

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land and Materials Administration • Resource Management Program
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HB 171 – Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure Study

Study Group Meeting
September 20, 2018 1:00 PM – 3:00 PM

Minutes

Attendance: Julia Mooney*, Dave Mrgich*, Christy Bujnovszky*, Kaley Laleker*, Tariq Masood*, John Sullivan*, Delegate Andrew Cassilly*, Erica Chapman*, Ed Dexter, Clifford Mitchell, Chris McCabe, Kevin Serron, Steven Birchfield, Dwight Dotterer*, Perez Ettinger, Jeff Harp, Taylor McCandless, Phil Davidson, Alan Pultyniewicz, Les Knapp, Brenda Platt*, Keith Losoya*, Bill Teter, Erin Young, Patrick Serfass*, Melvin Thompson*, Gemma Evans*, Jeff Dennis, Pichard Tabuteau, Charlie Reighart, Wendy Doring, Linnea Boodgades

On the phone: Jane Thery*, Ben Fischler*

*Study Group Member

Introduction

Dave Mrgich provided a brief introduction and overview of the meeting agenda. Information and study group resources are available on the webpage.

Phil Davidson with the Maryland Department of Agriculture (MDA), State Chemist briefly discussed registering digestate as soil conditioner or fertilizer. He noted that the same material can be registered as either a soil conditioner or a fertilizer. If a material is registered as a fertilizer it is a legal claim to the percentage of nutrients (nitrogen, phosphate, potassium, and other nutrients) in the digestate. He specified that the operator must be able to guarantee a batch consistency and that an applicant must submit lab testing and metals report. An alternate would be to register the digestate as a soil conditioner. He noted that this is an easier route and the material doesn't have guaranteed nutrient composition. Mr. Davidson stated that the MDA registers a lot of products as soil conditioners.

Mr. Davidson added that if you compost organic materials properly, the finished product will have no odor and people will want to land apply it. He noted that the problem with composting is leachate and lab reports required under MDA. He stated that testing is required for operators of composting facility to certify their competency to produce compost.

An email address for Phil Davidson is available if you have questions (philip.davidson@maryland.gov).

Brenda Platt had points for discussion with Phil Davidson:

1. How much is the fee that compost processors are charged to register the product? What is it used for? The fees are an annual registration fee and is a semi-annual tonnage inspection fee.

The registration fee of 15 dollars or 30 dollars, depending on weight of packages distributed, is owed annually along with an inspection fee at the rate of 25 cents per ton distributed owed when the operator submits their semi-annual Tonnage Report to MDA. The funds from these fees are deposited into the State Chemist Fund to administer the State Chemist Program, offset the cost of inspection, sampling, analysis, data collection, and reporting related to pesticides and soil amendments (fertilizers, compost, and conditioners). Both the fees and use of the fees' revenues is authorized in the State statute.

2. Are there exemptions for small compost sites? Phil Davidson stated that small compost sites are exempt from the regulations as long the operation does not distribute their compost products offsite.

Patrick Serfass added that the American Biogas Council rolled out a standard for digestate quality (<http://www.digestate.org/>).

Health and Safety Concerns

David Mrgich, Division Chief
Waste Diversion Division
Maryland Department of the Environment

- David Mrgich presented the Health and Safety Concerns Presentation. The presentation is available online.
- Tariq Masood noted that there are 22 active composting facilities and four are permitted but not operational. There are five active facilities and two are being established as Tier 2 facilities.

Natural Wood Waste (NWW) Facilities; Existing Controls

Ed Dexter, Program Manager
Solid Waste Program
Maryland Department of the Environment

- Ed Dexter presented NWW facilities and existing controls used to protect against discharges into State waters. The presentation is available online.

Composting: Environmental Health Issues

Clifford S. Mitchell, Director
Environmental Health Bureau
Maryland Department of Health

- Clifford Mitchell presented environmental health issues associated with composting. The presentation presented results from studies related to occupational health effects as a result of workers' exposure to vapors, pathogens, and other residuals at composting facility. These studies examined the health effects workers and not surrounding communities. Also, studies did not focus on exposure to odors.
- The presentation is available online.

Discussion

- Delegate Andrew Cassilly asked if the adverse health effects of being next to a composting facility are equal to living next to a state park. Clifford Mitchell is most concerned for people

working at the compost facility. He added that you are biologically exposed to the same things at a state park that you are at a compost facility.

- Brenda Platt asked if the studies accounted for the type of composting facility. Clifford Mitchell responded that the analysis looked at many systems and at many different points in time. He added that the data has more literature from Europe than the U.S.
- Jane Thery added that the studies don't address on-farm composting. She feels that some of this discussion is missing composting of horse manure. Dr. Mitchell stated that he did not look specifically at horse manure and cannot say if horse manure was included in the studies presented.
- Dave Mrgich asked if you would find similar affects from commercial composting to small scale composting. Dr. Mitchell agrees, but stated there would be different health impacts from organic material versus natural wood waste composting.
- Brenda Platt added that the MDA Compost Operator training mentioned by Phil Davidson teaches operators how to avoid many of those concerns.
- Brenda Platt asked what the cost would be if we wanted to do a Maryland specific study. Dr. Mitchell said that it would not be cheap for a well-designed study. He noted that adequate sampling, statistical reliability would be required and will impact costs. He estimates that a good study of one facility would cost \$100,000. He added that this is an estimate.
- Brenda Platt asked what Dr. Mitchell's recommendations are for the study group. He stated that he can provide a longer list of additional studies and more literature. He added that off-site detection reaches baseline air quality levels very quickly. He notes that occupational health is most concerning according to the literature.
- Brenda Platt mentioned a zoning battle in Howard County for on-farm composting and mulching. She added that the community won against the farmers by using data on health impacts and argued a composting facility would cause lots of problems. She added that the State needs to counter the protest, promote composting facilities and educate the public. Dr. Mitchell stated that there is data you could use to anticipate exposure that could be caused by a new facility.
- Dave Mrgich asked what the distance is until air quality goes back to ambient levels. Dr. Mitchell stated that Europe uses a reference standard of 250 meter setback for restoration to ambient levels, and noted he the data supports this setback.
- Brenda Platt asked if the Department of Health (MDH) offers similar health impacts for incinerators, Concentrated Animal Feeding Operations, etc. Dr. Mitchell stated that point source emissions are regulated by MDE or co-regulated with the MDH. He added that most regulated sites are constructed to minimize odors and other air pollutants. He stated that odors are an irritant and not a generally a health threat, but there may be individualized health impacts to people who suffer from respiratory conditions.
- Kaley Laleker noted that the scope of this group is to develop recommendations for outreach to promote composting, and identify public health and sanitary concerns. She added that the study group can recommend the creation a public document that will hopefully alleviate concerns.
- Brenda Platt said she would like share the report, but to balance a summary of health impacts with the benefits of diverting the wastes versus sending to disposal.
- Delegate Andrew Cassilly restated that health effects are no greater than living next to a state park.
- Erica Chapman noted that European setback is more than American. Kaley Laleker said that in final report we will try to capture the presentations and we will run the report section by Dr. Mitchell to verify its accuracy.

- Dave Mrgich doesn't think a Maryland study is necessary and stated that the data is pretty consistent across the literature.
- Brenda Platt recommends looking at the MDA Compost Operator training exam and maybe incorporating it in the training to enhance operator knowledge (e.g. avoid dust, particulates, and volatile organic compounds).
- Kaley Laleker asked if there are sample questions from a past exam so we can see what information is covered.
- Jane Thery added that horse farms are not in the composting business and something for on-farm composting is needed.
- Gemma Evans asked when the test was last updated. Phil Davidson said the test was created in 1991 and noted that there are not regular updates. Gemma Evans said maybe we should recommend updating the exam and update resources provided.
- Jeff Harp read his comments on composting health concerns (a copy of Jeff's comments is available).
- Jeff Dannis stated that from an engineering point of view there is a significant difference between US standards and European standards. He noted that the numbers were elevated beyond the measured unit (250 m). He added that composting facilities have trucks that dump, operators pick up and grind material, drops again to ground, every time the pile flips the mold spores can be thrown into the air and this is not the same as a leaf hitting the ground in a state park. He noted that spores were measured downwind from composting facilities as far as 900 feet away. He suggested looking at setbacks and consider changing them. Jeff asked if we want to have setbacks for indoor composting facilities or do we need similar setbacks. Jeff additionally suggested personal protection equipment (PPE) for employees and noted that there's nothing in the regulations that talks about PPE for employees at these facilities.
- Brenda Platt added that she talked to US Composting Council and would forward an email on the study.

Dave Mrgich discussed the study group's next steps. He added that the minutes for the subgroups were drafted and expects them all to be sent out before the next meeting for everyone's feedback. He noted that the goal is to finish the remaining topics at the next meeting. MDE will draft the Final Report and distribute to study group members sometime in January 2019 for review and discussion. The report is due to the legislature by July 1, 2019.