



**Department of the Environment**

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# **Maryland's Air Quality Regulations applicable to Anaerobic Digestion**

**Air Quality Permits Program**

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# DISCLAIMER

**This presentation is intended to be an overview of laws and regulations administered by the Maryland Department of the Environment that may relate to anaerobic digestion. It should not be used as a complete guide to all of the local, State, or federal statutory and regulatory requirements that may apply to a specific composting facility.**

## Permit to Construct (PTC)

- Required before a new air pollution source is constructed or an existing air pollution source is modified.
- Purpose: to ensure that a proposed project will comply with applicable air quality laws and regulations which exist to protect public health and the environment.
- A permit to construct applies to an individual unit or process line.
- There may be several PTC's issued to a single facility.
- COMAR 26.11.02.09(6) Sources Subject to Permits to Construct and Approvals.
  - “All sources, including installations and air pollution control equipment, except as listed in Regulation .10 of this chapter—permit to construct required.”

## Permit to Construct (Con't)

- **COMAR 26.11.02.10 Sources Exempt from Permits to Construct and Approvals.**
  - Provides a list of sources that are exempted. However, composting is not listed.
- **Air pollution is defined under COMAR 26.11.01.01 B(2):**
  - "Air pollution" as defined in Environment Article, § 2-101, Annotated Code of Maryland, "means the presence in the outdoor atmosphere of substances in quantities, having characteristics, and being of a duration which, from any single source or in combination with other sources, are, or may be predicted with reasonable certainty to be, injurious to human, plant, or animal life or to property, or which unreasonably interfere with the proper enjoyment of the property of others by reason of the emission of odors, solids, vapors, liquids, or gases, throughout the State and in such areas of the State that are affected by them."

## Potential Permit Requirements for Anaerobic Digestion Facilities

- An anaerobic digestion process or facility by itself does not meet COMAR definition of a source of air pollution.
- Electric powered mobile sources equipment, such as a bucket loader, do not need a permit.
- Other equipment used at an anaerobic facility that may need a PTC:
  - Boilers/process heaters;
  - Screening systems;
  - Grinding/shredding.
  - Internal combustion engine powered equipment (  $\geq 500$  brake horsepower), such as a tub grinder or to generate electricity. COMAR 26.11.02.10E.

## Other Regulations that May Apply to Anaerobic Digestion

- **COMAR 26.11.02.13 – Sources subject to Permit to Operate (PTO)**
  - **Consists of about 60 source categories.**
    - **Anaerobic digestion is not a listed source!**
  - **MDE also has the discretion to require additional sources of interest to obtain a PTO.**
    - **COMAR 26.11.02.13A(61)**

## Other Regulations that May Apply to Anaerobic Digestion (Con't)

- **COMAR 26.11.06.08 – Nuisance.**
  - **“An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution.”**

## Other Regulations that May Apply to Anaerobic Digestion (Con't)

- **COMAR 26.11.06.09 – Odors.**
  - **“A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.”**

**Note: Improper composting/handling practices could lead to anaerobic decomposition, causing undesirable odors.**



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