

**Meeting of the Solid Waste Advisory Committee  
Meeting Minutes of June 14, 2022**

**The following SWAC members were present:**

John Frederick, Chair  
Michelle Nestor, Vice Chair  
Eli Brill  
Gordon Burgoyne  
Mike Forbeck  
Brian Guzzone  
Jason Leck  
Tanya McCoy-Caretti  
Timothy O'Donnell  
Gregg Pearson  
Joe Reinhart  
Shannon Reiter  
Joanne Shafer  
James Welty  
Gerald Zona

**The following alternates were present:**

Elizabeth Bertha	Vogel Holding, Inc./on behalf of Ed Vogel
Ashley White	County Commissioners' Association of Pennsylvania (CCAP)/on behalf of Matthew Quesenberry

**The following SWAC members were absent:**

Matthew Quesenberry  
Ed Vogel  
Bob Watts

**The following guests and Department of Environmental Protection (DEP) staff members were present:**

Derek Bartram	DEP Bureau of Waste Management (BWM)
Jackie Binder	DEP BWM/Recording Secretary
Jodi Brennan	Clearfield County Solid Waste Authority
Robert Bylone	PA Recycling Markets Center (PennRMC)
Abbey Cadden	DEP Policy Office
Griffin Caruso	Alternate for Representative Ryan Mackenzie/RFAC
Donna Cooper	Jefferson County Solid Waste Authority
Mimi Cooper	Centre County Solid Waste Authority
Mike Crist	Clinton County Solid Waste Authority
Jason Dunham	DEP BWM
Emily Eyster	Alternate for Senator Carolyn Comitta/RFAC
Veronica Harris	Montgomery County Solid Waste Authority

Laura Henry	DEP BWM/Liaison to the Committee
Lawrence Holley	DEP BWM
Darek Jagiela	DEP Office of Communications
Amy Mazzella DiBosco	Greater Lebanon Refuse Authority/Professional Recyclers of PA (PROP)
Tom Mellott	DEP BWM
Ali Tarquino Morris	DEP BWM
Kyle Rosato	University of Pennsylvania (UPenn)
Valerie Shaffer	DEP Office of Waste, Air, Radiation & Remediation (WARR)
Jessica Shilladay	DEP Southcentral Regional Office Waste Management Program
Nikolina Smith	DEP Bureau of Regulatory Counsel (BRC)
Jennifer Summers	PROP
Christopher Solloway	DEP BWM
Lucas Swanger	DEP BWM
Nick Troutman	Alternate for Senator Gene Yaw/RFAC
Robert Young	DEP Energy Programs Office (EPO)

**Call to Order; Introduction of Members and Guests; Approval of Minutes of December 16, 2021, Joint Meeting (SWAC/RFAC); Old Business**

John Fredrick, Chair, called the June 14, 2022, Solid Waste Advisory Committee hybrid meeting to order at 10:07 a.m.

Roll call was taken by Laura Henry. Thirteen (13) people signed in and were noted to be in in-person attendance.

Having no old business nor any public comments, Mr. Fredrick requested a motion to approve the December 16, 2021, joint SWAC/RFAC meeting minutes. Joanne Shafer motioned, seconded by Gordon Burgoyne; the motion carried unanimously. Mr. Frederick then introduced Robert Young, DEP EPO, and Larry Holley, Chief, Division of Waste Minimization and Planning, to present the Food Waste to Renewable Energy Assessment Overview.

**Discussion Item: Food Waste to Renewable Energy Assessment Overview**

Mr. Holley shared some background information regarding the joint project between Waste Minimization and Planning and the EPO evaluating the social and environmental impact of food waste in Pennsylvania. Although there have been assessments at the national level, most were not applicable due in part to the unique demographics of the Commonwealth. Mr. Holley reiterated to the group that the Bureau is currently in the process of completing the Waste Composition Study update that had been delayed due to the pandemic; the final data should be available in July.

Working cooperatively with the EPO on the assessment allowed for the use of joint resources to move this effort forward in a positive manner and benefit both programs. Mr. Holley noted the social and environmental impacts of food waste. The United States Department of Agriculture (USDA) estimates 31% of food produced for human consumption is not eaten and ends up being disposed of or otherwise managed; the United States Environmental Protection Agency (EPA) estimates food waste to be 24% of municipal solid waste is sent to landfills. Once the Bureau completes the Waste Composition Study, DEP

will have specific data applicable to Pennsylvania and specific to rural, urban, and suburban communities within the Commonwealth.

Mr. Holley stated the goals of the Assessment were to quantify current Industrial, Commercial and Institutional (ICI) food waste generation and diversion by identifying the inventory of anaerobic digestion (AD) and composting facilities currently accepting food waste and additional food waste processing capacity available at existing facilities. The Assessment also evaluated existing infrastructure to identify how existing facilities could do more so the Commonwealth can make better use of potentially underutilized processing capacity. The Assessment also estimated the reduction in greenhouse gas (GHG) emissions and biogas generation resulting from the current level of diversion; how these fit into DEP's climate initiatives; and how to expand operations at these facilities. All the data collected and generated for the Assessment was provided in GIS format for further analysis and will be made available to the public soon.

Mr. Young shared that the Assessment and the 2021 Climate Action Plan (CAP) were conducted simultaneously, and information gathered from the Assessment was not incorporated in to the quantified GHG reductions and cost/benefit analysis for the CAP. The CAP identified food waste reduction and the use of food waste as feedstock for increased production and use of biogas and renewable natural gas as strategies within the waste sector.

### **Food Waste Generation**

Mr. Young discussed the ICI food waste management pathways currently being utilized and DEP's desire to increase utilization of anaerobic digestion and composting. Currently, these combined pathways manage 13% of food waste generated.

Mr. Young outlined the food waste sectors, types, and generation threshold utilized for the Assessment. Only ICI sectors were included. Food waste types included by-products from food and beverage processing, expired and unsold food from retail stores, uneaten prepared food from restaurants or cafeterias, and plate waste. The food waste generation threshold utilized was 52 tons/year (1 ton/week) per facility in order to focus on identifying diversion potential for generators where it is more likely to be economically feasible to implement food waste reduction strategies.

Mr. Young then discussed the quantification methodology used to gather the information for the Assessment. This included compilation of food waste generation factors for each sector; creation of a statewide database of ICI generator establishments grouped by sector (including 52,000 individual generators); and application of generation factors to the statewide database to estimate food waste generation by point source. Using this methodology, there is an estimated 2.7 million (M) tons of ICI food waste being generated within Pennsylvania.

The key findings from the generation portion of the Assessment included:

- 14% of ICI establishments exceed the 52 ton/year threshold but are responsible for 73% of total statewide ICI food waste generation.
- Of these establishments, 95% of the waste comes from Food Manufacturers (61%), Food Wholesale & Retail (21%), and Restaurant & Foodservice (13%).
- The 370 highest generating establishments are estimated to generate over 46% of the total 2M tons of ICI food waste per year.

### **Organics Processors**

Mr. Young then reviewed the processing portion of the Assessment. This portion evaluated existing and potential capacity to process food waste in the Commonwealth through anaerobic digestion (AD) and composting. Key findings of this portion of the Assessment were as follows:

- The throughput of facilities accepting food waste is currently 145,000 tons/year; this represents 7.3% of ICI food waste from generators producing more than 52 tons/year.
- An additional 111,000 tons/year (5.6%) of capacity would be available by overcoming operational barriers at facilities currently processing food waste.
- An additional 77,000 tons/year (3.9%) of available capacity would be available through \$20M+ in upgrades to existing AD facilities not currently processing food waste.

### **GHG Emission Reductions & Energy Generation through Food Waste Processing**

Finally, Mr. Young reviewed the climate impacts of ICI food waste processing on greenhouse gas (GHG) emissions and renewable energy generation. Long term projection to 2050 utilizing data from the 2018 Green House Gas inventory showed that the Solid Waste Management sector contributed 2.5 MTO<sub>2e</sub> to Pennsylvania GHG emissions. Continuing at the current 7% diversion rate would avoid 4% in additional emissions. Increasing the diversion rate to 13% by utilizing currently unused processing capacity could reduce sector emission by an additional 3%; and a 35% diversion goal (508,000 MTCO<sub>2e</sub>) could reduce sector emission by 16.2%.

### **Assessment Recommendations & Next Steps**

Mr. Holley reviewed the overall recommendations of the Assessment, which included the following next steps:

- Reinstating and expanding the Food Recovery Infrastructure Grant: In 2020, the program provided \$9.6M in grants to food banks, shelters, and soup kitchens to cover costs of equipment purchases necessary to prepare, transport and store excess food from ICI establishments.
- Creating dedicated resources to address food waste within DEP: Create a Commonwealth-wide Organic Management Coordinator and expand the capacity to develop and review permits for digestion and composting facilities.
- Establishing a grant fund for food waste-to-energy infrastructure: Make grant monies available to existing and new facilities with an emphasis on Environmental Justice communities.
- Providing technical assistance to the largest food waste generators: Create an outreach and educational program for the manufacturing sector.
- Leading by example: Establish diversion goals for Commonwealth agencies through GreenGov coordination.

Mr. Frederick noted that having an Organic Management Coordinator to facilitate this program would be extremely beneficial and questioned how they might facilitate bringing stakeholders together.

Mr. Holley replied DEP is confident that it can formally organize the partners in this initiative to work collectively and cooperatively to engage in this program; having the Organic Management Coordinator within the agency to coordinate the different programs at the onset will assist in this effort.

Tim O'Donnell questioned if the logistics of residential collections and the trucking component were considered. Mr. Holley acknowledged that residential collection continues to be a challenge across the

nation and Commonwealth. He indicated due to the proximity of existing collection facilities, building smaller collection units strategically located to deal with waste collection would help to facilitate collection but would also be a huge financial undertaking. Mr. Young clarified that the assessment did not go into depth with logistics as the overview was primarily focused on assessing generation and capacity; however, when looking at the existing facilities and completing the economic analysis, modeling took into account transportation and tipping fees to determine if upgrading the facility was a viable investment.

Eli Brill asked whether the energy recovery that takes place at landfills or incinerators that have gas to energy projects was considered during the GHG emissions calculations; and if a factor was used to calculate emissions, was it a Pennsylvania-specific factor or a national factor? Mr. Young responded that high level analysis was conducted where landfilling was assumed to be the current state, transportation distance was assumed to be 20 miles, and national defaults from EPA's dataset were utilized.

Mr. Brill warned of potential opposition from the waste industry toward diversion of organic material from landfill gas to energy facilities and discussed figures from a September 2019 DEP State emissions inventory report which was presented during a Climate Change Action Committee meeting he attended. Mr. Holley added that there is a need to look at the logistics and infrastructure of disposal, and it might make sense from a GHG standpoint to allow waste to be disposed at a facility that is closer to the generator rather than transporting it over great distances to anaerobic digestion and/or composting facilities.

Mr. Brill asked if there were permitting issues associated with the digesters and how the biogas generated at these facilities is utilized. Mr. Young replied that the biogas being generated at these facilities is currently being used to power generators to produce onsite electricity, heat, or for other purposes or just being flared. There are permitting and regulatory requirements associated with these facilities that are required to be met and managed.

Mr. Holley highlighted the importance of recognizing that all aspects of waste management are integral to Pennsylvania's success. It is an integrated system and all stakeholders must work together to create and implement the changes recommended in the Assessment.

Joanne Shafer commended the cooperation between BWM and EPO and asked Mr. Young if EPO had any plans to make funds available, either on the state or federal level, to assist specifically with developing infrastructure. Mr. Young responded that his understanding is that the funding to support those types of initiatives have historically come through EPA, not the Department of Energy. Mr. Holley added that there should be federal Infrastructure Investment and Jobs Act (IIJA) funding available, but that DEP is still learning how much might be available and how it will be awarded.

### **Discussion Item: Advisory Committees**

Abbey Cadden, DEP Policy Office, presented an overview of the Department's initiative to expand awareness about Advisory Committees and obtain feedback from SWAC members. The Policy Office is responsible for tasks such as developing and coordinating policy and regulatory initiatives for the Department; directing the development of strategic plans and identifying key policy issues; providing long range direction for program staff; and conducting studies on program issues as they arise. This also includes reviewing legislation and monitoring federal and state budget negotiations and how they will impact DEP program operations.

The Policy Office also has oversight over advisory boards and committees, wherein there are approximately 245 volunteer positions on approximately 30 boards, committees, commissions, and certification bodies. Policy has received feedback in the past two years that more recruitment is necessary and the process for appointment to a board or committee should be more transparent. They have also received feedback that there is a need for promoting public interaction and general awareness of the advisory committees.

The two main areas of improvement are to expand outreach to reach qualified individuals and connect with and engage the public. The Policy Office has created an online committee member interest form for individuals to fill out and submit a resumé and letter of interest, allowing creation of a list of qualified prospective members to pull from while providing transparency in the appointment process. Policy is also working on creating and maintaining a list of stakeholder groups that can be reached out to when a vacancy occurs. Ms. Cadden indicated the advisory committee website is also being reworked to be more user friendly and to provide easier access to advisory committee information. Specifically, summaries and links to committees, FAQs and educational materials, and testimonials from current members are provided to give further information and insight into each committee, current issues of concern, and reinforce why the public should get involved.

Ms. Cadden asked the committee members for feedback and their thoughts on recruitment and awareness, appointment processes, barriers to volunteering, improving community engagement and impact, and asked them to share any thoughts or ideas they have.

Michele Nestor, Vice Chair, commented that the qualifications for being on a committee are very important and having a background in solid waste and regulatory terminology are critical qualifications for SWAC membership. Mr. Frederick agreed, but indicated participation by grassroots organizations is also important. Ms. Nestor also stated that she has found that in recent years SWAC has not had an open dialogue with DEP to discuss what is going on in the industry and that meeting agendas have been primarily set by DEP.

Ms. Cadden clarified that the qualifications for becoming a committee member aren't changing, but rather an electronic version of the application process and to solicit resúmes for future vacancies is now being used.

Tim O'Donnell asked how many vacancies currently exist and how difficult they are to fill. Ms. Cadden responded that each board is unique and there are some boards where the position is hard to fill and are a struggle to get people to volunteer as they have other professional obligations that limits their ability to participate. There are other boards where this is not an issue at all, as they have a lot of contacts and strong outreach and engagement. Mr. O'Donnell followed up by asking how often applicants are rejected; Ms. Cadden responded that they aren't necessarily "rejected," but certain boards have statutory requirements for the positions that would exclude a potential applicant. For example, the Storage Tank Advisory Committee is looking to fill a vacancy for a local government representative; it must be filled by someone who is employed by local government. DEP keeps all resúmes on file from potential candidates who have expressed an interest, so when there is a vacancy, there is a pool to pull from.

Mr. O'Donnell then questioned if vacancies or anticipated vacancies are published on the DEP website. Ms. Cadden replied that currently they are not; however, DEP is determining the best way to provide this information.

Mr. Frederick questioned if the Policy Office has given thought to enhancing the perception of the Advisory Committees to be sure the public understands they serve an important purpose. Ms. Cadden responded that Policy is working on providing the educational awareness to the public via the interactive website.

Joe Reinhart commented that he felt there needs to be an evaluation of the effectiveness and engagement of the committees and went on to say that as DEP staffing has decreased, the level of committee engagement has also decreased. Ms. Cadden replied that there are annual reports created each year to show what has been discussed and worked on, and the impact a committee's work has had.

Brian Guzzone commented that as a newer member he feels that improving and increasing the communication between committee members would be useful. Specifically, providing new members information on their role as a board/committee member and DEP's expectations, as well as more communication between meetings and regarding upcoming meetings is desired.

Mr. Brill commended the Department on getting materials to the Advisory Committee in advance of the meetings; but would like to receive associated presentations prior to the meetings as well. Mr. Brill felt that having past committee meeting minutes and materials available on the website is a valuable resource and encouraged DEP to keep this legacy information available even if it is considered outdated.

Jim Welty offered that while there is an upside to the convenience of having hybrid meetings, the downside is not being in person and engaging with other committee members and those in the room. Meeting in person increases engagement and helps to develop relationships with the experts on both sides of the table. Mr. Welty offered this as an observation and a caution on continuing with hybrid meetings, as the benefit of having one-on-one conversations and developing relationships within the committees is getting lost.

### **Action Item: Draft Final Rulemaking; Municipal Waste Permit-by-Rule (PBR) for Rural Transfer Facilities**

Jason Dunham, Division of Municipal and Residual Waste, provided an overview of the draft final rulemaking creating a PBR for Rural Transfer Facilities. He reminded the Committee that the draft proposed rulemaking was adopted by EQB and published in January 2022 for public comment. No comments were received from the public nor the Independent Regulatory Review Commission (IRRC); therefore, no changes were made to the language of the rulemaking from the last time the Committee discussed it.

Mr. O'Donnell asked for clarification on the volume of certain types of municipal waste that can be stored at the facility prior to transfer. Mr. Dunham replied that there are separate provisions allowing for 40 cubic yards of construction/demolition waste to be stored in a maximum of two containers and another that allows for a maximum of 40 cubic yards of yard waste to be stored in a maximum of two containers. Storage of recyclables, which are not considered waste, is not to exceed 80 cubic yards.

Mr. Reinhart pointed out a potential conflict between the provisions for recordkeeping and reporting in Chapter 285 and those specific to the new PBR, cautioning it may create confusion. He also stated that if DEP wants to encourage these facilities being built, it may be best to simplify the metrics and provide some guidance on where these facilities may be located. Lastly, Mr. Reinhart suggested the language

should read that waste will be going to a processing and disposal facility that is otherwise authorized under an individual permit for clarity.

Ms. Shafer asked if there is anything in the rulemaking that requires a cover or tarp over containerized waste and expressed concerns with uncovered containers leaking after heavy rain or precipitation. Mr. Dunham replied that there is nothing specific in the rulemaking that requires a cover or tarp; however, there are nuisance prevention, stormwater and other general provisions included to address this. He went on to explain that these facilities will be quite simple and while there are some concerns with stormwater and how facilities will be managed, the intention of the PBR is to ensure protection of the environment without including specific stormwater requirements. Ms. Shafer responded that lack of specificity may cause hesitancy for rural communities to establish these facilities due to concerns with DEP taking enforcement action against them.

Mr. Frederick questioned as to whether mixed paper should be included in list of recyclable materials required to be collected. Ms. Nestor indicated the size, location, and capabilities of what these PBR facilities are going to look like would need to be considered. While cardboard and metal can likely go to a local scrap yard, introducing mixed paper might complicate the operation if it is required to be collected.

Mr. O'Donnell noted that while smaller container options would be better for maintaining a cover on collected materials, limiting the number of containers essentially mandates the use of rolloff containers and prevents the use of frontload cans or totes. He suggested consideration of changing or even eliminating the maximum number of containers in the PBR to allow for more flexibility.

Mr. Frederick asked if changes could be made to the regulatory language to address this potential issue. Mr. Welty also questioned if it were possible to make a motion to approve the PBR pending DEP addressing the issues raised. Ms. Henry stated that the rulemaking was on the agenda for the July 2022 EQB meeting and cautioned that changes to regulatory language would put finalization of the rulemaking in jeopardy. After more discussion, it was determined that the questions and comments raised could be addressed either in the preamble of the rulemaking or other form of guidance.

Ms. Nestor made a motion to accept the Municipal Waste Permit-by-Rule for Rural Transfer Facilities as presented, seconded by Shannon Reiter; the motion carried unanimously.

## **New Business**

Ms. Henry encouraged members to propose agenda items to her and Mr. Frederick for consideration at future meetings.

Ms. Shafer commented that moving forward, there will be some significant retirements from the Department in the next several years and encouraged DEP to invest in some succession planning to ensure corporate knowledge isn't lost.

Jason Leck requested that presentations be made available to the Committee prior to future meetings to allow for better contribution to discussions.

Chair Frederick asked for a motion for adjournment, so moved by Jim Welty and seconded by Joe Reinhart. The motion carried unanimously, and the meeting adjourned at 12:03 p.m.