that the record log be kept on paper rather than electronically. To avoid any misunderstanding, the word "log" will be deleted. The record may be created and maintained electronically or on paper, as long as it can be provided to the Department upon request.

10. **COMMENT**: Under Part III.P.2.a through g, the listed contents of the emergency preparedness plan are beyond what is required under COMAR 26.04.11.09B(1)(a)(vii). Composting facilities are a lower risk for fires than NWWRFs, yet the requirements in this part are much more detailed than those required in Part III.O of the NWWRF General Permit. Please identify where in the State Fire Code these are required.

    RESPONSE: To the Department's knowledge, nothing in the State Fire Code prescribes specific items for inclusion in an emergency preparedness plan for a composting facility. The emergency preparedness plan is a concept created under the Department's regulations at COMAR 26.04.11 and is not related to the State Fire Code. COMAR 26.04.11.09B(1)(a)(vii) requires the CFOP to include "an emergency preparedness plan for responding to and minimizing the occurrence of fires and releases," but does not elaborate on the contents of the emergency preparedness plan.

    The Department disagrees that the items to be included in the emergency preparedness plan under Part III.P.2 are much more detailed than those required under the NWWRF General Permit. In fact, with one exception, the items listed in Part III.P.2 of the Draft General CF Permit are identical to those listed in Part III.M of the NWWRF General Permit. The one exception is the addition of "a statement identifying a local fire agency that has been notified of the composting facility by the permittee." Relative to the NWWRF General Permit, the Draft General CF Permit includes more flexibility with respect to specific fire prevention requirements in recognition of the diverse nature of the materials handled at composting facilities compared with NWWRFs. For example, the Draft General CF Permit does not prescribe maximum pile heights or widths, minimum spacing between piles, or a minimum moisture content. Given this flexibility, the Department believes it is appropriate for the operator to notify the local fire agency of the existence of the facility prior to commencement of operations. This will allow the local fire agency to be prepared to respond in the event of a fire or other emergency at the site, especially because the configuration and spacing at composting facilities may be more variable than at NWWRFs. It also provides the local fire agency an opportunity to make any recommendations it may have with respect to emergency accessibility on the site.

11. **COMMENT:** Under Part III.P.3, the requirement to report in writing any changes to the emergency preparedness plan prior to or within one business day after the change may be onerous. Instead, small changes should be documented in an informal process at the time of the change and then formalized in the annual submission of the CFOP with the annual report under COMAR 26.04.11.12E.

    RESPONSE: The emergency preparedness plan is part of the CFOP, which a facility is required to maintain and implement under COMAR 26.04.11.09B(1)(a). Under Part II.B.4 of the Draft General CF Permit, the operator is required to notify the Department of any changes to the CFOP

prior to making operational changes. The Department needs to have a record of a facility's current CFOP, including a current emergency preparedness plan. This is the only way the Department can ensure that the facility is complying with its CFOP (as required under COMAR 26.04.11.09B(1)(a)) when a facility is inspected or, in the case of the emergency preparedness plan, when an emergency occurs. The operator may notify the Department of a change to the emergency preparedness plan by sending the updated plan by e-mail or mail. The Department does not consider it unreasonably onerous to accomplish this before or within 1 business day after implementing the change.

12. **COMMENT:** Under Part III.S.1, please clarify where the specific State Fire Code provision can be referenced. This may be a local regulatory requirement but we do not believe this is a requirement of the NWWRF General Permit, nor a composting facility as large as 40,000 square feet located on a farm.

    RESPONSE: Part III.S.1 does not reference a provision from the State Fire Code. Instead, it requires a permittee to notify the local fire agency of the composting facility prior to the commencement of operations. See the response to Question 10 for an explanation of why this is appropriate for composting facilities.

13. **COMMENT**: Under Part III.S.4, delete this provision except where specific State Fire Code sections can be referenced. This may be a local regulatory requirement. It is not a requirement under the NWWRF General Permit even though a NWWRF poses a higher fire risk than a composting facility. It is also not a requirement for a composting facility as large as 40,000 square feet on a farm, and thus is applied inconsistently. The composting facility regulations do not attempt to modify local or State fire codes in this manner; the General CF Permit should be silent on this issue as well.

    RESPONSE: Part III.S.4 addresses adequate water supplies for use in the event of a fire and provides that the Department, local fire department, or State Fire Marshal may direct expansion of water supply or fire retardant materials. This is required for NWWRFs under Part III.O.4 of the NWWRF General Permit. Where the State or local fire experts believe improved water supplies or fire retardant materials are necessary to provide adequate preparedness in the event of a fire at the composting facility, the Department believes it is reasonable to defer to their expertise.

    While fires from spontaneous combustion at composting facilities can be prevented through proper pile composition and management, including moisture content, many composting facilities store the same types of dry, woody materials as are used at NWWRFs. It is important to establish appropriate safeguards for fire prevention and response at composting facilities just as it is at NWWRFs. This includes consulting with local fire agencies that would respond in the event of a fire at the facility.[5]

[5] Naylor, Lew, "Fire Prevention At Composting, Mulch Facilities," BioCycle December 2004, Vol. 45, No. 12, p. 30, http://www.biocycle.net/2004/12/16/fire-prevention-at-composting-mulch-facilities/ (Recommending the following for fire prevention at composting sites: "Set up a meeting with your local fire department. Discuss compost fires, and agree on guidelines on how to handle compost fires once they begin. Have the correct fire fighting gear on site.")

14. COMMENT: Under Part IV.F, please confirm that this is the appropriate location for this requirement. Perhaps it should be incorporated into Part III.Y.3.d.

RESPONSE: Part IV.F is in the appropriate location. Part IV.F is located under the "General Requirements" portion of the permit and addresses signatory requirements for information submitted to the Department. The commenter's suggested location for this provision relates only to information required to be included in the annual report. This would be misleading because all information submitted to the Department, not just the annual report, must be signed, dated, and certified as true by the responsible party. This includes a variety of other potential submissions required under the General CF Permit (updated NOIs, CFOPs, emergency plans, etc.)

15. COMMENT: We operate a facility that collects yard waste. Twice per year, a contractor with a grinder comes to the site and grinds the brush and yard waste. The product, which resembles mulch, is then provided to residents free of cost. The site is not continuously manned during the off season. Certain requirements under the Draft General CF Permit would not be feasible or would be cost-prohibitive for this facility to meet. Specifically:

- The facility cannot be supervised at all times it is open, nor can it operate under the supervision of an operator certified by MDA. These requirements should be waived as long as the compost is not being sold and the process is "low tech."
- The operator cannot maintain a log of temperature readings, moisture content, dates, and times the piles are turned. We do not turn the piles.
- The compost may not be stored for longer than 12 months.
- The new requirements are applicable beginning July 1, 2016. We should be allowed at least until the end of the year to make necessary modifications to the site.

RESPONSE: The Draft General CF Permit applies only to facilities where composting takes place. Composting is defined under COMAR 26.04.11.02 as "the controlled aerobic biological decomposition of organic waste material." If the facility is only accepting yard waste, storing it temporarily for grinding, then distributing it as mulch, the activity may not constitute composting, in which case this permit and COMAR 26.04.11 do not apply.

Most of the requirements listed by the commenter are required under the composting facility regulations and cannot be eliminated through the General CF Permit. COMAR 26.04.11.09B(1)(a)(ix) and (x) require the CFOP to contain a plan for monitoring temperature and moisture. Compost may not be stored longer than 12 months under COMAR 26.04.11.09B(8), unless otherwise approved by the Department.

The Draft General CF Permit requires the facility to operate under the supervision of a certified operator "in accordance with COMAR 15.18.04.03." While the permit also requires the facility to be under the direct supervision of a responsible party at all times during operation, nothing in the permit would require the facility to operate during the "off season." For safety and emergency response reasons, the Department does not believe it would be appropriate for a

composting facility to be unsupervised by facility personnel during a time when it is open to the public.

Finally, if the facility is an existing composting facility and has submitted an Existing Facility Notification under COMAR 26.04.11.07, the facility must come into compliance with the permit requirement and the rest of the regulations by January 1, 2017, not July 1, 2016.

16. **COMMENT:** Under Part IV.C, authorization under the General CF Permit is not transferrable. Explain how transfer of ownership of a composting facility would work if the permit is not transferrable. If we cannot transfer the permit and facility to a potential buyer of the facility, then the business has no value.

    RESPONSE: COMAR 26.04.11.11I states that participation in the General CF Permit is not transferrable and lays out the procedures to be followed when a change in control or ownership of the facility occurs. Part IV.C of the Draft General CF Permit simply restates these requirements.

    If a permittee wishes to transfer ownership of a composting facility, the permittee must notify the succeeding owner of the existence of the General CF Permit and any outstanding permit noncompliance at least 60 calendar days prior to the transfer. The succeeding owner must submit a NOI and CFOP in order to obtain coverage under the General CF Permit. Authorization for the succeeding owner to operate the composting facility is effective when the Department acknowledges receipt and approval of the NOI and a CFOP that meets the requirements of COMAR 26.04.11.

    The design and construction of a previously permitted composting facility may already meet the requirements of the General CF Permit and regulations, but the operational aspects of the facility, as well as the CFOP, are likely to change with a change in operator. The Department will review the new NOI and CFOP to ensure they meet the requirements in the General CF Permit and regulations, including the operational requirements. The NWWRF General Permit is also non-transferrable (COMAR 26.04.09.12D).