



# Maryland

## Department of the Environment

Larry Hogan, Governor  
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

September 25, 2018

The Honorable Mike V. Miller, Jr., President  
Senate of Maryland  
State House, H-107  
Annapolis MD 21401-1991

The Honorable Michael E. Busch, Speaker  
House of Delegates  
State House, H-101  
Annapolis MD 21401-1991

The Honorable Joan Carter Conway, Chair  
Senate Education, Health and  
Environmental Affairs Committee  
Miller Senate Office Building  
2 West Wing  
11 Bladen Street  
Annapolis MD 21401-1991

The Honorable Kumar P. Barve, Chair  
Environment and Transportation Committee  
House of Delegates  
House Office Building, Room 251  
6 Bladen Street  
Annapolis MD 21401-1991

Dear President Miller, Speaker Busch, Chairs Conway and Barve:

As required in Chapter 384, Acts of 2017, I am enclosing a copy of the 2018 Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure Study Group Interim Report.

If we can provide you with any additional information, please contact me at 410-537-3304 or via e-mail at [kaley.laleker@maryland.gov](mailto:kaley.laleker@maryland.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kaley Laleker".

Kaley Laleker, Acting Director  
Land and Materials Administration

Enclosures

cc: Ben Grumbles, Secretary



# MARYLAND

Department of the Environment

## YARD WASTE, FOOD RESIDUALS, and OTHER ORGANIC MATERIALS DIVERSION AND INFRASTRUCTURE STUDY GROUP

– INTERIM REPORT –

September 2018

Prepared by:

Land and Materials Administration  
Resource Management Program

Prepared for:

Thomas V. Mike Miller, Jr., Senate President  
Maryland General Assembly

Michael E. Busch, House Speaker  
Maryland General Assembly



MARYLAND DEPARTMENT OF THE ENVIRONMENT  
1800 Washington Boulevard | Baltimore, MD 21230 | [www.mde.maryland.gov/recycling](http://www.mde.maryland.gov/recycling)  
410-537-3314 | 800-633-6101 x3314 | TTY Users: 800-735-2258  
Larry Hogan, Governor | Boyd K. Rutherford, Lt. Governor | Ben Grumbles, Secretary



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## **Background**

On May 4, 2017, Governor Hogan signed House Bill 171 (the Bill) entitled *Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure – Study* (Chapter 384, Acts of 2017). (See Appendix A for a copy of House Bill 171.) The bill became effective July 1, 2017 and required the Maryland Department of the Environment (the Department) to study, review, explore, identify, and make recommendations regarding specified matters related to the diversion of yard waste, food residuals, and other organic materials from refuse disposal facilities, including the status of infrastructure in the State.

## **Study Group**

In order to conduct the study, the bill required the Department to consult with the Maryland Department of Agriculture, Maryland Department of Commerce, Maryland Environmental Service, MD-DC Compost Council, American Biogas Council, Restaurant Association of Maryland, Maryland Retailers Association, Maryland Food Bank, Institute for Local Self-Reliance, Maryland Recycling Network, Maryland Farm Bureau, Maryland-Delaware Solid Waste Association, Chesapeake Foodshed Network, Maryland Horse Council, Johns Hopkins University Center for a Livable Future, Future Harvest/Chesapeake Alliance for Sustainable Agriculture, Maryland Association of Counties, Maryland Municipal League, Chesapeake Sustainable Business Council, University of Maryland – College Park, Chesapeake Bay Foundation, Food Waste Reduction Alliance, other environmental organizations, and a private Maryland-based food scraps collection service business (See Appendix B for a list of study group members), herein known as “the Study Group.” In addition, the Study Group meetings are open to the public, and additional interested stakeholders have attended meetings and offered input.

## **Study Topics**

In conducting the study, the Department is required to investigate and identify:

- The diversion of yard waste, food residuals, and other organic materials from refuse disposal facilities in the State, including any State laws or regulations governing the diversion of yard waste, food residuals, or other organic materials;
- The laws and regulations of other states, including the laws and regulations of Massachusetts, Connecticut, Vermont, California, and Rhode Island, governing the diversion of yard waste, food residuals, or other organic materials;
- The status of infrastructure for the diversion of yard waste, food residuals, and other organic materials in the State and other states;
- Ways to promote composting of yard waste and food residuals and other methods of organic waste reduction and diversion, including ways to encourage:

- A decentralized and diverse infrastructure; and
- The prevention of organic waste generation;
- The infrastructure needs and challenges related to yard waste, food residuals, and other organic materials composting and diversion that are unique to the different geographic regions of the State;
- Means to encourage investment in infrastructure and provide economic incentives to expand capacity for yard waste, food residuals, and other organic materials diversion in the State, including;
  - The development of, in consultation with local governments, model guidelines and best practices for the local identification of properties or development zones where diversion infrastructure may be developed; and
  - The identification of any tax, grant, or other incentives that already exist to encourage and support infrastructure and economic development;
- Any applicable sanitary and public health concerns related to yard waste, food residuals, and other organic materials composting and diversion; and
- The current process for permitting anaerobic digestion facilities.

Based on the study, the Department is required to recommend:

- Any improvements that should be made to the anaerobic digestion permitting process;
- Measures to promote the diversion of yard waste, food residuals, and other organic materials in the State, including any necessary programmatic, legislative, or regulatory changes; and
- Subject to the approval of the affected local governments, a pilot program for the region in which Elkridge and Jessup are located to prioritize infrastructure development and food waste recovery from large food waste generators.

## **Study Group Activities to Date**

The Department plans to hold meetings every other month in 2018 and at least once in 2019 to discuss the tasks identified in the bill. The Department or a relevant external contributor will provide to Study Group members a draft issue paper with background research on each study topic. A summary of the background research will be presented at the meeting for Study Group discussion and input. As of the writing of this interim report, meetings have been held on January 24, March 19, and May 17, 2018.

At the January 24<sup>th</sup> meeting, the Department provided an overview of the study, including the topics and the timeline. The Study Group reviewed and discussed research provided by the Department on the Maryland laws and regulations governing the diversion of organics. These included laws and regulations governing recycling, source reduction (*i.e.* waste prevention), composting, natural wood waste recycling, anaerobic digestion, greenhouse gas emissions reductions and renewable energy, liability for food donations, food recovery in schools, tax credits, date labeling of food products, and use of food scraps as animal feed.

At the March 19<sup>th</sup> meeting, the Department presented information on the current status of infrastructure for the diversion of yard waste, food residuals, and other organic materials in the Maryland and other states. Additionally, the infrastructure needs and challenges related to yard waste, food residuals, and other organic materials composting and diversion that are unique to the different geographic regions of the State was also discussed. For each type of material, the Department provided (where available) data on the tons diverted from disposal through recycling or donation each year; the existing infrastructure for composting, anaerobic digestion, and food donation; and the availability of capacity for diverting additional materials by geographic region. For food scraps, the Department also examined where the material is being generated. Maps, provided by the Johns Hopkins Center for a Livable Future, and data were provided to show the number, geographic distribution, and estimated tons of generation for large generators of food scraps. These large generators include entities expected to generate an average of at least one ton of food scraps per week, which is a threshold commonly used in other states. Large food scrap generators include, for example, supermarkets, food and beverage manufacturers, and slaughter facilities, food warehouses and distributors, fast food restaurants, colleges and universities, hospitals, and senior centers. Finally, Maryland's infrastructure and quantities of organics diverted were compared with those of selected states, including California, Connecticut, Massachusetts, Pennsylvania, and Vermont. Based on the information presented, the Study Group discussed gaps in organics diversion infrastructure and possible solutions to address these gaps.

At the May 17<sup>th</sup> meeting, the Department presented information on two topics. First, the Department presented the current process for permitting anaerobic digestion facilities, including any solid waste, air, and water-related permits that may be required. The Study Group decided that the Department will develop a guidance document to help parties determine if and what kind of permits are necessary for an anaerobic digestion operation. Second, the Department provided a summary of the laws and regulations governing the diversion of organic material in other states. This discussion will be continued at the July meeting along with recommendations for Maryland's laws and regulations based on successes in other States.

## **Plan for the Remainder of the Study**

Additional meetings are currently scheduled for July 16, September 20, and November 1, 2018, and January 3, 2019. Research will be conducted and presented by the Department on the following remaining study topics (with assistance to be requested from external experts where noted below):

- Applicable sanitary and public health concerns related to organic materials composting and diversion (assistance from the Maryland Department of Health);

- Means to encourage investment in infrastructure and provide economic incentives to expand capacity for organic materials diversion in the State, including the development of, in consultation with local governments, model guidelines and best practices for the local identification of properties or development zones where diversion infrastructure may be developed and the identification of any tax, grant, or other incentives that already exist to encourage and support infrastructure and economic development (assistance from the Maryland Department of Commerce and the Maryland Association of Counties);
- Potential ways to promote composting of yard waste and food residuals and other methods of organic waste reduction and diversion, including ways to encourage source reduction and a decentralized and diverse infrastructure; and
- A potential pilot program for the region in which Elkridge and Jessup are located to prioritize infrastructure development and food waste recovery from large food waste generators (assistance from Maryland Food Center Authority and Howard County).

Following the presentation of background information on the remaining study topics, the Study Group will discuss and formulate a set of recommendations, which will be included in the final report of the study. The final report is due on or before July 1, 2019.

## **Additional Information**

Information on the Study Group is presented on the Department's *Organics Diversion and Composting* web page at [www.mde.maryland.gov/composting](http://www.mde.maryland.gov/composting). Additionally, announcements on future meetings are presented in the Department's *Calendar of Events* available at <http://mde.maryland.gov/Pages/Calendar.aspx>.

# Appendices

# **APPENDIX A**

## **2017 HOUSE BILL 171**

### **Department of the Environment – Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure – Study**

Chapter 384

## (House Bill 171)

AN ACT concerning

**Department of the Environment – Yard Waste, ~~and~~ Food Residuals, ~~and~~ Other  
Organic Materials Diversion and Infrastructure – Study**

FOR the purpose of requiring the Department of the Environment, in consultation with certain persons, to study, review, explore, identify, and make recommendations regarding certain matters that relate to the diversion of yard waste, food residuals, and other organic materials from refuse disposal facilities, including certain infrastructure; requiring the Department to report its interim and final findings and recommendations to the Governor and the General Assembly on or before certain dates; and generally relating to yard waste, ~~and~~ food residuals, and other organic materials diversion and infrastructure.

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,  
That:

(a) The Department of the Environment shall:

(1) study the diversion of yard waste, ~~and~~ food residuals, and other organic materials from refuse disposal facilities in the State, including any State laws or regulations governing the diversion of yard waste, ~~or~~ food residuals, or other organic materials;

(2) study the laws and regulations of other states, including the laws and regulations of Massachusetts, Connecticut, Vermont, California, and Rhode Island, governing the diversion of yard waste, ~~or~~ food residuals, or other organic materials;

(3) review the status of infrastructure for the diversion of yard waste, ~~and~~ food residuals, and other organic materials in the State and other states, including the availability of infrastructure in relation to:

(i) large generators of food waste, identified by type, quantity of food waste generated by entity, and geographic distribution; and

(ii) organizations that use surplus food, identified by type and geographic distribution;

(4) explore ways to promote composting of yard waste and food residuals and other methods of organic waste reduction and diversion, including ways to encourage:

(i) a decentralized and diverse infrastructure; and

(ii) the prevention of organic waste generation;

(5) identify the infrastructure needs and challenges related to yard waste, food residuals, and other organic materials composting and diversion that are unique to the different geographic regions of the State;

~~(5)~~ (6) identify means to encourage investment in infrastructure and provide economic incentives to expand capacity for yard waste, and food residuals, and other organic materials diversion in the State, including identification of:

(i) the development of, in consultation with local governments, model guidelines and best practices for the local identification of properties or development zones where diversion infrastructure may be developed; and

(ii) the identification of any tax, grant, or other incentives that already exist to encourage and support infrastructure and economic development;

(7) identify any applicable sanitary and public health concerns related to yard waste, food residuals, and other organic materials composting and diversion;

~~(6)~~ recommend a refuse disposal fee to finance a grant program that provides financial assistance to develop infrastructure and expand capacity for yard waste and food residuals diversion in the State;

(8) identify the current process for permitting anaerobic digestion facilities and recommend improvements that should be made to the anaerobic digestion permitting process;

~~(7)~~ (9) recommend measures to promote the diversion of yard waste, and food residuals, and other organic materials in the State, including any necessary programmatic, legislative, or regulatory changes; and

~~(8)~~ (10) subject to the approval of the affected local governments, recommend a pilot program for the region in which Elkridge and Jessup are located to prioritize infrastructure development and food waste recovery from large food waste generators.

(b) In conducting the activities required under subsection (a) of this section, the Department shall consult with:

(1) the Department of Agriculture;

(2) ~~the Department of Natural Resources;~~

~~(3)~~ the Department of Commerce;

- ~~(3)~~ ~~(4)~~ (3) the Maryland Environmental Service;  
~~(4)~~ ~~(5)~~ (4) the MD–DC Compost Council;  
~~(5)~~ ~~(6)~~ (5) the American Biogas Council;  
~~(6)~~ ~~(7)~~ (6) the Restaurant Association of Maryland;  
~~(7)~~ ~~(8)~~ (7) the Maryland Retailers Association;  
~~(8)~~ ~~(9)~~ (8) the Maryland Food Bank;  
~~(9)~~ ~~(10)~~ (9) the Institute for Local Self–Reliance;  
~~(10)~~ ~~(11)~~ (10) the Maryland Recycling Network;  
~~(11)~~ ~~(12)~~ (11) the Maryland Farm Bureau;  
~~(12)~~ ~~(13)~~ (12) the Maryland–Delaware Solid Waste Association;  
~~(13)~~ ~~(14)~~ (13) the Chesapeake Foodshed Network;  
~~(14)~~ ~~(15)~~ (14) the Maryland Horse Council;  
~~(15)~~ ~~(16)~~ (15) the Johns Hopkins University Center for a Livable Future;  
~~(16)~~ ~~(17)~~ (16) the Future Harvest/Chesapeake Alliance for Sustainable  
Agriculture;  
~~(17)~~ ~~(18)~~ (17) the Maryland Association of Counties;  
~~(18)~~ ~~(19)~~ (18) the Maryland Municipal League; ~~and~~  
~~(19)~~ ~~(20)~~ (19) the Chesapeake Sustainable Business Council;  
~~(20)~~ ~~(21)~~ (20) the University of Maryland, College Park;  
~~(21)~~ ~~(22)~~ (21) the Chesapeake Bay Foundation;  
~~(22)~~ ~~(23)~~ (22) the Food Waste *Reduction Alliance*;  
~~(23)~~ ~~(24)~~ (23) other environmental organizations; and  
~~(19)~~ ~~(24)~~ ~~(25)~~ (24) a private business based in the State that provides food  
waste collection services.

(c) On or before July 1, 2018, the Department shall report its interim findings and recommendations to the Governor and, in accordance with § 2-1246 of the State Government Article, the General Assembly.

(d) On or before July 1, 2019, the Department shall report its final findings and recommendations to the Governor and, in accordance with § 2-1246 of the State Government Article, the General Assembly.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2017.

**Approved by the Governor, May 4, 2017.**

## **APPENDIX B**

### **STUDY GROUP MEMBERS**

## 2017 HOUSE BILL 171

### Department of the Environment – Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure – Study Study Group Members

Ms. Gemma Evans – MD-DC Compost Council  
Mr. Patrick Serfass – American Biogas Council  
Mr. Melvin R. Thompson – Restaurant Association of Maryland  
Ms. Cailey Locklair Tolle – Maryland Retailers Association  
Ms. Adria Aceto – Maryland Food Bank  
Ms. Brenda Platt – Institute for Local Self-Reliance  
Mr. Chaz Miller/Mr. Peter Houstle – Maryland Recycling Network  
Mr. J. Zack Brendel – Maryland Farm Bureau  
Ms. Pamela Metz Kasemeyer – Maryland-Deleware Solid Waste Association  
Ms. Susan Dalandan – Chesapeake Foodshed Network  
Ms. Jane Thery – Maryland Horse Council  
Dr. Roni Neff – Johns Hopkins University Center for a Livable Future  
Ms. Dena Leibman – Future Harvest Chesapeake Alliance for Sustainable Agriculture  
Ms. Julie Paluda – Maryland Association of Counties  
Ms. Daryl Braithwaite – Maryland Municipal League  
Mr. Stephen Shaff – Chesapeake Sustainable Business Council  
Mr. Gary Felton – University of Maryland, College Park  
Mr. Doug R. Myers – Chesapeake Bay Foundation  
Mr. Ben Fischler – Environmental Organizations (Sierra Club)  
Ms. Laura Cattell Noll – Environmental Organizations (Alice Ferguson Foundation)  
Mr. Keith Losoya – Private Food Waste Collection Service (Waste Neutral Group)  
Delegate Andrew Cassilly  
Mr. Steven Birchfield – Maryland Environmental Service  
Mr. Chris Clark – Maryland Energy Administration  
Mr. Hans W. Schmidt – Maryland Department of Agriculture  
Mr. James Palma – Maryland Department of Commerce  
Mr. Dave Mrgich – Maryland Department of the Environment  
Mr. John Sullivan – Maryland Department of the Environment  
Ms. Kaley Laleker – Maryland Department of the Environment