

MONTGOMERY COUNTY SOLID WASTE ADVISORY COMMITTEE

February 2, 2022, 5:30 – 7:30pm

MEETING NOTES

SWAC MEMBERS IN ATTENDANCE:

Carol Jones, Chair Robin Barr (MML rep.), Vice Chair Adam Diamond, Secretary Sara Bixby	Paula Jenson Fred Kranz Heidi Lovett	Ellen Ryan Candy Schimming Mark Symborski, (MD NCPPC rep, non- voting member)
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COUNTY STAFF IN ATTENDANCE:

Willie Wainer, Director, Recycling and Resource Management Division (RRMD)

David Frank, Recycling Planning, Policy, Regulation, and Compliance, RRMD

Lisa Shine, Executive Administrative Aide, RRMD

Eileen Kao, Section Chief, Waste Reduction and Recycling, RRMD

The regular meeting of the Solid Waste Advisory Committee (SWAC) was called to order by the Chair at 5:32 PM on February 2, 2021.

1. **RRMD Updates – Willie Wainer & Eileen Kao**

- RFI for Municipal Solid Waste Acceptance, Processing, Transportation, and Disposal Services (<https://www.montgomerycountymd.gov/DEP/Procurement/RFI-DEP-RRM-101121.html>) closed last Friday (January 28th, 2021); RRMD will start evaluating submissions shortly with help of MES.
- **RFP for Pay as You Throw (Unit-based-Pricing) Implementation Plan** is open until Feb. 22nd: looking for consultant to design program. (<https://menv.bonfirehub.com/opportunities/59363>)
 - **Update:** RRMD verified SWAC’s observation that the RFP was limited to small businesses. Because only one company had formally declared its intent to bid on the project, it was revised to include all business and the closing date was shifted to March 1.
 - In response to a question about how DEP will bring various trash and recycling contracts into PAYT program given contracts have staggered timeline, it was explained that contracts can be amended as needed; one of the design issues to be tackled by the consultant is where larger routes will be needed as customers opt for smaller containers.
- RFP for collection in areas 6 and 8 in Subdistrict B is open: primarily recycling collections for 22,000 homes in each area, where each area runs 9-10 routes daily.
 - Existing contracts have been in place for 10-11 years, need to readjust routes because a lot of growth has occurred in these areas.
 - Recycling contracts will be for 5 years with two 1-year possible extensions.
- Personnel changes in RRMD: We are looking for a new section chief for Collections Section—Michael Clem left. Chris McGough is starting shortly as the new Deputy Chief for RRMD.
- Recycling update- contamination rate in recycling has gone down 40% from a year ago, to around 15-17% now. The \$500K savings by reducing contamination more than pays for the cost of inspectors hired for the Recycling Right Program.

- Commercial food scraps program has recycled 750K lbs of food scraps since program started in May 2020. Today we have 23 partners, including Westfield Montgomery Mall.
- Residential food scraps pilots:
 - The Silver Spring pilot is currently serving 430 homes, and has recovered 33K lb. of food scraps since starting in Nov 2021. They are considering expanding the pilot in order to have a larger sample of households to collect data to inform planning for expansion to a county-wide program. Expansion options include conducting additional outreach to homes in original area that didn't respond to initial offer or expanding the area into contiguous neighborhoods.
 - The Potomac pilot is currently serving 255 homes (out of invited 1,600 households), and has recovered 9K lbs. of food scraps since starting in December 2021. Can't expand Potomac pilot geographic area much because it takes 2.5-3 hours roundtrip to deliver load at Western Branch Compost Facility and return.

2. Featured Speakers: Peter Ettinger, Chief Strategy Officer and Vinnie Bevivino, Director of Organics, BioEnergy DevCo

Context

- Drivers for development of food scrap processing capacity in MD include the new MD food scrap recycling and diversion mandate, and – more broadly - the move toward sustainability with the zero waste revolution.
- There are 2 food scrap processing options: composting, or aerobic digestion (breakdown of organic material by microorganisms, in the presence of oxygen); and anaerobic digestion [AD] (breakdown of organic material with microorganisms in the absence of oxygen).
- BioEnergy DevCo has built 240+ anaerobic digesters over the last 25 years across Europe, Asia, North America, and manages almost 150 AD facilities globally.

BioEnergy DevCo's new Jessup AD facility

- Status: construction is complete, they started commissioning the facility in mid-February, will start accepting our first loads of waste in mid-April, and will be in full commercial operations in mid-June.
- Space requirements: AD is a very compact process; the facility property is only 6 acres, including railroad right of way. It is located on land owned by the Maryland Food Center (a centralized regional distribution hub dedicated to food distribution), which supplies most of its feedstocks.
- Organic feedstocks will be food scraps, plus fats, oils and grease (FOG)
 - Can accept packaged food waste, because they have depackaging equipment
 - Whether to take horse manure is a question (it has lots of woody material in it, which does not contribute to gas production); if they do, it would be only a small amount
 - No human biosolids feedstocks (septic/sewage waste) will be accepted
- Outputs will be: biogas, which is captured, purified and sold as renewable energy; biosolids, which may be further processed to produce soil amendment products that can be sold; and liquid wastewater, most of which will be returned to the AD tanks to maintain a high liquid content
 - For 100 tons of organic material feedstock, around 15 tons are off-gassed as biogas, with 85 tons of material remaining.
 - The remaining material is put through centrifuge to remove excess waste —yielding 20 tons of solids, and 65 tons of process wastewater, called liquid centrate.
- Managing water quality emissions: Some of the centrate will be used on site; for example, some centrate will be routed to depackaging equipment to add water to incoming feedstocks on an as

needed basis. About 30,000 gallons per day is discharged in compliance with a Clean Water Act water quality permit and processed through the Howard County wastewater treatment plant. (Note: 30,000 gallons per day is equivalent to what a few hundred households produce.) All of the centrate that is discharged through the sewer system will first go to the facility's wastewater pre-treatment system.

- Managing air quality emissions and odors: the large building in which all waste receiving and digestate removal is fully enclosed and under negative aeration to manage odors. The exhaust from that system is discharged directly into the air. Odors are managed by dilution with fresh air, and by discharging from a high elevation above street level and where people are. They do not plan to store feedstocks or biosolids onsite; they have extensive experience with managing these processes successfully in other facilities.
- Managing traffic: Most of the traffic will be from MD Food Center sources of feedstocks located at the industrial site; the facility will be open 24 hours/day for them (and other customers) that generate waste around the clock; they estimate 1 truck/hour on average for feedstock deliveries, and 1 truck/day of digestate solids going out.

Renewable energy product options

- Biogas produced by AD is primarily carbon dioxide (CO₂) and methane (natural gas (CH₄))
- Currently they have a contract with BGE to supply pipeline-quality renewable natural gas; they have the equipment installed to purify the biogas to pipeline standards for natural gas
- If market demand develops for green hydrogen, they could alternatively produce that using a membrane cleaning process to separate out the hydrogen; they have a relationship with the firm BayoTech, which specializes in hydrogen technologies

Feedstock sourcing and currently available capacity

- Facility can accept up to 155K tons of food waste a year, which would yield 275K MMBTUs/yr; about 30K-40K tons/year of capacity remains currently available
- Primary feedstock suppliers now are commercial generators located in the Jessup Maryland Food Center
- As it seeks additional feedstocks, it is focused on large commercial generators, particularly those producing > 2 tons/week of food waste, covered by the diversion mandate as of January 2023, or > 1 ton/week, covered by the mandate in January 2024.
- Would like to pencil in a certain amount of capacity for municipalities with food waste collections that are separate from yard waste – like Montgomery County
 - Want a low contamination rate (e.g., can take some soiled paper, but can't produce any gas from it so want it to be a small fraction).

Potential and challenges for siting additional AD facilities in MD

- With implementation of the diversion mandate, there is potential for additional AD facilities located in population centers (where food scraps are generated) to be economic
- Critical factor in successfully locating a facility is the availability of feedstock nearby
- State permitting process for AD is well-established, but county zoning restrictions can be challenging
- State or local support for education and training for generators about the requirements of the new diversion mandate would be helpful

3. SWAC Organization Issues

- **Nominations Subcommittee**

- RRMD has received the SWAC applications from the August 2021 vacancy announcement from the County office processing them.
- SWAC has 10 vacancies it can fill with these applications; 4 people whose terms expired Dec 31, 2020 have applied to continue on the committee.
 - **Action:** The Nominations Subcommittee will review the applications and make recommendations to RRMD (for the Chief Executive). Paula Jenson will Chair the Nominating Committee, and will appoint the 2 additional committee members from current SWAC members who are eligible (members who are up for reappointment are not eligible).

- **Strategic Planning and Budget Subcommittee** was reconstituted for 2022 with members: Robin Barr, Carol Jones, Fred Kranz, and Heidi Lovett.

- **Action:** following the March 23 budget presentation, the subcommittee will prepare a draft budget letter for discussion and approval at April 6 meeting (and review before the meeting)

- **Ad Hoc Consolidation Subcommittee** was reconstituted for 2022 with members: Sara Bixby (Chair), Robin Barr, Carol Jones, and Fred Kranz.

- **Action:** Subcommittee will develop proposals for how to support forward movement on consolidation for discussion potentially at May meeting.

- 4. **Approved: December 2021 and January 2022 meeting minutes** – A quorum was present and approved the minutes unanimously.

5. Plans for March and April meetings

- **March 23:** March meeting is moved to enable receipt of the CE's recommended budget (to be transmitted to CC on March 15). Presentations will focus on the recommended budget and the RRMD Priority Programs (including *Aiming for Zero Waste* TF recommendations).
- **April 6:** Keith Levchenko, Senior Legislative Analyst, Environment, County Council will brief SWAC on County Council priorities, and implementation of *Aiming for Zero Waste* TF recommendations; SWAC will discuss budget letter draft.
 - **Action:** The Strategic Planning and Budget Subcommittee will develop a draft letter and distribute prior to the April 6 meeting.

Meeting Adjourned: 7:30 p.m.

ACRONYMS

C&D	Construction and Demolition
CC	County Council
CE	County Executive
CPI	Consumer Price Index
DAFIG	Dickerson Area Facilities Implementation Group
DEP	Department of Environmental Protection
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
OLO	Office of Legislative Oversight
PAYT	Pay As You Throw
RRF	Resource Recovery Facility
RRMD	Recycling & Resource Management Division
SA	Service Area for County collection
SAYT	Save As You Throw
SCA	Sugarloaf Community Association
SWAC	Solid Waste Advisory Committee
SWMP	Solid Waste Management Plan
T&E	Transportation and Environment Committee
TPD	Tons per Day
ZWTF	Zero Waste Task Force