MARYLAND DEPARTMENT OF THE ENVIRONMENT

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HB 171 - Yard Waste, Food Residuals, and Other Organic Materials Diversion and **Infrastructure Study**

Study Group Meeting May 17, 2018 1:30 PM – 3:30 PM

Minutes

Attendance: Joseph Zach Brendel, Julie Paulda, James Palma, Matthew Tabisz, Keith Ohlinger, Tariq Masood, Chris Skaggs, Laura Noll, Linnea Boogades, Kenneth Clare, Godfrey Ampadu, Lori Finafrock, Edward Dexter, Walid Saffouri, Jennifer Nitsch, Adria Aceto, Melvin Thompson, Mark Mhley, Mario Cora, Jeff Han, Gemma Evans, Peter Houstle, Brenda Platt, Linda Bilsens, Gary Felton, Chris Clarke, Patrick Serfass, Pam Kasemeyer, Doug Myers, Peter Ettinger; Andrew Cassilly, Julia Mooney, Dave Mrgich, Kaley Laleker

On the phone: Jane Thery, Ben Fischler

Introduction

Dave Mrgich provided a brief introduction and overview of the meeting agenda. The March 19, 2018 meeting minutes were approved. The draft July 2018 Interim Report was approved.

Anaerobic Digestion (AD) Facilities and Water and Sewerage Construction Permit

Walid Saffouri, P.E., Program Administrator Engineering and Capital Projects Program (ECPP) Water and Science Administration Maryland Department of the Environment

- The program manages special federal appropriation grants, state revolving loan and state grants for water quality and drinking water projects.
- It reviews proposed projects and issues Water and Sewerage Construction Permit for anaerobic digestion systems that are constructed as part of private and publicly owned sewage treatment plants.
- Walid Saffouri confirmed permitting includes direct and groundwater discharge.
- On-farm digesters are not permitted, only those at wastewater treatment plants.
- Patrick Serfass asked if brewery wastewater sent to a sewage treatment plant was considered industrial waste. Walid clarified that ECPP only reviews wastewater treatment plants treating their own sludge and the Department's Land and Materials Administration would be involved if sludge from other places were accepted.

Maryland's Air Quality Regulations Applicable to Anaerobic Digestion

Mario G. Cora, Regulatory Compliance Engineer Air Quality Permits Program Air and Radiation Administration

TTY Users: 800-735-2258 Paper

Maryland Department of the Environment

Permit to Construct

- Similar to the requirements for a Permit to Construct a composting facility.
- COMAR 26.11.02.09-.10 outlines sources that will require a Permit to Construct, and exempted installations.
 - o Permits to Construct are issued for equipment, not a facility as a whole.
 - One facility may have multiple permits.
 - o Composting is not exempted under COMAR 26.11.02.10.
- The process of anaerobic digestion is not defined as a source of pollution under COMAR 26.11.01.01(B)(2).
 - Brenda Platt asked if methane was considered an air pollutant. Mario explained methane, as a greenhouse gas, is not classified nor regulated as a "criteria pollutant" under the Clean Air Act's National Ambient Air Quality Standards or hazardous air pollutant definition.
 - o Brenda asked if there was discussion that methane should be considered an air pollutant because it is a very potent greenhouse gas.

Permit to Operate

- COMAR 26.11.02.13, sources subject to Permit to Operate.
 - An anaerobic digestion facility serving as an electric generating system is subject to a Permit to Operate.
 - (A)(45) Stationary internal combustion engines located at natural gas pumping stations or electric generating stations;
 - (A)(61) Any other source that the Department determines has the potential to have a significant impact on air quality.
- Note: May require a Maryland Public Service Commission's Certificate of Public Convenience and Necessity if the generating system has a capacity more than 2,000 kW
 - o Definition of a generating system is found at COMAR 20.79.01.02.

Current and Future Considerations Relating to Anaerobic Digestion Facility Permitting

Edward M. Dexter, P.G., Administrator

Solid Waste Program

Land Management Administration

Maryland Department of the Environment

- Ed Dexter noted that more information can be found on the Department's Solid Waste webpage. Additionally, he noted that AD recommendations made in this work group will be considered.
- Andrew Cassilly asked if recommendations for HB 124 rely on recommendations from HB 171. Ed Dexter said that is his intent dependent on the schedule and wants to share between the groups.
- Solid waste definition in § 9-101(j) of the Environment Article, Annotated Code of Maryland.
 - Does not exclude anaerobic digestion feedstock or resultant digestate from its Solid Waste definition.

- Anaerobic Digestion could require a Refuse Disposal Permit under present statute.
- However, the Department has not historically required a recycling facility to obtain refuse disposal permit if it does not accept and generate more than de minimis quantity of solid waste that requires disposal.
 - o Single-stream organic feedstock is an issue because of potential contamination of solid waste that cannot be recycled.
 - o Facilities receiving source-separated organic material usually receive a *de minimis* quantity of solid waste.
- HB124 Workgroup progress in discussing anaerobic digestion.
 - 26.04.07.03 (General Restrictions and Specifically Prohibited Acts) will serve as the minimum/baseline regulations that recycling facilities would be subject to (prohibits nuisances, air pollution, unpermitted discharges to waters of the State, etc).
 - o Regulatory considerations may include the handling and storage of feedstock, and back-end, by-products and discharges.
 - May or may not regulate the amount of feedstock received, stored, and processed.
 - The Solid Waste Program is sticking to basic rules for now and seeking to address potential problems without requiring additional permits for categories of recycling facilities that are deemed not to warrant them.
 - Brenda Platt mentioned AD in terms of recycling. Is AD being considered as recycling? She added that other materials are regulated by MDA. Brenda asked if other states have more proactive AD permitting.
 - o Patrick Serfass added that there is no clear process for permitting. Maryland's process is more straight forward than most but it is still not clear. There are not enough projects being developed. This is an opportunity to make things clear and streamlined. It is recommended that MDE draft a permitting guidance document. Patrick added that he thinks AD should count as recycling and noted the food recovery hierarchy ranks AD above combustion. He also noted that the solid waste hierarchy is outdated and that EPA is working to replace it.
 - o Ed Dexter stated that they are looking at facilities not currently permitted and to establish baseline standards. He added that refuse disposal permits take significant time and many agencies are looking to make the process simpler.
 - o Digestate sold or land applied will be regulated under the Maryland Department of Agriculture.

12-SW Permit for Stormwater Discharges Associated with Industrial Activity

Jennifer Nitsch Wastewater Permits Program Water and Science Administration (WSA) Maryland Department of the Environment

- The General Industrial Stormwater Discharge Permit regulates stormwater discharges associated with industrial activities.
- Coverage under the permit is required for any facility whose Primary Activity fits within certain Standard Industrial Classification Codes (SIC Codes).
 - o Sector C- Chemicals and Allied Products includes Anaerobic Digestion
 - Benchmark monitoring required for Sector C and all sectors require quarterly visual samples.
- Regulated entities require Stormwater Pollution Prevention Plans.
- WSA drafted a "Maryland Winery, Brewery, and Distillery Discharge Permit Guidance."
 - o Provides an overview of discharge-related permits that may be required for a winery, brewery, and distillery operating in Maryland.
 - General Industrial Stormwater Discharge Permit
 - General Groundwater Discharge Permit land application of wastewater for beneficial use or storage of processing wastewater offsite.
 - Composting Permit non-farm composting operations over 5000 sq ft.
 - Individual Surface Waters Discharge Permit discharging of wastewater into a stormwater sewer, ditches or other conveyance to surface waters.
- Steven Birchfield asked about benchmarks and who sets those limits. Are they site specific? The benchmarks are established by the permit writer and are not site specific under this permit. Jennifer noted this information can be found in Appendix D of the permit by sector.
- James Palma added that SIC codes are not used anymore.

Recommendations

- MDE should draft an AD permit guidance document.
 - Mirror guidance document after the WSA "Maryland Winery, Brewery and Distillery Discharge Permit Guidance" and LMA "Permitting Guidance for Maryland Composting Facilities."
 - O Peter Ettinger commented on the Maryland Food Center Authority groundbreaking. He noted that a guidance document for the AD permitting process would be great. He added that there is a gap in the county perspective. Additionally, he added that there is a working document that shares the process of how they were permitted. Peter said they could share the process in the next few months and volunteered to be a contact for creating a guidance document.
 - Jane Thery asked if the new AD facility was accepting horse manure. It is dependent on transportation costs, how is it being used, where is it coming from, etc. She added that Maryland has the largest number of horses per square feet.
 - O Patrick Serfass asked if a guidance document is a real possibility. Kaley Laleker added that the Department could start working on the document now and try to have something published with the final report.
 - Laura Noll asked what percent of AD facilities are submitting multiple permits.
 She noted that this could help form the guidance document.
- If the workgroup decides that stand alone AD regulations are required, the regulation should:
 - Regulate commingled organic waste and source-separated organic feedstock differently;
 - Provide exemptions for small-scale and on-farm anaerobic digestion facilities, similar to exemptions provided under the composting regulations.

• The workgroup should explore how to include organic waste recovery through AD as recycling under the Maryland Recycling Act.

Laws and regulations of other states, including Massachusetts, Connecticut; Vermont; California, and Rhode Island, governing the diversion of yard waste, food residuals and other organic materials

Erica Chapman
Office of the Director
Land and Materials Administration
Maryland Department of the Environment

- Erica provided an introductory overview of some research the Department has done on other states' laws and regulations regarding organics recovery.
- Adria Aceto added that fishing vessels are regulated by NOAA and generate organic materials that could be recovered.
- This presentation will be continued at the July meeting.

Comments

- Brenda Platt stated that the logical next step is to pull together the best pieces from each state to develop recommendations for Maryland. Dave Mrgich recommended that everyone look at the issue paper and make suggestions. Does Harvard Law Center have recommendations for state models?
- Adria Aceto noted that lack of standard labeling is driving food waste.
- James Palma asked how much food is wasted due to expiration dates. Adria Aceto stated 40% for grocery retailers. Erica added that USDA is looking at that but has trouble tracking at the household level. Adria stated she has a study that she could provide.
- Gemma Evans asked about grant programs and incentives. Which ones are working and are they effective? Erica noted that she did not include the grant programs if they were not used.
- An extension to review the interim report was requested. Dave Mrgich asked for feedback within the next week or two.
- Peter Houstle asked if Howard County has done any food scrap sampling. Howard County Schools are wasting 50 pounds per day per school. It was added that some schools have food recovery programs and some do not.