## **Department of Legislative Services**

Maryland General Assembly 2016 Session

## FISCAL AND POLICY NOTE Third Reader - Revised

House Bill 61

(Chair, Environment and Transportation Committee)(By Request - Departmental - Environment)

**Environment and Transportation** 

Education, Health, and Environmental Affairs

## **Environment - Solid Waste, Recycling, and Anaerobic Digestion**

This departmental bill requires the Maryland Department of the Environment (MDE) to adopt regulations governing the permitting and operation of anaerobic digestion facilities. MDE must also adopt regulations that (1) specify when a recycling facility may operate without a refuse disposal permit and (2) exempt certain materials that are managed at a recycling facility from being designated as solid waste. MDE must convene and consult with a workgroup of affected stakeholders when developing the regulations. The bill makes corresponding changes to several definitions. Finally, the bill provides for the enforcement of State recycling facility laws and regulations through existing enforcement provisions.

# **Fiscal Summary**

**State Effect:** MDE workloads increase beginning in FY 2017 to convene the workgroup and to develop, administer, and enforce the required regulations; any such increase can be handled with existing budgeted resources. Potential minimal increase in special fund revenues from the application of existing penalties to violations of the bill or regulations adopted pursuant to the bill.

**Local Effect:** Potential meaningful impact on local governments that own or operate recycling facilities or choose to establish anaerobic digestion facilities in the future, as discussed below.

**Small Business Effect:** MDE has determined that this bill has a potentially meaningful impact on small business (attached). The Department of Legislative Services concurs with this assessment. (The attached assessment does not reflect amendments to the bill.)

## **Analysis**

## **Bill Summary:**

Solid Waste

The definition of "solid waste" is modified to include (1) organic materials that can be, but are not, anaerobically digested; (2) materials that are managed at a recycling facility and are not "recyclable materials"; and (3) recyclable materials that are not returned to the marketplace within one calendar year from when they are received or otherwise managed in accordance with regulations adopted by MDE pursuant to the bill. Similarly, organic materials that can be, but are not, anaerobically digested are included in the definition of "solid waste stream."

Conversely, organic materials that can be, and are, anaerobically digested in accordance with the regulations adopted under the bill are *not* considered "solid waste." Also not included in the definition of "solid waste" are (1) materials that are managed at a recycling facility in accordance with regulations adopted by MDE under the bill; (2) organic materials that are managed under a sewage sludge utilization permit issued by MDE; or (3) organic materials that are managed at wastewater treatment plants in accordance with specified construction and discharge permits.

If the digestate, or the product of anaerobic digestion, is returned to the marketplace in the form of a raw material or product, then that process is included in the definition of "recycling."

A construction or discharge permit that is issued to a specified wastewater treatment plant where anaerobic digestion takes place must include conditions specific to the anaerobic digester and the anaerobic digestion process that are consistent with the regulatory requirements for anaerobic digestion facilities that MDE adopts pursuant to the bill.

#### Anaerobic Digestion

"Anaerobic digestion" means the controlled biological decomposition of organic waste material in the absence of oxygen, with the concurrent capture of produced gases and digestate. An "anaerobic digestion facility" is a facility where anaerobic digestion takes place. "Anaerobic digestion facility" does not include a facility that is required to obtain either a sewage sludge utilization permit or a refuse disposal permit from MDE or a specified wastewater treatment plant where anaerobic digestion takes place in accordance with a construction or discharge permit.

MDE must adopt regulations to implement the bill's provisions relating to the operation of anaerobic digestion facilities. These regulations may establish (1) conditions under which a person may construct and operate an anaerobic digestion facility; (2) a tiered system of permits or approvals for anaerobic digestion facilities; (3) design and operational conditions to protect public health and the environment and to minimize nuisances; (4) exceptions to any requirement to obtain an anaerobic digestion facility permit or approval; (5) exemptions for certain anaerobically digested organic materials from being designated as solid wastes; and (6) any other provisions MDE deems necessary to implement the bill's provisions related to anaerobic digestion. A person may operate an anaerobic digestion facility in the State only in accordance with the bill's provisions and any regulation, order, or permit issued pursuant to the bill's provisions. However, an anaerobic digestion facility that is located on a farm is exempt from any requirement to obtain a permit or approval under the regulations if the facility complies with specified federal standards.

#### Recycling

A "recycling facility" is a facility that provides recycling services and does not include (1) a composting facility; (2) an anaerobic digestion facility; (3) a natural wood waste recycling facility; (4) a facility requiring a sewage sludge utilization permit; (5) a wastewater treatment plant where anaerobic digestion takes place in accordance with a construction or discharge permit; or (6) a facility that uses Class A sewage sludge and is specifically exempted from the requirement to obtain a sewage sludge utilization permit under MDE regulations.

MDE must adopt regulations to (1) establish conditions under which a recycling facility does not require a refuse disposal permit and (2) exempt certain materials that are managed at a recycling facility from being designated as solid waste. The regulations may include (1) design, construction, and operational conditions for recycling facilities to protect public health and the environment and to minimize nuisances; (2) a tiered system of permits or approvals for recycling facilities; and (3) exceptions to any requirement to obtain a recycling facility permit or approval.

The bill also provides MDE with enforcement and inspection authority to enforce the bill's provisions regarding recycling facilities, any regulation adopted under those provisions, or any order or permit issued under those provisions.

#### Workgroup

In adopting the regulations applicable to both recycling facilities and anaerobic digestion facilities, MDE must convene and consult with a workgroup of affected stakeholders, as specified.

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**Current Law/Background:** MDE advises that the bill is needed to resolve a general lack of clarity in the statute about when anaerobic digestion and other recycling facilities require refuse disposal permits. MDE seeks the authority to develop regulations to establish clear conditions and thresholds for when a permit is or is not required for these activities, which will improve certainty for regulated parties and avoid overregulation of beneficial recycling activities.

## Anaerobic Digestion

Anaerobic digestion, which is the controlled decomposition of organic materials in the absence of oxygen, produces biogas, which is composed primarily of methane and carbon dioxide. MDE advises that because of its methane content, biogas can be used to generate heat and electricity and it can also be compressed for use as vehicle fuel or cleaned to natural gas quality. A residual material referred to as digestate is also produced and can be used as a soil amendment, fertilizer, or animal bedding.

According to MDE, anaerobic digestion is primarily used for the treatment of wastewater and sewage sludge at wastewater treatment plants, as well as for the processing of liquid manure at dairy farms. More recently, interest in anaerobic digestion for other waste streams has increased (such as food scraps, food processing residuals, yard waste, mixed municipal solid waste, and poultry manure and bedding). While anaerobic digestion is not yet prevalent in Maryland, MDE advises that commercial-scale projects exist or are underway in several other states. In response to the increasing interest in anaerobic digestion, MDE advises that a number of states have begun to revise their regulations to specifically address anaerobic digestion.

Outside of the treatment of wastewater and sewage sludge at wastewater treatment plants, Maryland law is silent on the regulation of anaerobic digestion and anaerobic digestion facilities. MDE reports that this creates confusion for the operation of existing facilities and the establishment of new facilities in Maryland.

#### Refuse Disposal Permits

Under current law, an anaerobic digestion facility or other recycling facility that processes any quantity of solid waste may be required to obtain a refuse disposal permit and comply with solid waste regulations applicable to processing facilities.

According to MDE, historically, recycling facilities have not been required to obtain refuse disposal permits. However, as the number of single-stream recycling facilities increases, more recycling facilities are processing substantial quantities of solid waste.

Under current law, a refuse disposal permit is required prior to the installation, material alteration, or material extension of a refuse disposal system which includes (1) an HB 61/Page 4

incinerator; (2) a transfer station; (3) a landfill system or landfill; and (4) a solid waste processing or acceptance facility. A "solid waste acceptance facility" is any sanitary landfill, incinerator, transfer station, or plant whose primary purpose is to dispose of, treat, or process solid waste. Based on that definition, an anaerobic digestion facility with the primary purpose of processing organic material would require a refuse disposal permit. Similarly, single-stream recycling facilities that accept mixed loads of recyclables, sort them, and in the process sort out more than a *de minimis* quantity of solid waste that is ultimately disposed, may fall under the definition of a solid waste acceptance facility.

#### Related MDE Activities

In 2013, the Maryland General Assembly passed legislation that was enacted as Chapter 686; the Act gave MDE the authority to adopt regulations governing the permitting and operation of composting facilities. These regulations became effective July 1, 2015. MDE anticipates that the structure of the composting statute and corresponding regulations can be used as a model for the regulation of anaerobic digestion facilities. Chapter 686 incorporated recommendations from MDE's composting workgroup which was convened in 2012 to study ways to increase composting in the State. MDE advises that the bill allows a similar approach to the regulation of anaerobic digestion and recycling in the State.

MDE is currently working to eliminate the need for disposal of solid waste as part of its zero waste plan. The zero waste plan is one of MDE's major strategies to reduce emissions as required by the Greenhouse Gas Reduction Act of 2009 (Chapters 171 and 172). Specific actions listed in the plan include encouraging food donation, phasing in a commercial/institutional ban on disposal of organic materials, and encouraging anaerobic digestion. Executive Order 01.01.2015.01, which also addresses Maryland's zero waste goal, states that "Maryland shall endeavor to ensure that all waste generated in the State is increasingly reduced and reused rather than discarded in a manner that adversely impacts our health and environment." The executive order also requires MDE to provide local governments with information on alternatives to landfilling and, except for permit applications submitted before January 19, 2015, prohibits MDE from issuing a permit for any new municipal or land clearing debris landfill capacity in the State.

**Local Fiscal Effect:** There are no known locally owned or operated anaerobic digestion facilities in Maryland. However, MDE advises that the bill may resolve a lack of clarity regarding the operation of anaerobic digestion facilities and allow local governments to establish such facilities in the future. Some recycling facilities are owned and/or operated by local governments. Because the bill requires MDE to adopt regulations that clarify when a recycling facility requires a refuse disposal permit, some locally operated recycling facilities may no longer need a refuse disposal permit, while others may need to obtain one. The fiscal impact, if any, on existing and future locally operated anaerobic digestion and

recycling facilities depends on the content of the regulations developed pursuant to the bill and cannot be reliably estimated at this time.

#### **Additional Information**

Prior Introductions: None.

Cross File: None.

**Information Source(s):** Baltimore City, Harford and Montgomery counties, Maryland Department of Agriculture, Maryland Department of the Environment, Department of

Legislative Services

**Fiscal Note History:** First Reader - January 25, 2016

kb/lgc Revised - House Third Reader - March 18, 2016

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#### ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Environment –Solid Waste, Recycling, and Anaerobic Digestion

BILL NUMBER: HB 61

PREPARED BY: Department of the Environment

(Dept./Agency)

# PART A. ECONOMIC IMPACT RATING This agency estimates that the proposed bill:

WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON

MARYLAND SMALL BUSINESS

OR

X WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

#### PART B. ECONOMIC IMPACT ANALYSIS

The proposed legislation impacts owners and operators of anaerobic digestion (AD) and recycling facilities. The Department has no information indicating whether any existing or future recycling or AD facilities would qualify as small businesses. The economic impact of the proposed legislation on small businesses, if any, depends on the content and scope of regulations to be adopted under the bill.

The proposed legislation would resolve the lack of clarity about which AD and recycling facilities do and do not require refuse disposal permits by requiring the Department to adopt regulations. Under the new regulations, some recycling or AD facilities that do not currently hold refuse disposal permits may be required to comply with conditions to continue operating without a refuse disposal permit, or may be required to obtain a new recycling or AD permit or approval instead of a refuse disposal permit. However, some recycling or AD facilities that would otherwise have required refuse disposal permits in the future may instead be subject to less burdensome requirements under the new regulations.

The proposed legislation would positively impact any small businesses that intend to establish recycling or AD facilities in the future by clarifying the regulatory requirements for these facilities.