

**MONTGOMERY COUNTY SOLID WASTE ADVISORY COMMITTEE**  
**Wednesday, April 3, 2024 – 5:30 – 7:30pm**  
**MEETING NOTES**

**SWAC Members in attendance:**

Amy Maron, Chair	Oladapo Awe
Robin Barr, Vice Chair	Michelle Ennis
Adam Diamond, Secretary	Carol Jones
Heidi Lovett	Pradip Mukerjee
Chaz Miller	Dawn Selis
Fred Kranz	Barry Shanoff
	Mark Symborski (M-NCPPC rep, non-voting)

**SWAC Members absent:** Troy Cavell

**DEP/RRMD Staff:**

Eileen Kao, Section Chief, Waste Reduction & Recycling

Alan Pultyniewicz, Acting Chief, Recycling and Refuse Services

Lisa Shine, Executive Administrative Assistant to the Division Director

Lonnie Heflin, Section Chief, Materials Management

Anthony Ekweozoh, Section Chief, Planning, Design Construction, Monitoring,

David Rosenbaum, Program Manager, Materials Management Section

David Frank, Waste Reduction & Recycling Section

**Other County Staff:**

Debbie Spielberg, Special Assistant to the County Executive

Bill Broglie, Internal Audit Manager

Jon Monger, Director, Department of Environmental Protection

Jeff Seltzer, Deputy Director, Department of Environmental Protection

**Contractors**

Regina Cagle Irr, P.E., EA Engineering, Science, and Technology, Inc., PBC

Crag Coker, Coker Composting and Consulting

Stephen Lezinski (B&L), LuAnn Meyer (B&L)

### **Members of the Public**

Susan Eisendrath, Lauren Greenberger, , Alan van Order, Kristie Blumer, Elisabeth Fidler, Carrie Maslen, Sharon Crane, Jane Hunter, Dick Hill

### **Featured Discussion: Overview of the Consultants' Report Prepared for DEP: *Organics Management Plan, including Siting, Technology and Capacity Planning, for Montgomery County, Maryland, Presented by Regina Cagle Irr, EA Engineering***

The project scope of the EA Engineering report was to evaluate capacity planning, technology, and siting for a potential County-owned organics processing facility for the period 2025-2045. The organics feedstocks would include food scraps, non-recyclable paper, and yard trim from both residential and commercial organics sources. The plan considered the Ten-Year Comprehensive Solid Waste Management Plan, the Strategic Plan to Advance Composting, Compost Use and Food Scraps Diversion in Montgomery County, and the Montgomery County Climate Action Plan.

Adding in-county capacity for composting will dramatically reduce transportation needs, compared to the current practice of hauling organic material to the Western Branch facility in Prince George's County.

#### Project Assumptions:

- Consider commingling food waste with yard trim and separate collection of food waste
  - Currently: 96% of yard trim is composted, 4.1% is disposed of as refuse.
  - Organics represented 27.5% of disposed waste in MC.
- 3 projections for collection to see how much capacity is needed — low, medium, and high – voluntary collection along with mandatory diversion estimate (residents and businesses).
- Siting Options:
  - Shady Grove Transfer Station
  - Montgomery County Yard Trim Composting Facility (Dickerson)
  - Site 2
- Also projected greenhouse gas (GHG) emissions avoided. Every ton of food waste not disposed of leads to more GHG emissions avoided. Transport has minor effect compared to actual disposal method. Used EPA WARM model.

#### Final alternatives review

- 5 alternatives developed based on top ranked technology and site combinations
- Each represents technologically feasible options
- Other feasible options considered at high-level in report.

#### Analysis boundary conditions

- Looked at other county owned facilities of 25 acres+ not in flood plain—no such parcels were identified
- Non-county county owned sites not considered

#### Options

**Option 1:** Aerated Static Pile (ASP) at Montgomery County Yard Trim Composting Facility—This is the standard option. ASP is quite flexible as there are many possible designs and it is commonly used technology. It uses moisture and temperature monitoring to optimize

composting process. Must manage contact water. Some improvements would be needed at site to address contact water and stormwater runoff.

**Option 2:** Tunnel Reactor at Shady Grove Transfer Station—high odor control technology—processing takes place in sealed concrete bunker. Suitable for use in high population density areas. Would be hard to do on already constrained site. Would need to cure material off-site as material coming out of reactor is not finished compost. Cost to transport material to curing site would be \$1 million.

**Option 3:** Agitated Bed at Site 2—high volume option—aerobic processing in long bays with mechanical auger, within an odor-controlled building. Little to no contact water. High degree of process control. Expensive: high equipment and building costs. Would need road access from RRF to Site 2.

**Option 4:** Dry Fermentation anaerobic digestion at Shady Grove Transfer Station with in-vessel reactor composting at MCYTTCF.

Anaerobic digestion of food and yard scraps. Little to no contact water. End products include digestate and biogas which require management. Would require upgrades to MCYTTCF. Need to cure digestate. Would compost it at yard trim facility. Would need to relocate activities from TS. This option has an unclear permitting pathway and is unfamiliar to regulators.

**Option 5:** Same as Option 4 except windrow composting of digestate at yard trim facility. No upgrades required at yard trim facility. Otherwise, it has the same drawbacks as option 4.

### **RANKING OF OPTIONS:**

Cost not only evaluation factor. Ease of construction and site availability of infrastructure were considered as well. Option 1 received the highest rank and lowest cost.

### **Next Steps:**

#### Project Pathways prior to Alternative Selection

--Community input and/or negotiations.

--Re-location of processing activities currently at Shady Grove Transfer Station. Would take 2.5-4 years to open operable facility, including permitting, design, and construction.

#### Additional Programmatic Considerations

--Material Collection (co-collection vs. separated)

--Outreach and Education.

### **Q & A:**

Q: What is the acreage size comparison of different options?

A: 6-20 acres needed for site for different technologies.

Q: What would diverse sites for decentralized composting look like?

A: This is discussed in the EA report; we didn't explore in detail. Would need 4 sites of 10-15 acres each to vet out that approach.

Q: How would you scale an auger facility?

A: Will build entire building up front—Phase 1 has more of costs, compared to other options as you can't build half a building.

Q: Option 2 with the auger rated highly for odor control. How high was odor control as a ranking factor in the evaluation process?

A: Odor and vector control are in the top 4 factors for evaluating options. Howard County's ASP system with biocover have received negative comments. But from nearest residents 700 feet away there have been no odor control problems since opening in 2018. Biocovers and biofiltration reduce 95-98% of VOCs, which are the principal source of odor at composting facilities.

Q: You developed a timeline for developing a new facility. What about a pilot project at the yard trim facility? How long would that take? Are there federal or state grants available for such a project?

A: Didn't develop any pilot program costs. From our experience, the facilities discussed in this report can be developed at all levels of sophistication and size. One county had a \$1 million project. Could do something less expensive for pilot. There are a number of funding opportunities on peoples' minds—EPA has \$5 billion available as Climate Program Reduction Grants. Baltimore just received \$4 million from EPA SWIFFER program for its composting facility.

There's a lot of money available for technology tied to emissions reductions. Deadline for CPRG- April 1<sup>st</sup>. Hope to learn soon what may be available for Montgomery County.

Q: The report doesn't address the need for outreach and education to residents to separate food waste from other waste materials. How long will that take? Do you have models from other communities?

A: Outreach and education were beyond the scope of our effort. The county has a really robust outreach program underway. Our scope was limited to technical analysis of the different site/technology options.

Q: How did you produce the curve showing the change in capture of organic waste over time under different scenarios?

A: With mandatory separation/collection of food waste for residences and businesses it would take time for people to get on board. It's not instant. Uptake over time would get you to 50-60% at end.

### **Public Comments:**

Q: There are two parts to my question: what are the pros and cons for anaerobic digestion (AD)? And among the cons, did you consider microplastic and PFAS contamination that would end up in final product, and the volume of organic material that's needed to operate such a facility?

A: PFAS and microplastics are of preeminent concern in the compost world. The EA report didn't address levels of contaminants for different technologies. Wet ASD ranks lower because of the depackaging requirement. With dry fermentation – loaded as MSW—don't need to depackage. Can't remove microplastics from AD.

Need outreach and education to remove contaminants.

Q: How would the lack of regulations for AD in MD be addressed?

A: MDE has a guidance document that shows a permitting pathway for AD, but it does not have a specific permitting process designed for this technology.

Q: I am from Zero Waste Montgomery. What sources did EA use to calculate its estimate of 93,000 tons of food waste, which is lower than other estimates from other sources?

A: We used a waste audit, which samples the current waste stream, and for projections—looked at generation rates over time, and developed estimates of what would be captured. This explains some of the variation you see.

Q: When food waste/yard waste carts are picked up weekly what potential problems are there for mixture of wet waste with yard trim regarding transportation?

A: We didn't look a lot at collection. But co-collection does have implications for how material is processed. Ideally you would have a 4:1 carbon: nitrogen ratio. When co-collecting it's hard to assure this ideal ratio. May need to add inoculate to accelerate process and make up for inadequate nitrogen. Most programs use co-collection model. Existing rail containers haul 27 tons and can handle food scraps—based on generation rates. Won't see increase in density of material with food waste collection.

Q: Can we get a list of the other sites that were considered?

A: We're in the process of narrowing them down—many were park sites. DEP will follow up on this.

Q: Suppose we do spectacularly well in outreach and education around food waste. How much capacity for growth is there? Can facility be expanded to meet excess need?

A: If projections are wrong, it would be fairly easy to speed up phase 2 for ASP options, which are readily expandable.

### **Discussion of Budget Letter:**

Chaz: In last 3 letters SWAC has asked for more staff, more education, expanding processing capacity. Before we draft this year's letter we want to know what are the priorities for new members as far as what to emphasize? Members responses:

- Focus on education on reducing waste needs to be more specific, for example reducing plastic wastes.
- We need direction from DEP regarding budget for organics program. What would help SWAC in its advocacy on behalf of organics program? Carts are a major expenditure. What does DEP need money for?
- A lot is dependent on negotiations around shutting down RRF. Folks around Dickerson believe in composting but need negotiations around RRF to proceed.
- Marrying SAYT with Organics will achieve most progress. However, SAYT will lead to major changes for MSW funding. County Council will be worried about uncertainty this presents.

Michelle: from consumer point of view—I saw a food waste bin at a resident's house—opened bin—very smelly—how do we deal with this? How will consumers deal with this?

Eileen Kao: RRMD has gotten some comments from pilot participants in the summer about odor—have provided tips. For example, residents can put food scraps in freezer awaiting collection. They have received only a few comments though, about odor.

Fred: I've heard problem of odor from some neighbors in pilot project. If you handle container properly you won't have an odor problem, but most people don't. We need a strong campaign to make people aware of the advantages of the community, the County—climate change—why this is important. People can relate to it personally; with drastic weather patterns we're seeing throughout the country. We need to own this whole effort.

Dapo: At United Therapeutics we have food waste picked up 3 days a week. We reduce odor by not serving fish when we have to wait overnight for food waste pick-up. We use latch system with green compost bags—have Veterans Compost pick I up. We had a lot of education at beginning. Can mitigate odors. Some days—lots of pineapple peels—actually nice smell. Really believe in latching containers—keeps odor inside containers.

Will have draft letter by May 1<sup>st</sup>. Get in touch with Chaz if want to work on this.

**March Minutes approved with one change: Next SWAC meeting is April 3<sup>rd</sup>, not 4<sup>th</sup>. 7:16 p.m.**

### **DEP Updates**

John Monger: DEP's "Food is too Good to Waste" campaign has been one of the outreach pieces that is really impactful—a lot of times we know that people don't know where to start. Urging people to think about one own's kitchen, shopping lists, how they store and dispose food. Good framework to messaging on as well as climate change.

Arcadis Contract: DEP has hired Arcadis to put out a Request for Expressions of Interest (REOI) for interested waste companies to manage waste as an alternative to continuing incineration. Arcadis has a timeline for deliverables. The REOI seeks information from companies interested in enhanced waste diversion technologies. It closed on March 26, 2024, and the qualifications committee is reviewing responses now. Can't share details yet. Can provide update on progress of larger project. Jon Monger will touch base with Arcadis. Will provide updates at future SWAC meetings.

Tours: Amy will send out a survey to find out where SWAC members would like to go.

Meeting Adjourned 7:30 p.m.

### **ACRONYMS**

C&D	Construction and Demolition Waste
CC	County Council
CE	County Executive
CNG	Compressed Natural Gas
CPI	Consumer Price Index
DAFIG	Dickerson Area Facilities Implementation Group
DEP	Department of Environmental Protection
DMV	District Maryland Virginia (metropolitan area)
EPA	U.S. Environmental Protection Agency
FTE	Full Time Employee
FY	Fiscal Year
MDE	Maryland Department of the Environment
MC	Montgomery County

MES	Maryland Environmental Services
MRF	Materials Recovery Facility
MML	Maryland Municipal League
MCPS	Montgomery County Public Schools
MWCOG	Metropolitan Washington Council of Governments
OLO	Office of Legislative Oversight
PAYT	Pay-As-You-Throw
CPRG	Climate Pollution Reduction Grants
RRF	Resource Recovery Facility
RRMD	Recycling & Resource Management Division
SA	Service Area for County collection
SAYT	Save-As-You-Throw
SCA	Sugarloaf Citizens' Association
SF	Single family
SWAC	Solid Waste Advisory Committee
SWMP	Solid Waste Management Plan
T&E	Transportation and Environment Committee
TPD	Tons per Day
TPW	Tons per Week
ZWTF	Zero Waste Task Force