Compost Facility Evaluation

PADEP Recycling Technical Assistance Program

Lower Paxton Township
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Harrisburg, PA 17109

SCS ENGINEERS

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Attachment 1: PADEP Municipal Waste General Permit Number WMGM030SC001

Attachment 2: Site Visit Photo Log

Attachment 3: 2023 and 2024 Compost Facility Annual Report

Attachment 4: General Permit WMGM017

1.0 INTRODUCTION

Lower Paxton Township requested recycling technical assistance from the Pennsylvania Department of Environmental protection (PADEP) to explore opportunities for improving the Township's existing composting facility. This report presents the results of the high-level recycling technical assistance analysis performed to evaluate potential improvements related to the current Lower Paxton Township ("Township") Compost Facility ("Facility") operations. Details of the survey are provided in this report.

2.0 BACKGROUND AND SUMMARY OF WORK

The Compost Facility is located at 6613 Conway Rd, Harrisburg, PA 17111. The current material acceptance hours are 7:30 am to 5:00 pm on Tuesday, Thursday, and Saturday from the first Tuesday in April through the second Saturday in December.

According to the Township's website, leaf waste may be delivered loose or in kraft bags; plastic bags may not be left at the Facility. Residents may take screened compost in 36-gallon containers or kraft bags. Residents may also take woody waste (mulch). Both products must be loaded by hand by the residents.

A permit is required to use the Facility, and residents are required to display the permit to access the Facility. Annual and daily permits are available at the Municipal Center located at 425 Prince St, Harrisburg, PA 17109 (approximately four miles east-northeast of the Facility) and at Hornung's Hardware Store located at 6005 Blue Bird Ave, Linglestown, PA 17112 (approximately five miles driving distance north-northeast of the Facility).

Lower Paxton Township and neighboring West Hanover Township residents may purchase an annual permit for $50 or a daily permit for $15. Obtaining a permit allows residents to dispose unlimited quantities of the accepted materials for the timeframe their permit is valid. Contractors may also use the Facility with a valid permit. Annual permits for contractors cost $690 and daily permits are available for $200. **Table 1** lists materials accepted for processing at the Facility along with items that are not accepted.

Table 1. Compost Facility Acceptable and Unacceptable Materials

Acceptable Items	Unacceptable Items
Branches (12 in. in diameter or less)	Branches (larger than 12 in. in diameter)
Brush	Concrete/Rocks/Construction Material
Garden Waste	Dirt
Leaves	Grass/Sod
Tree Prunings	Stumps
	Lumber

Residents and contractors using the Facility are allowed to take screened compost and single-grind wood waste from the Facility when it is available. Materials must be placed in kraft paper bags or containers no larger than 36 gallons. Compost cannot be taken by the truck- or trailer-load from the Facility.

The Facility operates under PADEP Municipal Waste General Permit Number WMGM030SC001 ("Permit"), which was issued on July 11, 2016, and expires June 6, 2025. The Permit (**Attachment 1**)

approves the processing and beneficial use of acceptable yard waste materials for use as compost soil conditioner, soil amendment, fertilizer or mulch.

As part of this PADEP recycling technical assistance project, the following tasks were completed:

Task 1 – Project Kick-Off Meeting and Site Visit
The project team organized and held a project kick-off meeting to review the project tasks, schedule, and budget. The meeting was used to confirm our understanding of what organics diversion activities are occurring in the Township to date. As part of this task, our team took a detailed and thorough walking tour of the Compost Facility to understand existing operations. Notes were made on operations, access, material flow, processing equipment, and buffers/barriers to name a few. We requested information on material quantities managed at the facility on an annual basis.

Task 2 –Facility Evaluation and Recommendations
Based on the Compost Facility site visit (Task 1), the project team provided thoughts and recommendations on the following facility infrastructure and operations conditions to improve the facility, customer experience, and impact on the neighborhood:

- Options for expanding facility hours, including implementation of automated key card access system
- Evaluate the installation of a berm on the property or other options to provide a buffer to adjacent residential community
- Overall evaluation of facility operations and identify opportunities for improving efficiency

Task 3 – Final Report
SCS developed this report to provide the results and recommendations from each of the tasks above. .

3.0 FACILITY SITE VISIT AND MEETING

The project team met with Facility representatives to complete a Facility site visit and meeting. The purpose of the site visit and meeting was to evaluate current Facility infrastructure and operations to better understand existing conditions to inform our suggestions and recommendations to improve efficiency, effectiveness, customer experience, and community impact at the Facility.

SCS Engineers staff facilitated the site visit and meeting with members of the Township's material diversion program. The kick-off meeting and site visit were held in November 2024, and attended by Steve Husted (CPS), Timothy Nolt (Lower Paxton Township Public Works Director), and Kris Reichert (Lower Paxton Township Public Facilities Division Manager).

During the kick-off meeting and site visit, the project team completed a walking tour of the Facility to understand existing operations and infrastructure. Township staff detailed compost facility operations including access, material flow, equipment, and buffers for the surrounding community. . The discussions provided clarification of information provided prior to the site visit and on the Township webpage. Attachment 2 includes a photo log of notable infrastructure and operations of the Compost Facility.

4.0 FACILITY INFRASTRUCTURE AND OPERATIONS

This section details the infrastructure and operational procedures currently used at the compost facility.

4.1 INFRASTRUCTURE

4.1.1 Structures

The Facility includes some buildings located on the property to aid in operations. All the buildings were observed to be in good condition and able to meet the current needs of the Township's composting program. **Table 2** lists the existing structures. **Figure 1** presents the locations of each structure.

Table 2. Existing Compost Facility Structures

• Commercial equipment shop / storage building built in 2001 - 798 sq. ft.
• Canopied storage structure (photo included in **Attachment 2**)
• Attendant hut (photo included in **Attachment 2**)
• Small storage shed

4.1.2 Equipment

The compost facility uses many pieces of heavy equipment to efficiently produce finished products. During the winter months or extended periods of inclement weather equipment is stored under cover. All equipment used at the site is kept in good condition and is sufficient to accommodate current material volumes. **Table 3** lists the equipment used by the site.

Table 3. Compost Facility Heavy Equipment

• Volvo H061 Wheel Loader
• Vermeer CT616 Compost Turner
• Vermeer Model TR516 Trommel Screen
• Bandit The Beast Model 3680 Horizontal Grinder

4.1.3 Operational Areas

The compost facility is located in a residential area in Lower Paxton Township. Composting activities occur within the permitted limits of disturbance (LOD~ 9.7 acres), staging and access (~2.5 acres), and Public Access Area (~1.2 acres). These boundaries were described in the Proposed Conditions Plan for Lower Paxton Compost Facility & Minor Landfill Modification drawing, dated September 1, 2016. Additional areas to the south and east of the Public Access Area as well as areas between the Public Access Area and LOD are utilized for staging and access (~2.5 acres). The facility operates

under the Pennsylvania General Permit For Processing/Beneficial Use of Municipal Waste, WMGM030 ("General Permit"), which limits Facility operations to less than fifteen (15) acres. **Figure 1** in Attachment 1 presents the compost facility boundaries within parcel (35-072-033).

Working surfaces were in good condition and appeared to be firm, uniformly graded, and dry during the site visit. Facility surfaces appeared to be well designed to properly manage stormwater.

Facility operational areas including the LOD area utilized for material storage and composting as well as the Public Access Area utilized for resident material drop offs and pickups appeared well organized and well suited to accommodate current operational needs. Areas are partitioned by jersey barriers and denoted with signs indicated to users where to offload the various accepted materials. Photos of these areas can be observed within the photo log presented as **Figure 2** includes pictures of the areas described in this section.

4.1.4 User and Material Management Flow

The Facility's Public Access Area and associated drop off and pickup areas appeared to be well designed and able to accommodate the volumes of material accepted and picked up by community members. Existing signage clearly directed users where to go and there was adequate space to safely maneuver within the area. Unless the Township experiences a significant increase in users or material acceptance volumes, there appears to be no need to modify existing Facility infrastructure or user flow within this area. It is suggested that the Facility continue to manage stockpiled materials in the Public Access Area per Facility permit requirements. This includes timely incorporation of the materials into stockpiles and windrows for processing.

4.1.5 Windrows

Overall, the material processing/curing windrows at the site were well organized and sufficient to handle annual material flows. Composting at the Facility is done through the utilization of windrows. The windrows have no active aeration other than periodic turning with the compost turner. Leaves are currently the primary constituent of the windrows.

Woody materials are stockpiled in static piles intermittently throughout the LOD area.

The Facility LOD area utilized for material storage and composting appeared well organized and well suited to accommodate current operational needs.

4.1.6 Signage

The Compost Facility included appropriate and clear signage to direct users to material drop-off and pickup points.

4.2 FACILITY OPERATIONS

4.2.1 Staffing

The Facility is staffed by public works staff from the Township whose responsibilities extend beyond Facility operations and include other public works activities. The operation of heavy equipment is limited to qualified/trained staff. Facility attendants are stationed at the attendant hut and are

responsible for confirming permits and verifying materials delivered are accepted by the facility. Currently the Facility is staffed by four (4) part-time attendants.

4.2.2 Material Handling

Materials received in the public access area are transported to the appropriate windrow or static pile by the site loader operator. Depending on site conditions, the materials in windrows are turned approximately once per month using the Vermeer CT616 compost turner. This exceeds the minimum mixing requirements of once every three (3) months as required by the General Permit (V.1.h.). The loader is used to move received materials to their appropriate static piles within the LOD area for staging and storage. This equipment is also used to transfer finished compost and mulch products from static piles to the public access area for purchase. Occasionally dump trucks are used for material transfer offsite.

4.2.3 Monitoring

Facility staff record temperature measurements using a thermometer mounted on a three-foot stem to gauge internal windrow temperatures throughout the composting process. Staff also approximate moisture content by squeezing a handful of material and noting the characteristics of the product when pressure is released. The project team was not made aware of additional testing performed on the materials.

4.2.4 Amendments

The Township reports no application of additional materials or chemicals to the static piles or windrows to facilitate or improve the composting process.

4.2.5 Revenue and Material Flow

Upon request, Facility representatives provided the Compost Facility Annual Reports from 2023 and 2024. (Attachment 3). These reports provided approximate volumes of materials accepted and removed from the Facility during each reporting period. The 2024 annual report estimates that 14,408 cubic yards of material were accepted, and only 793 cubic yards of material was removed (634 cubic yards of compost and 158 cubic yards of mulch) Collected permit fees in 2024 generated a revenue of $65,673.20 for the facility. The report noted revenue from permit fees has remained consistent for several years.

The 2024 Compost Facility Annual Report states that the amount of material currently stockpiled at the site is high. Efforts aimed at reducing current stockpiles and increasing compost material output are discussed in the following sections.

5.0 FACILITY IMPROVEMENTS

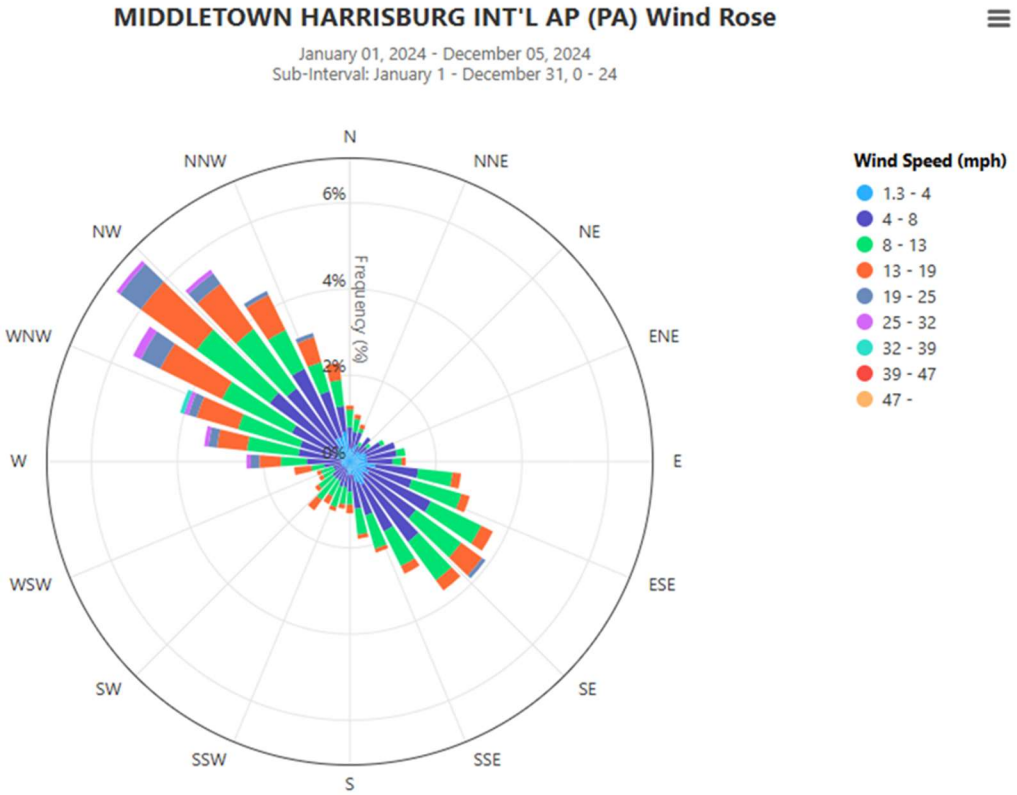
Prior to implementing potential changes to current operations, it is important to review existing laws and regulations at the state, county, and city levels that may impact Facility operations. Modifications to the existing General Permit (Attachment 1) or the application for additional permits may be needed to implement proposed alternatives.

5.1 OPERATIONS

5.1.1 Nuisances

Dust generation associated with Facility operations and its impact on neighboring residents is a concern. **Table 4** presents a wind rose diagram from the Midwestern Regional Climate Center's cli-MATE database for the year-to-date average daily wind speeds and directions recorded at the nearby Harrisburg International Airport, located approximately six miles south of the Facility. As observed, regional winds are predominantly from the northwest and southeast. During periods of high winds, activities producing significant volumes of dust should be limited. The Facility should explore alternative locations for activities producing significant dust to minimize the impact on surrounding residents. These activities include chipping/shredding, vehicle loading, and other activities creating significant dust.

Table 4. Harrisburg International Airport 2024 Wind Rose Diagram



5.1.2 Composting Efficiency

The Facility could implement changes to improve efficiency and material utilization. The current use of passive aerated static piles for woody material storage and mulch generation combined with a reduced mulch output has left the Facility with a volume of material greater than what is currently desired. Additionally, as stated within the 2024 Annual Report (**Attachment 3**), "…the mulch material produced at the Compost Facility is not a desirable product as it is offered to residents at no cost, but not many residents take advantage." There are potential operational improvements that could be

implemented to improve the quality and desirability of the mulch produced as well as producing more products to reduce existing stockpiles.

5.1.2.1 Technology

Passive windrows rely on regular mixing and attention to material composition and size to achieve composting objectives. High temperatures are difficult to achieve with this method and pile temperatures typically are not high enough to break down proteins in some materials such as meat, bones, and dairy products.

Aerated static piles can improve composting efficiency by actively moving air through the windrows using blower systems. Air is blown through pipes in or under the pile or drawn down through the pile. These systems allow for faster composting and an increased number of acceptable materials, and result in faster material processing. Upgrading the current facility to incorporate the use of aerated static piles would present a significant cost but would improve composting efficiency of the Facility.

5.1.2.2 Spacing

Improvements can be made with windrow spacing, the Facility's compost turner has a processing tunnel capable of accommodating windrow sizes up to approximately six feet high by 16 feet wide. Windrows were each spaced approximately 10'-12' apart. It is suggested that pairs of windrows be spaced approximately one compost turner wheel width apart. Each pair of windrows should be separated from the next pair by a 10'-12' space. This layout allows access to all windrows while maximizing available space for composting.

5.1.2.3 Temperature Monitoring

The ideal temperature for thermophilic composting is around 55 degrees Celsius (131 Fahrenheit). Temperatures about 55 degrees Celsius are lethal to many pathogens and weed seeds. Cooler temperatures allow pathogens and seeds to survive, which impacts the quality of the finished product. If the temperature in the windrow is too high (>60-65 degrees C) the beneficial microbial populations are also killed. Mixing or turning is a primary method used for the control of temperatures and the reintroduction of oxygen.

Thermometers should be used to gauge and record temperatures of each windrow in multiple locations. Purchasing a thermometer with a longer stem would improve the accuracy of pile temperatures. Heavy-duty industrial composting thermometers with stems of six feet or longer are available for relatively minimal costs. Section 5.1.g. of the General Permit states that "The operators shall maintain records to demonstrate that all compost produced by the facility meets the time/temperature standards of 45C – 65C (113F – 140F) for at least 72 consecutive hours.

5.1.2.4 Moisture Content

Section V.1.e. of the General Permit states that "During the active composting process, the optimal moisture content of the windrows or compost piles shall range from 40 to 65 percent…". According to research done by Cornell University and presented in a published document titled "The Science of Composting", an initial moisture content of 50–60 percent by weight is generally considered optimum for composting because it provides sufficient water. This maintains microbial growth but does not restrict air flow because the material is too saturated. Decomposition by microorganisms occurs most rapidly in the thin films of water surrounding compost particles. When conditions

become drier than 35–40 percent, bacterial activity is inhibited because these films begin to dry up. Additionally, moisture levels above 65 percent result in slow decomposition, odor production in anaerobic pockets, and nutrient leaching."

More accurate methods to measure moisture content include oven tests, which are standardized tests for more accurate measurements that use a dedicated facility or laboratory for testing. Material samples are obtained from the windrows to confirm accurate measurements. There are also various tools and probes available that provide digital moisture readings.

5.1.2.5 Oxygen Levels

According to the U.S. Composting Council, Compost Operations Training Course, "The ideal oxygen level is 10 percent or higher as microbial populations grow and increase activity, they consume oxygen in the pile. A proper compost recipe allows for airflow in the pile and is achieved by creating a porous mix." Additionally, according to Section V.1.e. of General Permit, "…the oxygen level during the composting process shall be maintained at a level greater than 5%."

5.1.2.6 Incorporating Woody Materials

During the site visit it was estimated by Facility staff that the current ratio of materials entering and leaving the Facility is approximately 15 to 1. This means the Facility takes in a significantly more material than is redistributed as a compost/mulch product. Most of the woody material comes from municipal vehicles and is ground and stockpiled. Various landscape suppliers have historically utilized these materials, but the demand is lower than supply.

Woody materials are not currently incorporated into the windrows. Improvements to composting conditions will allow for more efficient breakdown of woody materials. These improvements will help alleviate large volumes of woody material needing to be screened. Woody materials are chipped and staged in piles. . Modifications to current operations would include the incorporation of these materials into the compost piles to produce more refined final product.

5.1.2.7 Inbound Material Ratio

Leaves are the primary constituent of the windrows. Leaves, especially those that are not shredded, tend to become matted within the windrows forming barriers. These barriers prevent air and water movement through the piles, slowing the composting process. The incorporation of chipped wood material would help increase the pore space within the windrows, making for more efficient composting. Additionally, the incorporation of different materials into the windrows, especially non-woody green vegetative materials can improve composting speeds and the quality of the composted end-product.

Woody or leafy materials will generally benefit from a nitrogen addition. Good sources of nitrogen are manure, fertilizer, grass clippings, meat scraps, and bone meal. According to the EPA's Approaches to Composting guidelines, optimal composting requires an approximate balance of 3:1 ratio by volume of carbon-rich to nitrogen-rich materials. The carbon-rich materials include wood chips and dry leaves, and the nitrogen-rich materials include food scraps and manure. Improper ratios can cause unwanted odors, pests, or incomplete decomposition of the materials.

5.1.2.8 Recordkeeping and Material Testing

In addition to the recordkeeping requirements outlined within the General Permit, it is suggested that the facility institute a more robust recordkeeping plan. Records should track measurable parameters and operational procedures to help refine the Facility's composting process. The approximate percentages of the materials incorporated into each batch of windrows should be recorded as well as any additional notes, observations, or measurements. To track pile content and source information, it is suggested that a numbering system be developed to identify the various piles, windrows, and public drop off bins to more easily reference materials on site. Enhanced recordkeeping will allow for multiple people to assist, allow for continual improvements to operations, and the development of improved "recipes" or batches that could be recreated or modified as needed.

It is also recommended that the Facility incorporate enhanced material testing into the operations. The Penn State College of Agricultural Science (https://agsci.psu.edu/aasl/compost-testing) offers compost testing services for relatively minimal costs. As described on their website, "Compost testing is important for characterizing the beneficial physical and chemical properties of a compost, as well as, for identifying potential problems with compost use." Free sample mailers and submission forms are available from the laboratory or from the county offices of the Penn State Extension. Alternatively, the Township may submit their compost sample in their own container. Sample size required and associated fees are listed with each test. Other labs are available for use. Additionally, various testing kits are available with testing to be performed by Facility staff.

At a minimum, finished batches of compost products should be tested for percent solids, organic matter, soluble salts, and carbon/nitrogen ratio to help end-product users assess the best use for the materials. Presenting the results of the material testing on the Facility's webpage, where permits are purchased, and on signage at the Facility is recommended. This information will improve the marketing of the end-products to potential commercial users, increasing revenue and movement of product.

In addition to testing materials for the characteristics addressed above, it may be advisable to test received materials for potential pollutants. For instance, if woody materials are sourced from soils impacted by metals, PCBs, or other harmful pollutants, these chemicals may bioaccumulate and be present in unsafe levels. It is important to ensure that the Facility provides end-product mulches and compost that is safe for resident use. **Table 5** is a summary list of the data the Township may consider maintaining records on for the compost/mulch products produced.

Table 5. List of Recording Data Points

• Source, Type, Quality, and Quantity of Material Received
• Turning/Mixing Events (e.g., Dates, Methods)
• Composting Duration
• Moisture Readings
• Temperature Readings
• Approximate Material Percentages Utilized Within Batches
• Laboratory or On-Site Testing Results
• Pile/Windrow Watering Events

5.2 INFRASTRUCTURE

5.2.1 Community Access

The current material acceptance hours of 7:30 am to 5 pm on Tuesday, Thursday, and Saturday from the first Tuesday in April through the second Saturday in December appear sufficient to accommodate current Facility demand and Facility staffing abilities. If future demand increases, it would be advisable to evaluate the expansion of the current acceptance windows, as needed. Additionally, if modification of the current acceptance windows would be advantageous for contractors or other entities, and doing so would increase the utilization of produced materials, the Facility should consider modifying or expanding the window accordingly.

The current acceptance window does not extend beyond the Christmas holiday. However, the municipalities offer Christmas tree recycling pickups or drop offs independent of the Facility's public access season.

The Facility plans to roll out a Paladin Data Systems, SMARTGov, online permit purchasing system for the 2025 season. The SMARTGov permit issuing software will allow for residents to apply for permits and pay required fees online. This system will be utilized in addition to the currently available purchasing options.

The Facility is also evaluating potential options for the implementation of a system that would allow for access upon purchase of a permit. There are a variety of options available. An access control system that issues unique access codes with pre-determined day, time, and use durations would help prevent unauthorized use of the facility. Many modern solutions will integrate with smart telephone entry systems that will accept digital passes sent to users. Older systems that utilize fobs, transponders, or proximity cards would still require the user to physically acquire the access device prior to use at the point of entry.

Upgrading to an unmanned system would require investment in Facility infrastructure including gated entry and an accompanying surveillance system to help deter abuses primarily associated with the dumping of unacceptable items. In addition to the financial investment required to pay for the

Facility upgrades, there will likely be fees associated with subscriptions, management, invoicing, and maintenance.

If this is pursued by the Facility, it would be advantageous to contact Paladin Data Systems to determine if there are cloud-based access control options available that are designed to work with their SMARTGov permit issuing software. An ideal scenario would allow users to register on the website, pay the associated fees, and receive their code via smart phone.

CPS attempted to contact Paladin Data Systems via their website to determine if options utilizing their SMARTGov permit issuing software were available but have received no response to date.

There are several potential drawbacks associated with the implementation of this type of unmanned access system. The pros and cons should be weighed and evaluated to help make this determination. Is the ease of use worth the costs of starting and operating this system? Is the demand there to justify any additional expenses? Will part-time attendants still be required to monitor incoming and outgoing material types and volumes as well as monitor for permit misuses? As part of a longer-term plan for increasing community utilization of the Facility, it may be advisable to poll the community to determine if this is an option worth pursuing. If community engagement efforts can increase Facility utilization, it may make more sense to further investigate the implementation of an automated access system option.

5.2.2 Residential Buffers

CPS was provided with a letter from a nearby resident outlining several complaints related to alleged negative impacts associated with Facility operations. The letter, from a resident whose property is on Conway Drive, cited noise, dust, unsightliness, odors, and the migration of debris onto their property as their primary complaints. As part of the desktop review performed prior to the site visit, CPS utilized available aerial imagery to identify areas where Facility operations would be visible from neighboring residences. Several areas were identified where the Facility would potentially benefit from the installation of physical buffers to better isolate the Facility and its operations from the view of the surrounding community as well as to serve as a buffer to help reduce noise and dust exposure. These areas are identified on **Figure 2**. During the site visit, these areas were checked to ensure the accuracy of the information gathered during the desktop review.

The development of physical buffers in some areas identified may be challenging due to various site or regulatory constraints. Limitations associated with a lack of available space, existing structures or features, and the existence of the former landfill should all be factored in while evaluating potential buffering options.

Using GoogleEarth Street View, parts of the Facility appear visible from sections of Creek Crossing Dr. to the west-southwest during full vegetation foliage and visible from portions of Conway Rd. to the north including Hodges Heights Park, located at 6600 Conway Rd. Portions of the Facility are visible from Fairfax Dr. to the northwest as well. It is highly likely that the Facility is more easily visible during the winter months when the existing deciduous portions of the border vegetation has shed their leaves for winter.

Dust generation associated with material screening activities and vehicular traffic is currently an issue. It was relayed during the site visit that complaints from nearby residents have been filed due to dust generation. Noise complaints have also been filed. It may be advisable to incorporate occasional monitoring of noise at various locations on the border of the Facility property during times

of active Facility operations to evaluate and document associated noise levels for reference and planning.

Currently, there are no sources of water available on site. The strategic application of water could be utilized to keep dust down during times when the trafficked areas and screened materials are dry and prone to significant dust generation and winds are capable of transporting the dust off-site. There are several systems that could be implemented to assist. As it is unlikely a well could be developed at the Facility due to the presence of the historical landfill, one option would be for municipal water to be run to the Facility from an adjacent waterline. If this is not a feasible option, some combination of onsite auxiliary storage tank and water tank truck/trailer could be utilized instead. Options with booms are available that would make the application to windrows and dusty surfaces a more efficient process. It is suggested that the Facility investigate options for having a water source and the ability to apply the water as needed.

Measures that can be used to control dust generation include the maintenance of adequate moisture content in all active composting piles as well as limiting the screening and turning during periods of high winds and the moistening of dry compost as necessary. It may be advisable to install a windsock and anemometer at the Facility to monitor wind direction and relative speeds and to halt dust generating activities when conditions are suboptimal.

The construction or installation of berms or fencing are two potential options for reducing potential Facility impacts on neighboring residences related to dust and noise generation. However, due to the Facility being located atop the historical landfill, the installation of these physical barriers would likely require approval and must be designed to ensure no negative impacts on site surface water flow. The strategic planting of native evergreen trees in areas where border vegetation is most thin or where neighboring residences have the most potential exposure to generated dust and noise is therefore advised.

Potential evergreen options will depend on site soil conditions (pH, moisture, grain size, pore space, drainage, etc.) as well as the desired height needed to sufficiently block views, space available for planting and growth, as well as costs.

Reasonable planting options which would not grow to excessive heights, have moderate to dense foliage, and are native to Pennsylvania include the following:

- Eastern Red Cedars (Juniperus virginiana)
- Virginia Pine (Pinus virginiana)
- American Arborvitae (Thuja occidentalis)
- Atlas Cedar (Cedrus atlantica)
- American Holly (Ilex opaca)
- Eastern White Pine (Pinus strobus)

This is not a complete list but merely a suggestion of potentially viable options that could serve the intended purpose and provide habitat and food for native animals.

Berms with vegetation planted atop may be a viable option. These could be constructed to ensure plant roots will not impact the existing landfill liner. Liners beneath the berms could potentially be utilized to help accomplish this. Topsoil currently stockpiled to the east of the Public Access Area could potentially be used in the construction of berms at strategic locations across the site.

It is suggested that berms or vegetated berms be strategically placed around the locations where Facility activities such as chipping, shredding, and material screening produce the most noise and dust. These activities should be performed within areas of the LOD furthest away from neighboring residential property boundaries and residences to reduce the chance of potential impacts and complaints.

The nearby Dauphin County Technical School (one-mile northwest) has a Landscaping & Greenhouse Production program (https://dcts.org/program/landscaping-greenhouse-production/). According to the school's website, the Landscaping & Greenhouse Production program "…focuses on improving the appearance of the outdoors as well as producing and caring for plants." It is suggested that the head of the program, Mr. Arnold, be contacted to enquire as to whether they would have interest in incorporating this project into their curriculum. As they also have a greenhouse on the premises, it is possible that they could potentially grow and plant all necessary trees or assist in portions of the project with minimal or no costs incurred by the Facility/community. This school as well as other nearby community educational facilities could be potential sources of beneficial community outreach, sources of additional compostable materials, provide potential labor opportunities, and similar. Additional discussion of these topics is included in **Section 5.3** of this evaluation.

5.2.3 Equipment

Existing Facility equipment appeared to be in good condition and well suited to accommodate current needs. If staff identify additional equipment or equipment accessories that would allow for more efficient operations, the acquisition and implementation of these items should be pursued.

5.3 EXPANDING OPERATIONS

An increase in community utilization of the Facility would be influenced by the level of information and knowledge provided to citizens about the Facility. Further education efforts should inform and involve citizens in Facility operations. The 2023 Annual Report state that "… the mulch material produced at the Compost Facility is not a desirable product as it is offered to residents at no cost, but not many residents take advantage." Expanded operations should focus on increasing the utilization of the compost products produced.

5.3.1 Material Acceptance and Output

According to the U.S. Census Bureau, in 2023 the population of Lower Paxton Township was 54,807 and West Hanover Township's population was estimated to be 11,120. Based on EPA estimates of 164 pounds of food is wasted per person each year, approximately 4,500 tons of food waste is generated by the two townships with an estimated 180 tons being composted.

Lower Paxton and West Hanover Township are well-positioned to implement policies and initiatives to help reduce food waste. Considerations could be made regarding the incorporation of certain food waste into the existing compost program which could help reduce the volume of compostable materials ending up in landfills. A secondary benefit of this would be a reduction of solid waste management costs and an increase in the amount of usable compost generated.

According to Section IX. Waste Management of the Permit, "… **food waste**, food processing sludge, spent mushroom substrate, **manure**,… are not authorized under this general permit." The Facility would likely need to pursue the General Permit WMGM017 (**Attachment 4**) to allow it to accept these materials. Based on an initial review of the operating conditions for all permittees, so long as the

Facility "does not store more than 3,000 cubic yards per acre of total materials at any one time" it should be able to apply for this permit.

There are potential downsides to the acceptance of food waste into the Facility composting program. These may include logistics, additional labor, plastics and trash that accompanies food waste, and the potential for odors or pests. If the primary reason for not looking to accept food waste is concern for a potential increase in the number of rodents and other pests at the Facility, there are measures to reduce the likelihood of the Facility having issues. The Institute for Local Self Reliance ("ILSR") is an advocacy and organizing group that, amongst other things, focuses on bolstering local composting across the country to cut food loss, enhance soil, protect the climate, and build community. ILSR published a short reference guide titled "*Oh, Rats! How to Avoid Rodents At Community Composting Sites*" which provides useful information on how to avoid rodents when incorporating food wastes into community composting programs. Of primary note to deter rodents or pests is suggestions related to proper material handling and storage including:

- Avoid the acceptance of meats and other proteins,
- Keep the areas in the vicinity of the piles free of clutter, tall vegetation, and other areas where pests can shelter,
- Routinely move or turn the piles to keep temperatures up and disturb habitat,
- Ensure all food scraps are integrated into the pile and no bits are left on the ground or elsewhere on site, and
- Make sure active composting piles are on a surface or have a barrier that prevents rodent burrows underneath.

Further discussion of the neutralization of potential odors associated with composting, including food waste, is included in Section 5.1.2.

While it is understood that grass clippings are not currently accepted at the Facility, they are a permitted material. Fresh grass clippings are high in nitrogen and moisture, and if added during the turning process and in the proper quantities, will provide improved composting efficiency and a more balanced compost end-product. If the acceptance of grass clippings is considered, there are several things to consider prior to incorporating them into the windrows. Of specific concern are clippings with certain types of chemical herbicides. Lawns treated with herbicides should not be accepted. Also, to ensure that weed rhizomes or seeds are killed and not left to propagate within the compost end-product, it is important to ensure the windrows reach thermophilic temperatures, as discussed within Section 5.1.2, above.

It is worth noting that the leaves of black walnut and eucalyptus plants contain natural herbicides that can prevent seeds from germinating. The Facility should avoid the incorporation of these leaves in large volumes, if possible. Leaves of diseased plants should also be thrown away and not composted.

The incorporation of manure as nitrogen-rich "greens" is discussed in Section 5.1.2 above. Manure is a valuable nutrient resource for soils and a good nitrogen additive. It would be good to ensure that this resource does not end up in landfills. Even though the Township is a fairly urban area, there are agricultural and farming facilities within the Township and neighboring West Hanover Township that may offer opportunities to secure this beneficial additive. One such facility is the Sunrise Stables & Riding Club, a local horse stable located less than one (1) mile west of the Facility. It would be advisable to contact a representative to determine what they currently do with their manure and if there are opportunities to incorporate it into Facility compost.

If the Facility plans to begin incorporating food waste or manure into their composting program, it would be recommended to start off at a small scale to ensure operations are manageable and the potential for the downsides is minimized. Contacting and planning with local grocery stores or schools would be an advisable first step.

There are potential opportunities for compost/mulch/silt socks or wattles to be constructed of Facility materials for use by the Lower Paxton Township's Public Works department. This would negate the need for the purchase of these essential erosion and sediment control tools. The review of the PADEP Erosion and Sediment Pollution Control Program Manual, March 2012, and PADEP's Alternative E&S and PCSM BMPs document, revised, August 22, 2023, which provides updates concerning the use of wood chips and other materials in compost socks for stormwater discharges in watersheds classified as ABACT HQ, CPS determines that STA certification is not currently required for compost materials contained within erosion control compost filter socks utilized or sold within the State of Pennsylvania. However, PADEP does outline specific standards and construction details regarding the construction of erosion control compost filter socks for use in PA.

As briefly addressed in Section 5.1.2, potential avenues or opportunities to sell the produced mulch or compost beyond just the reliance on permit holders should be explored. Efforts should continue to be made to arrange with local landscaping or material supply companies to acquire produced materials. Municipal representatives from various departments should be contacted to explore opportunities to use the materials on local public works projects including public spaces, construction projects, or similar. Local farms, community gardens, community-based organizations, school districts, and other similar entities should be contacted to enquire about potential opportunities for use.

5.3.2 Community Engagement

Community engagement efforts are currently minimal. There are opportunities for significant improvements in this area. Increased community engagement can lead to greater community acceptance, less complaints, and increased facility utilization including more material drop-off and pickup. Avenues to improve community engagement include contacting and establishing relations with local tech or other schools, organizing community volunteer days, advertising campaigns, and the similar.

To increase positive attention and raise community awareness and utilization of the Facility, it may be of benefit to offer community demonstrations or community leader training days. This would also create applied learning opportunities for local schools or organizations, allowing for the potential achievement of curriculum goals through an active, hands-on learning environment. Similarly, the organization of community volunteer days could help provide labor and awareness that could be of benefit to the Facility and community.

There are numerous schools within an approximate 2-mile radius of the Facility including:

- Rutherford Elementary School
- Bishop McDevitt High School
- South Side Elementary School
- Central Dauphin East Middle School

- Central Dauphin East High School
- EH Phillips Elementary School
- Infinity Charter School
- and many more within just another mile or two beyond this initial 2-mile search radius.

These schools could be potential sources of community outreach, sources of compostable materials, potential labor opportunities, etc.

There are other means of increasing community awareness and utilization that include sending residential mailers, the posting of fliers, Facility representation at local events or community meetings, and hosting a web-based information session for residents to see what services and products are available/provided at the Facility. As previously mentioned in Section 5.1.2 above, information related to the quality and availability of produced compost and mulch could also be posted to the Facility webpage and where permits are obtained.

6.0 SUMMARY AND ADDITIONAL CONSIDERATIONS

Prior to implementing any potential changes to current Facility operations, it will be important to review existing regulations at the state, county, and local levels as they may have implications on the ability to implement specific changes. Modifications to the existing General Permit (Attachment 1) or the application for additional permits may be needed to implement proposed alternatives.

Summary of key evaluation points and recommendations:

- Current Facility hours of operation appear adequate to handle the current demand from the public. However, it may be advisable to issue a survey to past, current, and key potential users to determine if adjustments to the hours and/or days could result in increased utilization of the Facility. Potential scenarios would include adjusting operational hours to ranges more conducive to contractor utilization, such as an earlier weekday opening or later closing time. Facility records should be reviewed to determine what the peak utilization hour or hour ranges are and consider adjusting community access to the Facility accordingly.

- The Facility is evaluating potential options to allow permit holders to have automated access to the Facility. Any unmanned system would require investment in Facility infrastructure including gated entry and an accompanying surveillance system to help deter abuses primarily associated with the dumping of unacceptable items or unauthorized use. In addition to the financial investment required to pay for the Facility upgrades, there would be fees associated with subscriptions, management, invoicing, maintenance, or the similar. If automated access is pursued by the Facility, it would be advantageous to contact Paladin Data Systems to determine if there are cloud-based access control options available that are designed to work with their SMARTGov permit issuing software. An ideal scenario would allow for users to register on the website, pay the associated fees, and receive their code via smart-phone. Additionally, grant options to fully or partially offset fees associated with the implementation of an automated system should be evaluated. Various recycling financial assistance grants including the Section 902 Recycling Program Development and Implementation Grant are available for review at the DEP's website here:

https://www.dep.pa.gov/Business/Land/Waste/Recycling/Municipal-Resources/FinancialAssistance/Pages/default.aspx.

- The Facility could benefit from the installation of physical barriers to better isolate the Facility and its operations from the view of the surrounding community and to help reduce noise and dust exposure. A potentially viable option to accomplish this goal would be the use of strategically planted vegetation or vegetated berms. It is suggested that vegetation, berms, or vegetated berms be strategically placed around the locations where Facility activities such as chipping, shredding, and material screening produce the most noise and dust. These activities should be performed within areas of the LOD furthest away from neighboring residential property boundaries and residences to reduce the chance of potential impacts and complaints. It may also be advisable to install a windsock and anemometer at the Facility to monitor wind direction and relative speeds and to halt dust generating activities when conditions are suboptimal.

- In addition to the recordkeeping and monitoring requirements outlined within the General Permit, it is suggested that a more robust recordkeeping and monitoring plan is instituted to track the various measurable parameters and operational procedures utilized to help with the management and refinement of the Facility's material handling and composting process. The approximate percentages of the materials incorporated into each batch of windrows should be recorded as well as any additional notes, observations, measurements, or the similar. To better keep track of pile content and source information, it is suggested that a naming or numbering system be developed to identify the various piles, windrows, and public drop off bins to more easily reference materials on site. Enhanced recordkeeping would provide significant benefit, allow for multiple people to assist, allow for continual improvements to operations, and the development of improved "recipes" or batches that could be recreated or modified as needed based on user feedback and review of Facility records.

  In addition to testing materials for the properties listed below, in certain instances it may be advisable to test received materials for potential pollutants. For instance, if woody materials are sourced from soils impacted by metals, PCBs, or the similar, these pollutants may bioaccumulate and be present in unsafe levels within the materials. It is important to ensure that the Facility provides end-product mulches and compost safe for resident use. Data suggested for inclusion in Facility records include:

  - Source, Type, Quality, and Quantity of Material Received
  - Turning/Mixing Events (e.g., Dates, Methods)
  - Composting Duration
  - Moisture Readings
  - Temperature Readings
  - Approximate Material Percentages Utilized with Batches
  - Laboratory or On-Site Testing Results
  - Windrow Watering Events

- Currently, there are no sources of water available on site. The strategic application of water could be utilized to keep dusts down during times when the trafficked areas and screened materials are dry and prone to significant dust generation and winds are capable of transporting the dust off site. There are several systems that could be implemented to assist. As it is unlikely a well could be developed at the Facility due to the presence of the historical

landfill, one option would be for municipal water to be run to the Facility from an adjacent waterline. If this is not a feasible option, some combination of onsite AST and water tank truck/trailer could be utilized instead. Options with booms are available that would make the application to windrows and dusty surfaces a more efficient process. It is suggested that the Facility look into options for having a water source and the ability to apply the water as needed.

- Increased community engagement can lead to greater community acceptance, less complaints, and increased facility utilization including more material drop-off and pickup. Avenues to improve community engagement include contacting and establishing relations with local tech or other schools, organizing community volunteer days, advertising campaigns, and the similar. To increase positive attention and raise community awareness and utilization of the Facility, it may be of benefit to offer community demonstrations or community leader training days. This would also create applied learning opportunities for local schools or organizations, allowing for the potential achievement of curriculum goals through an active, hands-on learning environment. Similarly, the organization of community volunteer days could help provide labor and awareness that could be of benefit to the Facility and community.

  There are other means of increasing community awareness and utilization that include sending residential mailers, the posting of fliers, Facility representation at local events or community meetings, and the similar. Information related to material testing results and the quality and availability of produced compost and mulch could be posted to the Facility webpage and where permits are obtained.

This draft evaluation was conducted in accordance with reasonable and accepted industry practices, and the interpretations and conclusions are rendered in a manner consistent with other professionals within our industry.

Figure 1

Lower Paxton Compost Facility
Site Map

Notes.:

1. Basemap from GoogleSatellite
2. Property and Waste Cell Boundaries obtained from "Existing Conditions Plan for Lower Paxton Compost Facility & Minor Landfill Modification" drawing by HRG, dated 9/1/2016

Legend:

- Parcel 35-072-033 Approximate Boundary
- Approximate Boundary of Permit Approved LOD
- Public Access Area
- Approximate Former Landfill Waste Cell Boundary
- A Commercial equipment shop
- B Canopied storage structure
- C Attendant hut
- D Small storage shed

Project No.:	0489.02
Map *Scale:*	1 inch = 75 feet
Drawn by: SJH	*Check by:*
N:\#0489 - SCS Engineers\Lower Paxton Composting	

COMPLIANCE PLUS SERVICES, INC.

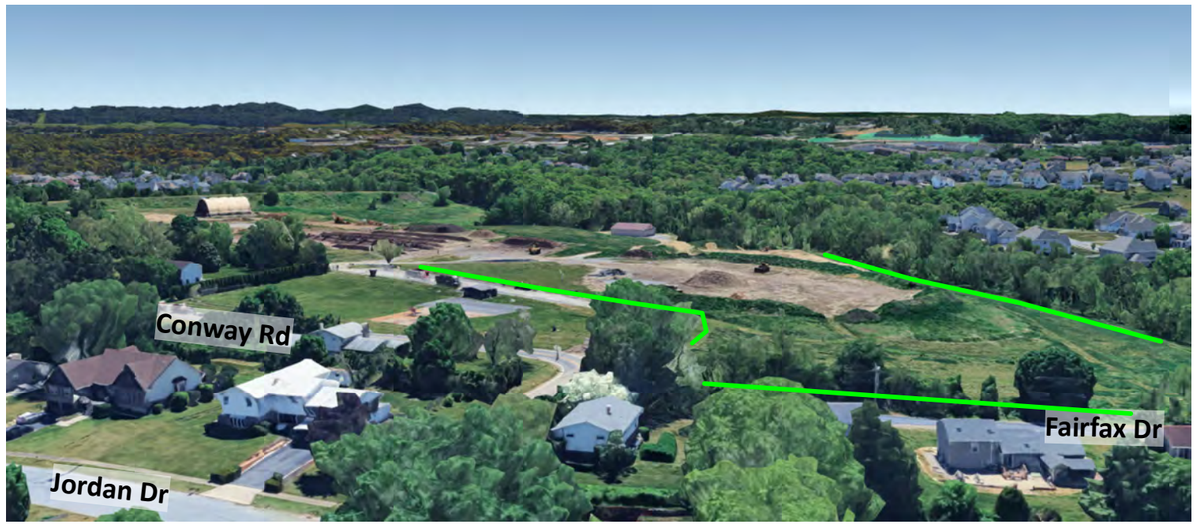
COMPLIANCE PLUS SERVICES, INC.
240 GIBRALTAR ROAD
SUITE 100
HORSHAM, PA 19044
PHONE: (215) 734-1414 * FAX: (215) 734-1424
www.complianceplusservices.com

Lower Paxton Compost Facility
Site Map

Client:	SCS Engineers
Site:	Lower Paxton Compost Facility
Date:	11/01/2024
Figure No.:	01

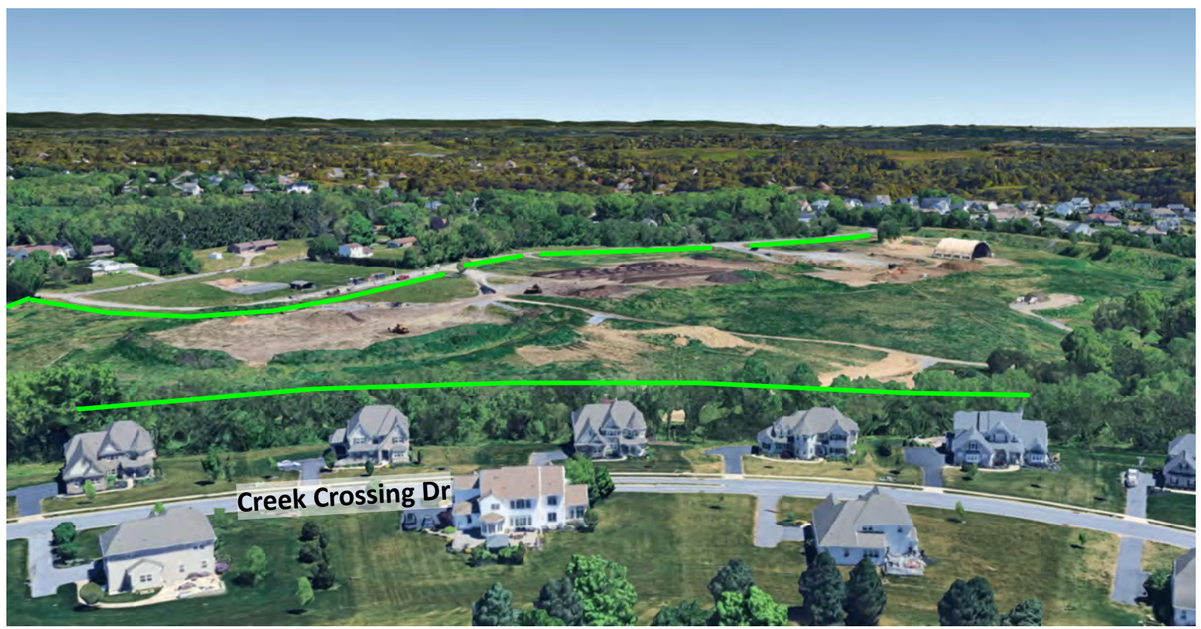
Figure 2

Lower Paxton Compost Facility
Site Map – Community Views of the Facility

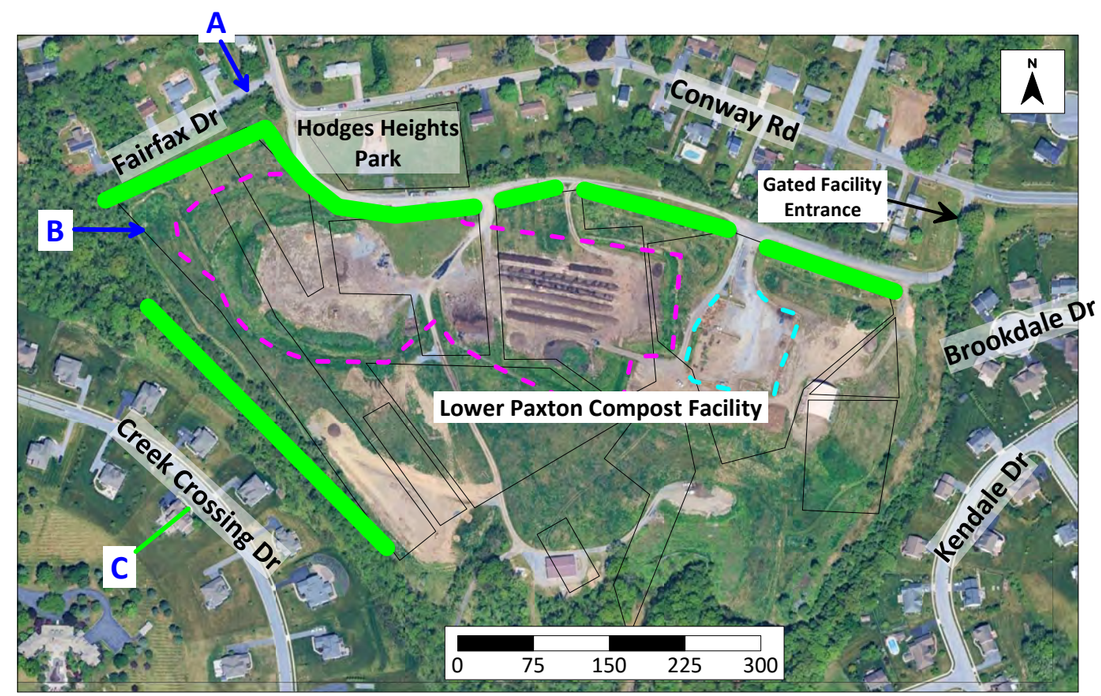


A View to Southeast

B View to East



C View to Northeast



Identified Areas Potentially Benefitting from Physical Barrier Improvements

Notes.:

1. Imagery acquired from Google Earth Pro
2. Basemap from GoogleSatellite
3. Property and Waste Cell Boundaries obtained from "Existing Conditions Plan for Lower Paxton Compost Facility & Minor Landfill Modification" drawing by HRG, dated 9/1/2016

Legend:

- Approximate Boundary of Permit Approved LOD
- Public Access Area
- Approximate Former Landfill Waste Cell Boundary

Project No.:	0489.02
Map *Scale:*	As shown
Drawn by: SJH	*Check by:*
N:\#0489 - SCS Engineers\Lower Paxton Composting	

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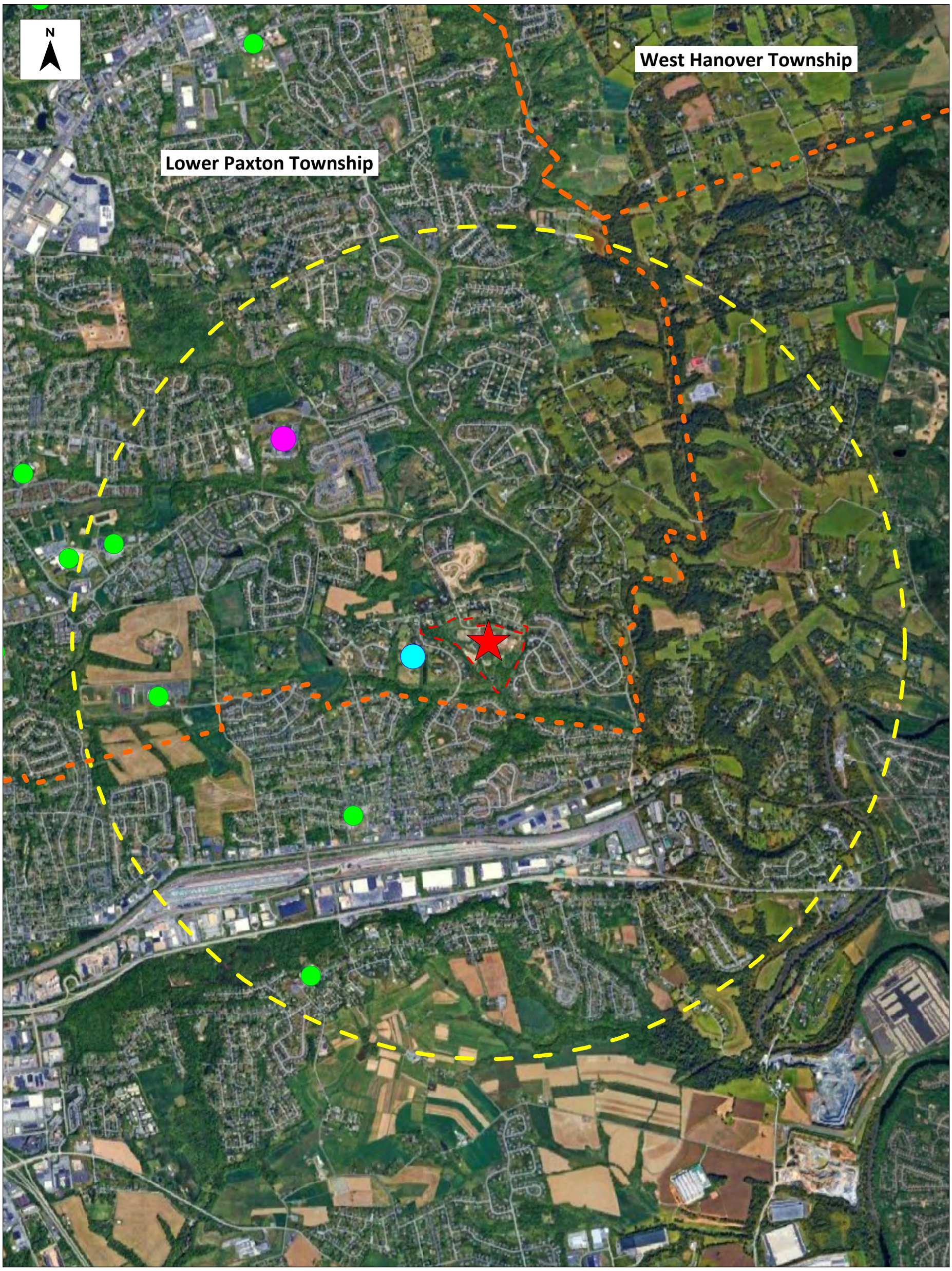
Lower Paxton Compost Facility
Site Map - Community Views of the Facility

Client:	SCS Engineers
Site:	Lower Paxton Compost Facility
Date: 11/01/2024	Figure No.: 02

Figure 3

Lower Paxton Compost Facility
2-Mile Radius Vicinity Map



Facility

School

Dauphin County Technical School

Sunrise Stables

Township Boundary

2-mile radius

Parcel 35-072-033 Boundary

Map Scale (feet)

0 1000 2000 3000 4000

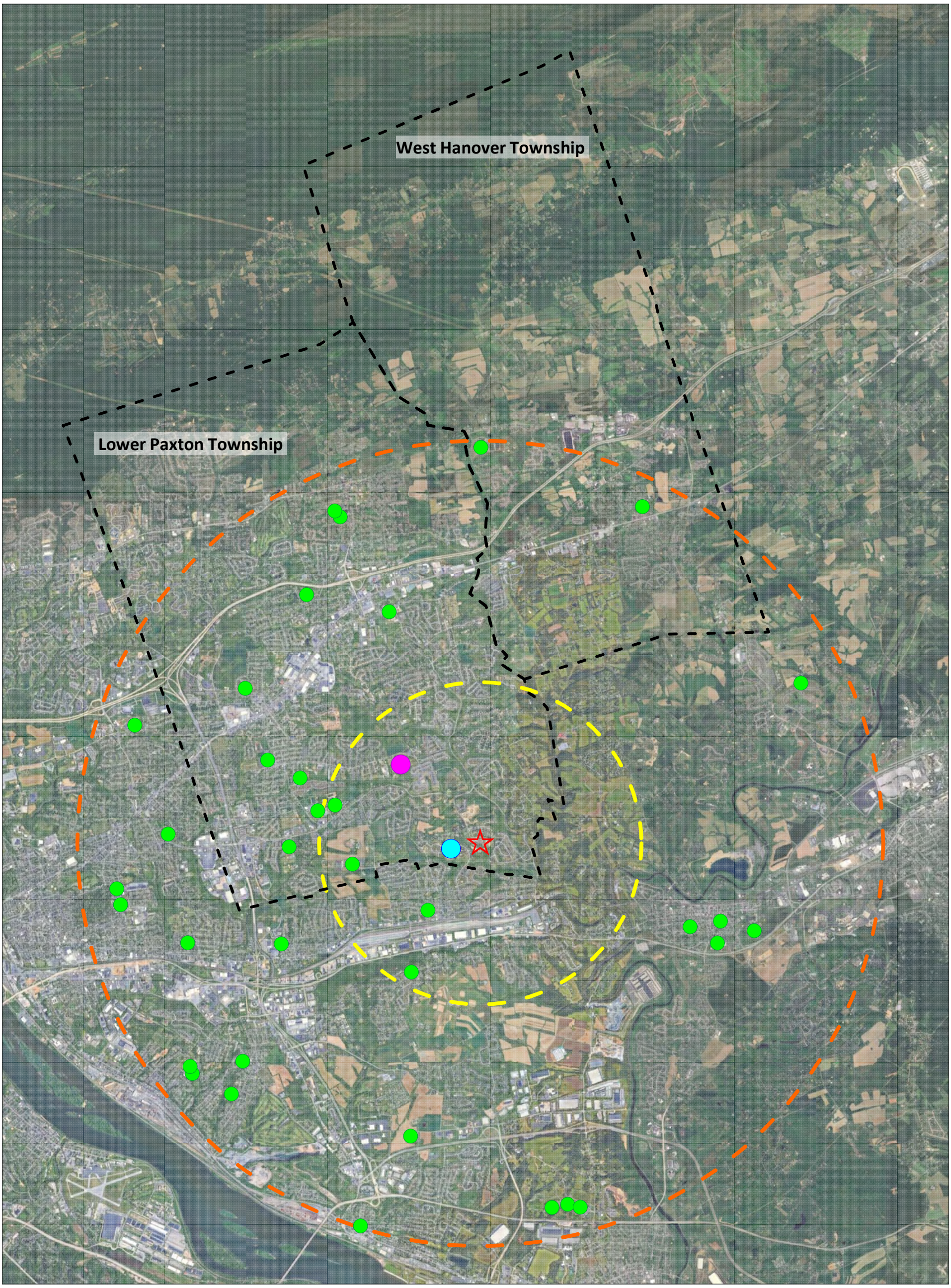
Notes.:

1. Basemap from GoogleSatellite
2. Property Boundarie obtained from "Existing Conditions Plan for Lower Paxton Compost Facility & Minor Landfill Modification" drawing by HRG, dated 9/1/2016

Project No.: 0489.02	COMPLIANCE PLUS SERVICES, INC.	COMPLIANCE PLUS SERVICES, INC. 240 GIBRALTAR ROAD SUITE 100 HORSHAM, PA 19044 PHONE: (215) 734-1414 * FAX: (215) 734-1424 www.complianceplusservices.com	Lower Paxton Compost Facility 2-Mile Radius Vicinity Map
Map *Scale:* As Shown			Client: SCS Engineers
Drawn by: SJH / *Check by:*			Site: Lower Paxton Compost Facility
N:\#0489 - SCS Engineers\Lower Paxton Composting			Date: 11/01/2024 / Figure No.: 03

Figure 4

Lower Paxton Compost Facility
5-Mile Radius Vicinity Map



Facility

School

Dauphin County Technical School

Sunrise Stables

Township Boundary

2-mile radius

Parcel 35-072-033 Boundary

Map Scale (miles)

0 1 2

Notes.:

1. Basemap from GoogleSatellite

Project No.: 0489.02	COMPLIANCE PLUS SERVICES, INC.	COMPLIANCE PLUS SERVICES, INC. 240 GIBRALTAR ROAD SUITE 100 HORSHAM, PA 19044 PHONE: (215) 734-1414 * FAX: (215) 734-1424 www.complianceplusservices.com	Lower Paxton Compost Facility 5-Mile Radius Vicinity Map
Map *Scale:* As Shown			Client: SCS Engineers
Drawn by: SJH / *Check by:*			Site: Lower Paxton Compost Facility
N:\#0489 - SCS Engineers\Lower Paxton Composting			Date: 11/01/2024 / Figure No.: 04

Attachment 1

PADEP Municipal Waste General Permit Number WMGM030SC001

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 11, 2016

George Wolfe, Manager
Lower Paxton Township
425 Prince Street
Harrisburg, PA 17109

Re: Issuance of General Permit
Lower Paxton Township Municipal Compost Facility
Municipal Waste General Permit No. WMGM030SC001
APS No. 886182, Auth ID 1099620
Lower Paxton Township, Dauphin County

Dear Mr. Wolfe:

Your application for a Determination of Applicability under the Municipal Waste General Permit No. WMGM030 has been approved. Enclosed is Municipal Waste Permit Number WMGM030-SC001 for the processing of yard waste and the beneficial use of the compost for the site located at 6600 Block of Conway Road, Harrisburg, PA in Lower Paxton Township, Dauphin County.

The approval granted under this permit is contingent upon Lower Paxton Township operating as described in the approved application, complying with the enclosed permit conditions, and complying with the applicable provisions of the Municipal Waste Management Regulations.

Please note the following conditions of this approval, which have been discussed with Mr. Ken Shoaf of your office on July 8, 2016:

1. The Township agrees to provide documentation that a Township representative, responsible for composting operations, has scheduled and/or received compost facility operator training by the first anniversary date of this permit.
2. Ponding of leachate from the composting activities on the landfill must be further evaluated in the minor permit modification to the post closure care plan for the landfill which is due 45 calendar days from the date of this letter (reference our prior correspondence of November 10, 2015.)
3. Although referenced in the Form GIF, this permit does not authorize the use of street sweepings within the compost facility permit boundary. A management plan for street sweepings currently being placed on other areas of the closed landfill should be addressed in the minor permit modification for the landfill.
4. The Form E-GP must typically be recorded in the Recorder of Deeds office for the composting facility, however, if Lower Paxton Township can document that this has already been done for the landfill or if Lower Paxton Township commits to completing a Form E as part of the minor permit modification to the landfill closure plan, it will not be necessary to do so for the composting permit.

Any persons aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office

Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary of the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please call John Oren, Facilities Manager, at 717.705.4706.

Sincerely,

Anthony Rathfon

Anthony Rathfon
Program Manager
Waste Management Program

Enclosures

cc: Alex Greenly, E.I.T., Herbert, Rowland, & Grubic, Inc.
Ken Shoaff, Lower Paxton Township
Jeff Kline, Lower Paxton Township
Lower Paxton Supervisors
Dauphin County Planning Commission

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

General Permit
For
Processing/Beneficial Use of Municipal Waste

Permit No. WMGM030SC001 **Date Amended** _____

Date Issued July 11, 2016 **Date Expires** June 6, 2025

The Department of Environmental Protection, Bureau of Waste Management, Division of Municipal and Residual Waste hereby approves the:

☒ Beneficial Use ☒ Processing prior to Beneficial Use ☐ Other

of yard waste limited to non-liquid waste, yard waste, leaf waste, grass clippings, garden residue, tree trimmings, chipped shrubbery, and other vegetative material, for use as: compost used as a soil substitute, soil conditioner, soil amendment, fertilizer or mulch.

This approval is granted to: Lower Paxton Township for use at the Lower Paxton Township Municipal Compost Facility located at 6600 Block of Conway Road, Harrisburg, PA in Lower Paxton Township, Dauphin County.

subject to the attached conditions and may be revoked or suspended for any project which the Department of Environmental Protection determines to have a substantial risk to public health, the environment, or cannot be adequately regulated under the provisions of this permit.

The processing of wastes not specifically identified in the documentation submitted for this approval, or the beneficial use of wastes not approved in this permit, is prohibited without the written permission of the Department.

This permit is issued under the authority of the Solid Waste Management Act (35 P.S. §§6018.101-6018.1003), The Pennsylvania Used Oil Recycling Act (58 P.S. §§471-480), The Clean Streams Law (35 P.S. §§691.1-691.1001), Sections 1905-A, 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§510-5, 510-17 and 510-20) and the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§4000.101-4000.1904).

This approval is granted: By: Anthony L. Rathfon

☒ Statewide ☐ Regional Title: Environmental Program Manager

THIS PERMIT IS NON-TRANSFERABLE

This issuance of General Permit (WMGM030SC001) is based upon the following permit application documents and subsequent submittals, as well as the conditions of General Permit WMGM030 (pages 2-14):

1. Permit Application submitted by Alex Greenly, E.I.T, of Herbert, Rowland, and Grubic, Inc, on behalf of Lower Paxton Township, prepared on November 30, 2015 and received by the Department on December1, 2015, consisting of the following:

    a. Cover Letter
    b. Project Description
    c. Municipal Waste General Permit Checklist
    d. General Information Form—GIF
    e. Form 20—Application for a Municipal Waste General Permit
    f. Form E-GP—Contractual Consent of Landowner
    g. Form HW-C—Compliance History
    h. Form 27M—Acceptance of General Permit Conditions
    i. Form B—Professional Certification
    j. PNDI Receipt
    k. Location Map
    l. Municipal Notifications to Dauphin County and Lower Paxton Township
    m. Check for $500.00
    n. Site Plan
    o. PPC Plan

2. Response to the Department's Technical Review Letter dated March 29, 2016, submitted by Alex Greenly, E.I.T, of Herbert, Rowland, and Grubic, Inc, on behalf of Lower Paxton Township, prepared on April 29, 2016 and received by the Department on May 2, 2016, consisting of the following:

    a. Cover Letter
    b. Project Description
    c. Municipal Waste General Permit Checklist
    d. General Information Form—GIF
    e. Form 20—Application for a Municipal Waste General Permit
    f. Form 20 Narrative
    g. Form E-GP—Contractual Consent of Landowner
    h. Parcel Information
    i. Form HW-C—Compliance History
    j. Lower Paxton Township Sanitary Landfill Permit

k. Lower Paxton Township Sanitary Landfill Compliance History
l. Form 27M—Acceptance of General Permit Conditions
m. Form B—Professional Certification
n. Operational Narrative
o. Exclusionary Distance Waiver from Lower Paxton Township
p. Public Education & Advertisement Materials
q. PNDI Receipt
r. Location Map
s. Municipal Notifications to Dauphin County and Lower Paxton Township
t. Notifications Proof of Receipts
u. Recordkeeping Sheets
v. Sample Annual Operation Report
w. Site Plan
x. PPC Plan

3. Response to the Department's Second Technical Review Letter dated May 13, 2016, submitted by Alex Greenly, E.I.T, of Herbert, Rowland, and Grubic, Inc, on behalf of Lower Paxton Township, prepared on June 9, 2016 and received by the Department on June 9, 2016, consisting of the following:

a. Cover Letter
b. Project Description
c. Municipal Waste General Permit Checklist
d. General Information Form - GIF
e. Form 20 – Application for a Municipal Waste General Permit
f. Form 20 Narrative
g. Form B- Professional Certification Form
h. Form E-GP – Contractual Consent of Landowner
i. Parcel Information
j. Form HW-C – Compliance History
k. Lower Paxton Township Sanitary Landfill Permit
l. Lower Paxton Township Sanitary Landfill Compliance History
m. Form 27M – Acceptance of General Permit Conditions
n. Operational Narrative
o. Exclusionary Distance Waiver from Lower Paxton Township
p. Public Education & Advertisement Materials
q. PNDI Receipt
r. Location Map
s. Notifications
t. Recordkeeping Sheets
u. Sample Annual Operation Report

v. PPC Plan
w. Site Plan:

i. Drawing No. EXH-1 Sheet 1 of 2, Proposed Conditions Plan for Lower Paxton Compost Facility, dated December 2014 (rev. 6/10/2016.)
ii. Drawing No. 2, Sheet 2 of 2, Cross Sections for Lower Paxton Compost Facility, dated July 2014 (rev. 6/10/2016.)

SPECIAL CONDITIONS
GENERAL PERMIT WMGM030

I. AUTHORIZATION

The approval herein granted is limited to the composting of yard waste and beneficial use of the compost so produced at compost sites. The waste streams accepted for composting shall be non-liquid waste[1] and limited to the following categories of municipal waste: yard waste, leaf waste, grass clippings, garden residue, tree trimmings, chipped shrubbery and other vegetative material. The beneficial uses of the finished compost approved in this permit are for the marketing or distribution as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch.

1. Yard waste composting facilities under 5 acres are exempt from this general permit if they are eligible for operation under the permit by rule permit provisions of 25 Pa. Code Section 271.103(a-c) & (h).

2. Approval to operate under this permit is limited to composting facilities which do not exceed fifteen (15) acres. The composting facility shall include all raw materials and waste storage areas, support structures to include buildings, access roads, stormwater devices, the composting and curing areas, and the finished compost storage area (other than areas storing bagged product for retail sales).

II. GENERAL REQUIREMENTS

1. Storage of incoming yard waste, curing materials, building materials and finished compost shall be consistent with Storage Requirements - Chapter 285 of the municipal waste regulations.

2. A person, municipality, or county operating a yard waste composting facility shall, for the duration of yard waste composting activities, identify the operation by posting and maintaining signs that are clearly visible at the junction of each access road and public road. The signs shall be easily seen and read. They should be constructed of a durable, weather-resistant material. The sign wording shall include the name, address, and telephone number of the person(s), municipality (ies), or county (ies) operating the facility, the operating hours, and the materials that can be received by the facility.

3. Nothing in this permit shall be construed to supersede, amend or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act, 35 PS §6018.101 et seq.; and the Municipal Waste Planning, Recycling and Waste reduction Act of 1988, 53 P.S. §4000.101 etseq.

4. As a condition of this permit and the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or search

[1] EPA method 9095 (paint filter liquid test) as described in the EPA Publication No. SW-846

warrant, upon presentation of appropriate credentials and without delay, to have access to and to inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, soils, water, or gases; to take photographs; to perform measurements, surveys, and other tests; and to inspect and/or copy documents, books, and papers required by the Department to be maintained. This permit condition is referenced in accordance with Sections 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

5. Failure of the measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations, and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.

6. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, the environment, or if the activities cannot be adequately regulated under the conditions of this permit.

7. Any person that operates under the provisions of this permit shall immediately notify, in writing, the waste program operations manager of the appropriate regional office of the Department (address in attached list) of any changes in: the name, address, owners, operators, and/or responsible officials of the company; the generator(s) of the waste; the status of any permit issued by the state or federal government under the environmental protection acts; and the land ownership and the right to enter and operate on the land where the facility is located.

8. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require the permittee to apply for, and obtain, and individual permit or cease operation if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment.

9. Upon cessation of operations at the composting facilities, the operator shall remove any yard waste and structures or other materials which contain or have been contaminated with other waste and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated hereunder.

10. Any waste generated from the composting process shall be managed in accordance with the solid Waste management Act of July 7, 1980, as amended, P.L. 380, No. 97, 35 P.S. §§ 6018,101 et seq. And the regulations promulgated hereunder.

11. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall operate as described in the approved application.

12. Each permitted facility operating under this general permit must have a certified compost operator on staff. This certification can be the Compost Specialization Certificate from the Professional Recyclers of Pennsylvania (PROP), or other Dep approved certification courses.

III. SUBMISSION OF APPLICATION

1. Persons or municipalities that propose to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" from the **Department's Central Office.** No activities shall commence unless specifically authorized in writing by the Department.

   At a minimum, the following information must be provided on forms available from the Department's Bureau of land Recycling and Waste management:

   a. Name, address and telephone number of the applicant;

   c. A description of yard waste types to be composted;

   d. Number and title of the general permit;

   e. The location of the compost facility, including identification of the site by outlying perimeter site boundaries on a United States Geological survey 7½ minute topographic map;

   f. A separate map of a general site plan drawn to scale of 1 inch equals 400' for the facility indicating the following:

      1. The location of access roads and gates in relation to public and private roads, wells, and property lines.

      2. The location of the tipping area.

      3. The location of the processing area, including compost piles and windrows.

      4. The location of storage and curing areas.

5. Surface water controls.

6. All support structures associated with the operation

7. The operational narrative shall describe the following:

   a. The yard waste collection methods.

   b. The methods that will be utilized at the facility to construct compost piles.

   c. The proposed dimensions of compost piles and windrows at the facility;

   d. The source of supplemental water that will be used to maintain an optimal 50 percent moisture content of compost piles or windrows at the facility.

   e. The proposed method of turning windrows, the turning frequency for composting at the facility and the method for determining that frequency.

   f. The proposed duration of the composting process, including curing time, storage time, and the proposed term of compost distribution.

   g. A plan for the marketing and distribution of the finished compost.

   h. A residue disposal plan including the location of disposal sites.

   i. Provisions for emergency response.

   j. A public information and education program

   k. The projected volume of material that will be process by the facility during the calendar year.

   l. A description of how leachate is generated and collected will be managed.

   m. Proof that waste and waste management activities are consistent with the general permit.

   n. Signed and notarized statement by the person who seeks "Determination of applicability" to accept all conditions and operate under the terms and conditions of this general permit.

   o. An application fee in the amount of $500, payable to the "Commonwealth of Pennsylvania".

   p. Proof that copies of the Determination of Applicability application have been submitted to each municipality, county, county planning agency, and

county health department, if one exists, in which composting activities are or will be located.

q. Proof that the applicant has legal right to enter the land and perform the composting facility activities approved under this permit.

r. A Preparedness, Prevention and Contingency (PPC) Plan prepared in accordance with the most recent edition of the Department's, " Guidelines for the Development and Implementation of Environmental Emergency Response Plans".

r. An irrevocable written consent from the landowner giving the Department permission to enter upon land where the applicant will be conducting waste management activities.

s. Information that identifies the applicant (i.e. individual, corporation, partnership, government agency, association, etc.) and related parties, including the names and addresses of every officer who has a financial interest in or controls the facility operation.

t. A list of all-previous permits or licenses issued to the applicant or related parties by the Department or federal government under the environmental protection acts; the dates issued status and compliance history concerning environmental protection acts.

u. Proof that any independent contractors retained by the applicant to perform any activities authorized under this permit are in compliance with state and federal laws and regulations relating to environmental protection.

v. For compost facilities operating under this general permit other than a municipal compost facility, a financial bond is **required** guaranteeing the operation of the entire facility.

w. Storm Water Management Control Plan to address on-site runoff and leachate management at the facility must be submitted as part of this application.

x. A description of the method used to maintain the optimal moisture and oxygen level of the windrows and temperatures of the piles or windrows in the production of mulch and compost.

IV. SITING REQUIREMENTS

1. Areas at the permitted facility where incoming materials or waste and finished compost are stored, composted, or cured shall not be located:

a. In or below the 100-year floodplain of waters of this Commonwealth;

b. In or within 300 feet of an exceptional value wetland;

c. In or within 100 feet of a wetland other than an exceptional value wetland;

d. Within 100 feet of a sinkhole or area draining into a sinkhole;

e. Within 300 feet measured horizontally-from an occupied dwelling unless the owner has provided a written waiver consenting to the facility being closer than 300 feet;

f. Within 50 feet of a property line unless the owner has provided a written waiver consenting to the facility being closer than 50 feet;

g. Within 100 feet of a perennial stream;

h. Within 300 feet of a water source unless the owner has provided a written waiver consenting to the facility being closer than 300 feet; or

i. Within 3.3 feet of the regional groundwater table;

j. Within **900 feet** of the following, if existing prior to the date the Department received an administratively complete application, unless a written waiver is obtained from the current property owner of:

   1. A building owned by a school district or parochial school and used for instructional purposes.

   2. A park.

   3. A playground.

V. OPERATIONAL REQUIREMENTS

1. Windrows (yard waste compost piles or windrows) shall be constructed and maintained as follows:

   a. The compost area shall be constructed in a well-drained area with a workable surface and sloped to prevent ponding and to direct and control surface water. The windrows shall be placed to promote drainage away from the windrows.

   b. The size of the compost piles or windrows should not exceed eight feet in height or sixteen feet in width unless the composting technology and or equipment can adequately manage the compost piles, and is approved by the Department.

c. Compost piles or windrows shall be constructed within one week following receipt of organic waste materials at the facility.

d. The facility shall provide adequate space to be maintained between the aerated piles, static piles or windrows to allow the unobstructive movement of emergency personnel and equipment unless other configurations are approved by the Department.

e. During the active composting process, the optimal moisture content of the windrows or compost piles shall range from 40 to 65 percent and the oxygen level during the composting process shall be maintained at a level greater than 5%.

f. Incoming materials or waste, active compost, curing materials and finished compost shall be stored in a manner that prevents harborage or breeding of vectors or creation of odor, litter and other nuisances which may be harmful to public health, public safety or the environment. Storage shall be in a manner that prevents dispersal of waste or compost by wind or water erosion or a risk of fire or explosion. Waste may not be stored in a manner that causes groundwater contamination.

g. The operators shall maintain records to demonstrate that all compost produced by the facility meets the time/temperature standards of **45C – 65C (113F – 140F) for at least 72 consecutive hours.**

h. To promote decomposition, compost piles and windrows shall be turned and reconstructed at least once every three (3) months. A higher turning frequency may be required, depending on the composting technology unless the composting technology requires more intensive management.

VI. Compost Pad Construction

1. The working surface (i.e. processing and storage areas) of the compost should be firm, uniformly graded, dry and as follows:

   a. A compacted mixture of soil or soil like material of at least four feet thick, or select granular material with adequate of fine grained particles to bind it together and provide a stable working surface.

   b. The pad shall be constructed to allow for operations to continue during all types seasonal weather conditions.

   c. The pad shall be constructed to promote the direction of leachate into the leachate management system.

d. The pad shall be accessible at all times for inspection purposes to evaluate the condition of the pad and shall be made of a material that is repairable if damage is incurred during operations.

VII. Stormwater Management

1. Stormwater runoff at the facility should be diverted away from the processing area, tipping, staging, curing and storage areas of the compost material. Surface water controls shall be based on a 24-hour precipitation event to be expected every 25 years. Proper drainage controls such as diversions, dikes and drains must be constructed and maintained to prevent ponding and excessive wetting.

2. Runoff from the from the processing, tipping, staging, curing and storage areas of the compost material , finished mulch material, and finished compost storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated hereunder.

3. Storm water runoff shall be directed to a properly sized vegetated filter area for treatment.

VIII. Air Quality

1. No person, municipality, or count shall cause or allow open burning at the facility.

2. Based on the facility composting volume capacity, the composting facility may be subject to the plan approval and operating requirements of 25 Pa. Code Chapter 127. If plan approval is required, the permittee may not construct, assemble, install, or modify the facility prior to obtaining a plan approval from the Department's Bureau of Air Quality.

IX. Waste Management

1. The operator shall not allow non-combustible residues or solid waste other than yard waste to accumulate at the facility, and shall provide for proper disposal or processing. The operator shall submit a waste management plan addressing the disposal options selected. Yard waste and other municipal waste received at the facility that are not suitable for composting shall be removed weekly and disposed or processed at a permitted municipal waste facility.

2. Plastic bags, food waste, food processing sludge, spent mushroom substrate, manure, dewatered dredge waste, non-compostable residues, waste materials not identified in Condition 1 above, etc., are not authorized under this general permit.

3. Rejected and other wastes, that are not authorized under this general permit, shall be separated from the incoming waste materials intended for beneficial use in the production of compost material.

X. Storage

1. Incoming materials , active compost, curing materials, and finished compost shall be stored in a manner that prevents harborage or breeding of vectors or creation of odor, litter and other nuisances which may be harmful to public health, safety, welfare, or the environment. Storage shall be in a manner that prevents dispersal of incoming materials or compost by wind or water erosion or prevents a risk of fire or explosion.

2. Storage of incoming yard waste, curing materials, building materials and finished compost shall be consistent with Storage Requirements - Chapter 285 of the municipal waste regulations

XI. Erosion and Sedimentation Controls

1. Surface water management and erosion/sedimentation control shall be provided during all phases of construction and operation of the facility, to meet applicable requirements of 25 Pa. Code, Chapter 102 (relating to erosion control). In addition, a storm water management system shall be designed to meet federal and state storm water regulations and managed accordingly. Surface water controls shall be based on the most significant 24-hour precipitation event to occur based on a once in 25 years frequency. The application must contain an approved County Conservation Erosion and Sedimentation control plan.

XII. Feedstock Requirements

1. The operator shall establish a plan for monitoring at an adequate frequency for inspecting the facility to detect hot spots in any composting, curing or storage areas, dust or litter accumulation, surface water accumulation, erosion or sedimentation, vectors, odors, and other problems. The operator shall take prompt, necessary corrective actions to preclude combustion.

2. The Department may prohibit the use of grass clippings at a yard waste composting facility if the grass clippings cause or contribute to nuisances, or if the site is adversely affecting, or has potential to adversely affect, the citizens or environment of the commonwealth. Grass clippings shall not be brought to or received at a yard waste composting facility unless:

    a. Grass clippings delivered to the yard waste composting facility in non-compostable bulk, bags or other collection containers are emptied of all grass clippings.

    b. Grass clippings are incorporated into the windrows of partially composted leaves or other yard waste within twenty-four (24) hours of delivery to the facility.

c. Grass clippings are incorporated into the partially composted windrows of partially composted leaves or other yard waste at a ration not to exceed one part grass to 3 parts leaves or active compost or other carbon source.

d. Plastic bags are not approved to be accepted for processing, only decomposable or Kraft style paper bags are approved to be accepted for processing.

3. The access road to the facility shall be paved or surfaced with asphalt, gravel, and cinder or equivalent material and be capable of withstanding the load limits. The access road shall be maintained to control dust and to prevent or control the tracking of mud onsite or offsite.

4. Each yard waste composting facility shall be operated in a manner, which results in the active biological decomposition of the yardwaste material received.

XIII. RECORD KEEPING

1. The operator shall maintain records to demonstrate that all compost produced by the facility has achieved the thermophillic stage. Records of the weights or volumes and types of incoming yard waste; finished compost shall be maintained on the premises or at another location with the approval of the Department for at least 5 years. These records shall be made available for inspection by the Department staff upon request. The records shall contain: the date of receipt and quantity of incoming materials processed at the site. In addition the following must also be recorded: composting temperatures, and turning frequencies

2. Persons operating under the provisions of this general permit must submit to the appropriate regional waste program of the Department (address in attached list) a summary of volumes of yard waste received at the facility and of compost generated and distributed annually. The annual report is due on March 1st of each year.

3. A copy of a Preparedness, Prevention and Contingency Plan (PPC), that is consistent with the Department's most recent guidelines, "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" shall be maintained at each composting facility and updated at least every 3 years or sooner if information changes. The permittee shall immediately implement the applicable provisions of the Department approved PPC plan for any emergency that affects or threatens public health, safety, welfare, or the environment.

4. The permittee shall maintain records of rejected, unacceptable and unauthorized wastes that are disposed by the permittee. The records shall include the name and address of the disposal location, date of disposal, type of waste volume or weight of the waste that is disposed.

5. The permittee shall maintain records of volume or weight of the finished compost materials that are generated, sold, given away and stored on site.

XIV. FINISHED COMPOST SPECIFICATIONS

1. The beneficial uses of the compost, as listed in condition 1 above, are contingent upon compliance with this permit and if sold, the *Pennsylvania Fertilizer, Soil Conditioner and Plant Growth Substance law* of the Pennsylvania Department of Agriculture. Information related to this law and the necessary registration, labeling, marketing, and other related requirements can be obtained from the Department of Agriculture by writing to the *Bureau of Plant Industry, Division of Agronomic Services, 230 North Cameron Street, Harrisburg, PA 17110-9408.*

2. The finished compost generated under the terms and conditions of this general permit shall cease to be waste when the compost:

   a. Is used, sold, or distributed as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch for landscaping applications or composting; this provision applies to the finished mulch material or finished compost that is sold, traded, distributed, given away or used for landscaping applications or composting locations other than the processing facility where the material is produced

   b. Does not present a greater harm or threat of harm than the use of products which the compost is replacing; and

   c. Is not abandoned or disposed.

XV. NUISANCE CONTROL

1. The operator shall not cause or allow the attraction, harborage or breeding of vectors

2. The operator shall not cause or allow conditions that are harmful to the environment or public health or which create safety hazards, odors, noise or other public nuisances

SPECIAL CONDITIONS
GENERAL PERMIT WMGM030

DEFINITIONS

"Composting"

The process by which organic solid waste is biologically decomposed under a controlled anaerobic or aerobic to yield a humus-like product.

"Composting Facility"

A facility for processing solid waste by composting.

"Composting Pad"

An area within a composting facility where compost or solid waste is processed, stored, loaded or unloaded.

"General Permit"

Except as provided in Subchapter J (relating to beneficial use of sewage sludge by land application), a regional or Statewide permit issued by the Department for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

"Landowner"

The person or municipality in whom legal title to the surface of the land is vested.

"Leaf Waste"

Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

"Non-Liquid Waste"

Wastes that do not pass the paint filter liquid test (EPA Method 9095) as described in the EPA Publication No. SW-846.

"Permit Area"

The area of land and water within the boundaries of the permit, which is designated on the permit application maps as approved by the Department. The term includes areas which are or will be used or affected by the residual waste processing or disposal facility.

"Source Separated Recyclable Materials"

Materials that are separated from municipal waste at the point of origin for the purpose of recycling. The term is limited to clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper (cardboard), plastics and other marketable grades of paper.

"Source Separated Food Scraps"

Pre-consumer food wastes that are separated from municipal waste at the point of origin for the purpose of recycling and composting.

"Storage"

The containment of waste on a temporary basis in a manner that does not constitute disposal of the waste. It shall be presumed that containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

"Yard Waste"

Leaves, grass clippings, garden residue, tree trimmings, chipped shrubbery and other vegetative material.

Attachment 2

Site Visit Photo Log

Photo 1: Bandit The Beast Model 3680 Horizontal Grinder

Photo 2: Vermeer CT616 Compost Turner

Photo 4: Material Stockpiles

Photo 3: Volvo H061 Wheel Loader & Vermeer Model TR516 Trommel Screen

Photo 5: Windrows

Notes.:

Photos taken by CPS staff during November 12, 2024 site visit.

Project No.:	0489.02
Map *Scale:*	
Drawn by: SJH	*Check by:*
N:\#0489 - SCS Engineers\Lower Paxton Composting	

COMPLIANCE PLUS SERVICES, INC.

COMPLIANCE PLUS SERVICES, INC.
240 GIBRALTAR ROAD
SUITE 100
HORSHAM, PA 19044
PHONE: (215) 734-1414 * FAX: (215) 734-1424
www.complianceplusservices.com

Lower Paxton Compost Facility
Site Visit Photos

Client:	SCS Engineers
Site:	Lower Paxton Compost Facility
Date: 11/25/2024	Attachment: 02

Photo 6: Public Access Area Entrance / Attendant Hut

Photo 7: Public Access Area / Canopied Storage Structure

Photo 8: Public Access Area

Photo 9: Public Access Area Exit / Attendant Hut

Notes.:

Photos taken by CPS staff during November 12, 2024 site visit.

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Lower Paxton Compost Facility
Site Visit Photos

Client:	SCS Engineers		
Site:	Lower Paxton Compost Facility		
Date:	11/25/2024	Attachment:	02

Attachment 3

Compost Facility 2023 & 2024 Annual Report

Lower Paxton Township
Dauphin County, Pennsylvania

Compost Facility 2023 Annual Report

Municipal Waste Permit WMGM 030SC001

March 1, 2024

Lower Paxton Township
Public Works Department
5975 Locust Lane
Harrisburg, PA 17109

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2 Incoming and Outgoing Material in 2023 2

Exhibits

Exhibit

1 2023 Compost Facility Attendant Logs

1.0 INTRODUCTION

The Lower Paxton Township Compost Facility (Compost Facility) is situated on approximately 13.6 acres in Lower Paxton Township on the site of the Township's closed landfill at 6613 Conway Road. The Compost Facility accepts leaf waste including leaves, branches up to 12-inch diameter, garden waste, brush and tree prunings. Residents are permitted to drop off the specified materials at the site on Tuesday, Thursday, and Saturday between the hours of 7:30 am and 5:00 pm. The Compost Facility is staffed by four (4) part-time attendants from April to December. These attendants greet the residents, confirm their permit, and verify that the material to be disposed of meets the specifications. The Lower Paxton Township Public Works Department processes the material at the Compost Facility.

In addition to residents, material is delivered to the Compost Facility by Waste Management and the Lower Paxton Public Works Department. Waste Management currently collects leaf waste at curbside as part of the solid waste and recyclables collection program in Lower Paxton Township. This service includes unlimited materials two times per month, April through November, and one collection in December. Waste Management provides a similar service in West Hanover Township, and the material is accepted at the Compost Facility under the terms of an intermunicipal agreement dated March 15, 1993. Similarly, the Township's Public Works Department provides vacuum leaf collection from late October through December, depending on weather conditions.

Per Condition XIII.2 of Municipal Waste General Permit No. WMGM030, Lower Paxton Township is required to submit an annual report to the Department of Environmental Protection's South Central Regional Office. This annual report shall document the summary of volumes of yard waste received at the facility and a summary of compost generated and distributed annually.

2.0 COMPOST FACILITY PERMITS

Residents and contractors in Lower Paxton Township can purchase an annual or daily pass to the Compost Facility. Table 1 summarizes the documented permit sales during 2023.

Table 1: Number of Permits Sold in 2023

Permit Type	Permits Solid
Residential Annual Permit ($50.00)	587
Residential Day Permit ($15.00)	213
Residential Annual Second Permit ($5.00)	15
Commercial Annual Permit ($690.00)	6
Commercial Day Permit ($75.00)	4
Total	**825**

Permit fees listed in Table 1 have remained constant for several years. Total revenue generated from permit fees and West Hanover Township was $64,322.23 in 2023.

3.0 VOLUME ESTIMATES

Table 2 includes a summary of the material processed through the facility during 2023. These values are approximate based on information recorded by the compost facility attendants. Exhibit 1 includes the daily breakdown of incoming and outgoing material at the Compost Facility during 2023.

Table 2: Incoming and Outgoing Material in 2023

Month	Incoming Material (Cubic Yards)	Outgoing Compost (Cubic Yards)	Outgoing Mulch (Cubic Yards)
April	1,788.50	313.10	37.00
May	1,554.75	123.50	45.75
June	1,685.25	83.00	30.00
July	1,438.75	73.75	15.00
August	1,803.50	33.75	11.00
September	1,199.00	30.75	12.20
October	1,472.80	41.50	6.00
November	2,318.25	27.75	5.50
December	376.00	3.50	1.50
Total	**13,636.75**	**730.60**	**163.95**

4.0 2023 OPERATION

The day-to-day operation remain relatively unchanged in 2023, although there was a continued focus placed on working with landscapers to reduce the amount of material stockpiled on the site. As evident in Table 2, the mulch material produced at the Compost Facility is not a desirable product as it is offered to residents at no cost, but not many residents take advantage. During 2023, the Township worked with AH Reiff Landscape Supply and Zeager Brothers Inc. to remove this single cut mulch from the site so that it can be processed further at their facilities and mixed in with their products. The landscapers bring their own equipment to the site to load and transport the material, and the Township does not pay for these services. The older material is offered to the landscapers free of charge to reduce the stockpiles.

5.0 2024 INITIATIVES

The Public Works Department reorganized in 2023, with the existing Forman position reassigned to a Public Facilities Division Manager, who is responsible for the day-to-day operations of the Compost Facility, among other items. The Township budgeted funds to have the Public Facilities Division Manager attend the Compost Research and Education Compost Facility Operations training in 2024. To date, the 2024 training sessions offered are in California and Colorado and would be cost prohibitive due to the airfare. The Public Facilities Division Manager will attend training on the east coast if one is offered in 2024.

In December 2023, Zeager Brothers Inc. notified the Township that it will no longer remove single cut mulch from the site free of charge. The Township is currently exploring ways to balance the site so that material stockpiles do not accumulate. Zeager Brothers was removing a significant amount of single cut material and it will be difficult to find a replacement for this service.

EXHIBIT 1

2023 Compost Facility Attendant Logs

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2023

Drop-off/Pick-up Volume in Cubic Yards

MONTH	DATE	TOTAL # OF RESIDENTS	# OF RESIDENT DROP-OFFS	APPROXIMATE DROP-OFF VOLUME (CY)	# 0F RESIDENT PICK-UPS	VOLUME OF COMPOST TAKEN (CY)	VOLUME OF MULCH TAKEN (CY)	VOLUME OF WOOD CHIPS (CY)
APRIL	**4**	110.00	101.00	270.00	17.00	14.00	3.00	0.00
	6	57.00	45.00	125.00	16.00	15.50	2.00	0.00
	8	98.00	80.00	155.50	24.00	9.75	1.75	0.00
	11	104.00	80.00	259.00	26.00	16.00	1.50	1.00
	13	99.00	74.00	138.25	36.00	33.25	6.25	0.00
	15	96.00	60.00	114.00	38.00	150.50	5.00	0.00
	18	50.00	34.00	151.00	17.00	14.50	3.50	0.00
	20	85.00	65.00	239.75	28.00	22.25	7.00	0.00
	22	75.00	58.00	122.25	22.00	15.10	3.25	0.00
	25	55.00	41.00	110.75	19.00	9.00	1.50	1.00
	27	35.00	26.00	49.50	15.00	10.75	1.75	0.00
	29	31.00	28.00	53.50	4.00	2.50	0.50	0.00
TOTAL		**895.00**	**692.00**	**1,788.50**	**262.00**	**313.10**	**37.00**	**2.00**
MAY	**2**	31.00	25.00	67.50	10.00	5.00	0.50	1.00
	4	38.00	32.00	87.50	9.00	2.00	3.00	0.50
	6	99.00	81.00	141.50	30.00	14.00	8.00	1.50
	9	61.00	50.00	119.50	14.00	9.75	1.25	0.00
	11	63.00	52.00	106.25	16.00	12.75	1.50	0.00
	13	53.00	48.00	86.25	6.00	5.00	5.00	0.00
	16	65.00	46.00	211.00	25.00	7.00	6.50	1.50
	18	75.00	48.00	133.50	24.00	13.00	4.00	1.00
	20	80.00	44.00	154.50	17.00	7.50	2.50	0.50
	23	62.00	46.00	91.25	25.00	10.50	7.00	1.00
	25	54.00	44.00	70.50	17.00	10.50	3.00	0.00
	27	116.00	98.00	149.50	25.00	19.50	3.50	0.50
	30	51.00	43.00	136.00	13.00	7.00	0.00	0.00
TOTAL		**848.00**	**657.00**	**1,554.75**	**231.00**	**123.50**	**45.75**	**7.50**
JUNE	**1**	54.00	35.00	159.50	23.00	10.00	1.00	1.00
	3	85.00	56.00	101.50	39.00	13.50	7.50	2.50
	6	107.00	87.00	211.50	19.00	4.00	1.00	1.50
	8	60.00	48.00	83.50	15.00	11.50	1.00	0.00
	10	94.00	76.00	169.50	26.00	12.00	3.50	0.00
	13	41.00	32.00	100.50	16.00	4.50	2.00	0.50
	15	70.00	60.00	155.00	14.00	6.50	0.50	0.50
	17	79.00	70.00	117.50	13.00	9.00	3.50	0.00
	20	68.00	59.00	231.00	11.00	4.00	0.50	1.00
	22	24.00	24.00	61.00	0.00	0.00	0.00	0.00
	24	50.00	38.00	81.50	16.00	5.50	6.50	0.00
	27	39.00	37.00	98.25	26.00	1.00	0.00	0.00
	29	57.00	53.00	115.00	6.00	1.50	3.00	0.00
TOTAL		**828.00**	**675.00**	**1,685.25**	**224.00**	**83.00**	**30.00**	**7.00**

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2023

Drop-off/Pick-up Volume in Cubic Yards

JULY	**1**	81.00	69.00	98.75	17.00	15.00	3.50	0.00
CLOSED	**4**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	40.00	35.00	78.00	9.00	14.50	1.50	0.00
	8	65.00	60.00	137.00	8.00	4.50	0.50	0.00
	11	60.00	56.00	141.50	7.00	3.00	0.50	0.00
	13	41.00	35.00	108.25	9.00	7.00	0.00	0.50
	15	62.00	53.00	89.00	12.00	7.00	0.50	0.00
	18	55.00	52.00	124.50	9.00	4.50	0.00	0.50
	20	42.00	37.00	91.00	7.00	4.50	2.00	0.00
	22	86.00	78.00	161.00	14.00	4.50	3.00	1.00
	25	39.00	36.00	119.00	4.00	1.25	1.50	0.00
	27	54.00	49.00	205.50	8.00	3.50	1.00	0.00
	29	53.00	50.00	85.25	4.00	4.50	1.00	0.00
TOTAL		**678.00**	**610.00**	**1,438.75**	**108.00**	**73.75**	**15.00**	**2.00**
AUGUST	**1**	81.00	73.00	167.00	9.00	4.00	0.50	0.00
	3	64.00	52.00	110.50	14.00	6.50	2.00	0.00
	5	99.00	95.00	198.00	10.00	2.00	3.00	1.00
	8	58.00	58.00	159.00	1.00	0.50	0.00	0.00
	10	28.00	27.00	80.00	1.00	0.00	0.00	0.50
	12	52.00	51.00	75.50	3.00	2.50	1.00	0.00
	15	65.00	57.00	218.50	8.00	3.50	0.50	0.00
	17	31.00	31.00	74.25	0.00	0.00	0.00	0.00
	19	91.00	90.00	193.50	7.00	4.00	1.50	0.00
	22	46.00	44.00	187.00	3.00	2.50	0.00	0.00
	24	30.00	28.00	74.00	2.00	0.50	0.50	0.00
	26	50.00	48.00	79.75	4.00	5.00	0.50	0.00
	29	30.00	29.00	115.50	1.00	0.50	0.00	0.00
	31	33.00	32.00	71.00	5.00	2.25	1.50	0.00
TOTAL		**758.00**	**715.00**	**1,803.50**	**68.00**	**33.75**	**11.00**	**1.50**
SEPTEMBER	**2**	68.00	63.00	131.00	7.00	1.50	2.00	0.00
	5	30.00	29.00	95.00	1.00	0.00	0.00	0.50
	7	22.00	20.00	97.50	3.00	1.00	0.50	0.00
	9	49.00	48.00	95.50	2.00	0.75	0.00	0.00
	12	49.00	46.00	106.00	7.00	1.00	2.50	0.50
	14	94.00	88.00	76.50	6.00	5.00	0.00	0.00
	16	73.00	70.00	130.00	3.00	1.25	0.50	0.00
	19	34.00	32.00	83.50	8.00	2.50	1.20	0.00
	21	57.00	48.00	156.50	8.00	1.50	3.50	0.50
	23	12.00	12.00	0.00	0.00	0.00	0.00	0.00
	26	20.00	20.00	58.50	1.00	0.00	0.50	0.00
	28	41.00	36.00	66.50	10.00	8.25	0.50	0.00
	30	64.00	54.00	102.50	12.00	8.00	1.00	0.00
TOTAL		**613.00**	**566.00**	**1,199.00**	**68.00**	**30.75**	**12.20**	**1.50**

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2023

Drop-off/Pick-up Volume in Cubic Yards

OCTOBER	**3**	57	52	127.5	8	4.0	0.0	0.50
	5	45	44	70.3	5	4.5	1.0	0.00
	7	26	25	40.5	2	0.5	0.0	1.50
	10	64	59	155.5	5	3.5	0.0	0.00
	12	62	54	173.5	9	7.5	0.0	0.00
	14	18	65	65.0	0	0.0	0.0	0.00
	17	50	46	134.5	4	2.0	0.0	0.00
	19	33	29	76.5	5	1.5	1.5	0.00
	21	55	51	87.5	6	3.5	1.5	0.00
	24	47	45	145.0	5	3.5	1.0	0.00
	26	53	51	102.0	7	3.5	1.0	0.00
	28	98	88	192.0	13	7.5	0.0	0.00
	31	49	49	103.0	0	0.0	0.0	0.00
TOTAL		**657.00**	**658.00**	**1472.75**	**69.00**	**41.50**	**6.00**	**2.00**
NOVEMBER	**2**	50.00	50.00	213.50	1.00	1.50	0.00	0.00
	4	105.00	105.00	180.00	4.00	2.50	0.00	0.50
	7	77.00	75.00	220.50	5.00	2.50	1.00	0.50
	9	64.00	63.00	154.50	3.00	1.50	2.00	0.00
	11	67.00	66.00	122.50	2.00	0.50	0.50	0.00
	14	64.00	64.00	252.00	1.00	0.50	0.00	0.00
	16	68.00	66.00	337.00	3.00	3.00	0.00	0.00
	18	92.00	86.00	140.25	10.00	12.25	1.00	0.00
	21	28.00	27.00	99.00	1.00	0.50	0.00	0.00
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	25	78.00	76.00	185.50	2.00	0.50	0.50	0.00
	28	33.00	33.00	130.50	2.00	1.00	0.00	0.00
	30	59.00	56.00	283.00	4.00	1.50	0.50	0.00
TOTAL		**785.00**	**767.00**	**2,318.25**	**38.00**	**27.75**	**5.50**	**1.00**
DECEMBER	**2**	51.00	50.00	106.50	4.00	1.00	1.00	0.00
	5	29.00	28.00	87.00	2.00	0.50	0.50	0.00
	7	26.00	26.00	111.00	0.00	0.00	0.00	0.00
	9	44.00	44.00	71.50	2.00	2.00	0.00	0.00
TOTAL		**150.00**	**148.00**	**376.00**	**8.00**	**3.50**	**1.50**	**0.00**
GRAND TOTAL		**6,212.00**	**5,488.00**	**13,636.75**	**1,076.00**	**730.60**	**163.95**	**24.50**

Lower Paxton Township
Dauphin County, Pennsylvania

Compost Facility 2024 Annual Report

Municipal Waste Permit WMGM 030SC001

February 27, 2025

Lower Paxton Township
Public Works Department
5975 Locust Lane
Harrisburg, PA 17109

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Exhibit

1 2024 Compost Facility Attendant Logs

1.0 INTRODUCTION

The Lower Paxton Township Compost Facility (Compost Facility) is situated on approximately 13.6 acres in Lower Paxton Township on the site of the Township's closed landfill at 6613 Conway Road. The Compost Facility accepts leaf waste including leaves, branches up to 12-inch diameter, garden waste, brush and tree prunings. Residents are permitted to drop off the specified materials at the site on Tuesday, Thursday, and Saturday between the hours of 7:30 am and 5:00 pm. The Compost Facility is staffed by four (4) part-time attendants from April to December. These attendants greet the residents, confirm their permit, and verify that the material to be disposed of meets the specifications. The Lower Paxton Township Public Works Department processes the material at the Compost Facility.

In addition to residents, material is delivered to the Compost Facility by Penn Waste, Republic Services and the Lower Paxton Public Works Department. Penn Waste currently collects leaf waste at curbside as part of the solid waste and recyclables collection program in Lower Paxton Township. This service includes unlimited materials two times per month, April through November, and one collection in December. Republic Services provides a similar service in West Hanover Township, and the material is accepted at the Compost Facility under the terms of an intermunicipal agreement dated March 15, 1993. Similarly, the Township's Public Works Department provides vacuum leaf collection from late October through December, depending on weather conditions.

Per Condition XIII.2 of Municipal Waste General Permit No. WMGM030, Lower Paxton Township is required to submit an annual report to the Department of Environmental Protection's South Central Regional Office. This annual report shall document the summary of volumes of yard waste received at the facility and a summary of compost generated and distributed annually.

2.0 COMPOST FACILITY PERMITS

Residents and contractors in Lower Paxton Township can purchase an annual or daily pass to the Compost Facility. Table 1 summarizes the documented permit sales during 2024.

Table 1: Number of Permits Sold in 2024

Permit Type	Permits Solid
Residential Annual Permit-Resident ($50.00)	566
Residential Annual Permit- Non-Resident ($75)	8
Residential Day Permit ($15.00)	252
Residential Annual Second Permit ($5.00)	16
Commercial Annual Permit ($690.00)	8
Commercial Day Permit ($200)	1
Total	**851**

Permit fees listed in Table 1 have remained constant for several years. Total revenue generated from permit fees and West Hanover Township was $65,673.20 in 2024.

3.0 VOLUME ESTIMATES

Table 2 includes a summary of the material processed through the facility during 2024. These values are approximate based on information recorded by the compost facility attendants. Exhibit 1 includes the daily breakdown of incoming and outgoing material at the Compost Facility during 2024.

Table 2: Incoming and Outgoing Material in 2024

Month	Incoming Material (Cubic Yards)	Outgoing Compost (Cubic Yards)	Outgoing Mulch (Cubic Yards)
April	2,535.00	182.70	13.50
May	1,542.50	156.60	29.70
June	2,187.95	78.00	34.60
July	1,466.00	38.50	22.00
August	1,563.25	51.20	14.00
September	1,211.75	52.50	16.00
October	1,719.75	26.00	11.75
November	1,773.75	44.50	14.75
December	407.75	4.50	2.50
Total	**14.407.70**	**634.50**	**158.80**

The estimate in Table 2 includes yard waste loads brought to the facility by waste haulers for Lower Paxton Township and West Hanover Township while the facility was open. According to the annual recycling report submitted by Penn Waste, a total of 721.80 tons of yard waste material was hauled to the Compost Facility in 2024.

4.0 2024 OPERATION

Day-to-day operations remained largely unchanged in 2024, though efforts continued to focus on collaborating with landscapers to reduce the volume of material stockpiled on-site. As shown in Table 2, the mulch produced at the Compost Facility is not in high demand, despite being offered to residents free of charge. To address this, staff began screening older stockpiles to separate decomposed material from woody waste. The decomposed material, resembling topsoil, is now available to residents and contractors alongside leaf waste compost. The separated woody waste is being dried and reintroduced into the composting process.

In September 2024, the Public Facilities Division Manager attended the Compost Research and Education Facility Operations training in North Carolina. This valuable experience provided practical insights that will be implemented at the facility in 2025.

Additionally, the Township secured a DEP Technical Assistance Grant for a Compost Facility Evaluation (CF Evaluation) in 2024. Conducted by Compliance Plus Services, Inc., the evaluation, currently being finalized, focuses on potential operational improvements, automation and security upgrades, and the construction of berms to create a buffer between the facility and nearby residential areas.

5.0 2025 INITIATIVES

The Township continues to search for a large contractor to haul single cut woody waste material from the site so that stockpiles do not accumulate. In addition to continuing to search for a contractor partnership for this service, the Township will attempt to promote the compost facility through its new community gardens initiative in 2025. In a cooperative effort with the Central Dauphin School District, the Township was able to obtain approval to use a 1-acre

portion of the property located at the EH Phillips Elementary School to develop a community garden center. We are hopeful this increased community engagement will result in increased facility utilization which could help with material balance at the site.

The Township budgeted for the purchase of a drone with a LiDAR camera in 2025. Among many uses for this drone, we anticipate using it for volumetric calculations at the site to improve the accuracy of our reported data. We would use the drone to scan the site periodically and compare the volumetric calculations with the data reported by the attendants. However, in late 2024 we were alerted that United States Customs held up delivery of the particular model we included in the budget, and it is uncertain if we will be able to acquire the drone in 2025. Regardless, the Township continues to evaluate methods to improve the level of accuracy with our volume reported each year in this report.

Once the CF Evaluation is finalized, the Township will begin implementation of recommendations as appropriate. There are several operational recommendations that we will begin implementation of immediately in 2025, which include:

1.) Institute an improved recordkeeping plan to track the various measurable parameters and operational process. We will incorporate this into the Township's existing GIS system, which will catalog the data for future reference.
2.) Develop a regular material testing plan to include percent solids, organic matter, soluble salts, and carbon: nitrogen ratio. This testing data will help determine the best uses for the compost, determine the need for additives/modifications, and help build gardener confidence in the product.
3.) Measure and track compositing conditions to create more optimal composting conditions. As part of this, we will evaluate mixing some of the woody waste in with leaf compost.

The CF Evaluation also identified long-range improvements at the facility which will be considered.

EXHIBIT 1

2024 Compost Facility Attendant Logs

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2024

Drop-off/Pick-up Volume in Cubic Yards

MONTH	DATE	TOTAL # OF RESIDENTS	# OF RESIDENT DROP-OFFS	APPROXIMATE DROP-OFF VOLUME (CY)	# 0F RESIDENT PICK-UPS	VOLUME OF COMPOST TAKEN (CY)	VOLUME OF MULCH TAKEN (CY)
APRIL	**2**	30.00	30.00	89.50	1.00	0.20	0.00
	4	66.00	61.00	185.50	6.00	3.50	0.00
	6	147.00	146.00	305.50	8.00	4.50	1.00
	9	142.00	127.00	302.00	34.00	32.50	0.50
	11	59.00	53.00	120.00	15.00	8.00	0.00
	13	125.00	115.00	243.50	23.00	11.50	2.50
	16	91.00	86.00	294.50	16.00	26.00	0.00
	18	43.00	38.00	75.50	8.00	9.50	0.00
	20	134.00	115.00	243.00	33.00	27.50	1.00
	23	75.00	69.00	168.00	19.00	10.00	1.00
	25	51.00	47.00	184.00	11.00	6.00	1.00
	27	111.00	93.00	167.50	48.00	34.00	4.00
	30	65.00	63.00	156.50	19.00	9.50	2.50
TOTAL		**1,139.00**	**1,043.00**	**2,535.00**	**241.00**	**182.70**	**13.50**
MAY	**2**	65.00	47.00	112.75	25.00	24.00	2.50
	4	54.00	125.50	15.00	13.00	15.00	1.00
	7	52.00	43.00	146.50	29.00	14.50	3.20
	9	45.00	32.00	90.25	16.00	17.00	0.00
	11	48.00	47.00	96.25	8.00	3.00	3.00
	14	50.00	41.00	103.75	15.00	10.10	0.50
	16	49.00	38.00	88.50	18.00	12.50	3.50
	18	65.00	65.00	72.00	4.00	3.00	0.00
	21	63.00	56.00	175.50	20.00	11.00	4.50
	23	43.00	41.00	102.00	13.00	5.00	1.00
	25	104.00	95.00	254.50	23.00	17.00	1.50
	28	68.00	61.00	169.00	18.00	9.50	1.50
	30	76.00	59.00	116.50	24.00	15.00	7.50
TOTAL		**782.00**	**750.50**	**1,542.50**	**226.00**	**156.60**	**29.70**
JUNE	**1**	128.00	125.00	287.50	22.00	6.50	3.50
	4	67.00	65.00	164.00	6.00	1.50	2.50
	6	31.00	31.00	98.50	2.00	1.50	0.50
	8	111.00	102.00	225.00	32.00	18.50	5.00
	11	72.00	65.00	188.50	21.00	8.00	3.00
	13	69.00	54.00	141.50	19.00	2.00	2.50
	15	79.00	76.00	168.00	22.00	14.00	5.60
	18	42.00	40.00	121.95	5.00	5.00	2.00
	20	32.00	30.00	115.50	7.00	4.00	1.00
	22	48.00	43.00	91.50	6.00	3.50	1.00
	25	50.00	50.00	238.00	5.00	1.50	1.50
	27	31.00	28.00	121.50	5.00	4.00	2.50
	29	85.00	80.00	226.50	16.00	8.00	4.00

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2024

Drop-off/Pick-up Volume in Cubic Yards

MONTH	DATE	TOTAL # OF RESIDENTS	# OF RESIDENT DROP-OFFS	APPROXIMATE DROP-OFF VOLUME (CY)	# 0F RESIDENT PICK-UPS	VOLUME OF COMPOST TAKEN (CY)	VOLUME OF MULCH TAKEN (CY)
TOTAL		**845.00**	**789.00**	**2,187.95**	**168.00**	**78.00**	**34.60**
JULY	**2**	65.00	64.00	211.50	8.00	3.00	1.50
CLOSED	**4**	0.00	0.00	0.00	0.00	0.00	0.00
	6	58.00	58.00	155.50	8.00	1.00	2.50
	9	23.00	19.00	92.50	6.00	1.00	1.00
	11	36.00	33.00	94.00	10.00	9.00	0.50
	13	63.00	56.00	108.00	12.00	8.00	2.50
	16	24.00	19.00	66.00	6.00	3.50	2.50
	18	36.00	35.00	219.50	3.00	0.25	0.50
	20	71.00	67.00	101.00	7.00	3.75	3.00
	23	50.00	50.00	102.00	4.00	0.00	2.00
	25	29.00	27.00	76.75	4.00	1.50	2.00
	27	60.00	60.00	110.75	13.00	5.00	3.00
	30	38.00	35.00	128.50	5.00	2.50	1.00
TOTAL		**553.00**	**523.00**	**1,466.00**	**86.00**	**38.50**	**22.00**
AUGUST	**1**	32.00	24.00	49.00	8.00	6.00	0.00
	3	62.00	61.00	147.00	6.00	2.00	1.50
	6	38.00	35.00	89.25	4.00	4.00	0.00
	8	12.00	11.00	13.00	1.00	2.00	0.00
	10	68.00	67.00	153.75	3.00	3.00	0.00
	13	49.00	49.00	136.50	3.00	0.50	1.00
	15	44.00	39.00	121.25	8.00	3.00	1.50
	17	48.00	47.00	142.50	9.00	3.20	1.50
	20	38.00	37.00	114.50	5.00	3.00	1.50
	22	35.00	33.00	75.25	2.00	1.50	0.00
	24	59.00	53.00	105.75	8.00	2.00	3.50
	27	51.00	48.00	188.50	9.00	3.50	3.00
	29	34.00	30.00	37.50	7.00	6.50	0.00
	31	54.00	51.00	189.50	16.00	11.00	0.50
TOTAL		**624.00**	**585.00**	**1,563.25**	**89.00**	**51.20**	**14.00**
SEPTEMBER	**3**	41.00	41.00	111.50	4.00	0.50	1.00
	5	38.00	37.00	124.00	11.00	3.50	2.00
	7	36.00	29.00	66.50	10.00	4.50	4.50
	10	53.00	51.00	155.50	11.00	3.00	1.00
	12	47.00	40.00	102.50	12.00	13.00	0.50
	14	58.00	51.00	129.00	18.00	8.00	2.50
	17	48.00	39.00	155.75	11.00	10.00	2.50
	19	27.00	27.00	61.00	8.00	3.50	0.50
	21	56.00	54.00	146.00	16.00	5.50	1.00
	24	24.00	23.00	87.50	3.00	1.00	0.50

LOWER PAXTON TOWNSHIP COMPOST FACILITY LOG 2024
Drop-off/Pick-up Volume in Cubic Yards

MONTH	DATE	TOTAL # OF RESIDENTS	# OF RESIDENT DROP-OFFS	APPROXIMATE DROP-OFF VOLUME (CY)	# 0F RESIDENT PICK-UPS	VOLUME OF COMPOST TAKEN (CY)	VOLUME OF MULCH TAKEN (CY)
	26	7.00	7.00	19.00	0.00	0.00	0.00
	28	18.00	18.00	53.50	0.00	0.00	0.00
TOTAL		**453.00**	**417.00**	**1,211.75**	**104.00**	**52.50**	**16.00**
OCTOBER	1	11	11	36.0	2.00	1.0	0.0
	3	22	22	100.0	0.00	0.0	0.0
	5	55	53	111.5	4	1.5	2.5
	8	45	45	99.0	4	0.5	2.0
	10	30	28	46.3	4	1.5	2.0
	12	48	47	104.0	6	2.8	1.5
	15	29	29	101.0	0	0.0	0.0
	17	41	41	188.0	4	1.0	0.5
	19	67	67	174.5	5	3.5	1.0
	22	56	56	141.5	10	4.5	0.0
	24	54	50	220.5	10	4.0	1.5
	26	68	61	52.0	8	2.3	0.8
	29	47	45	262.5	2	1.0	0.0
	31	38	36	83.0	2	2.5	0.0
TOTAL		**611.00**	**591.00**	**1719.75**	**61.00**	**26.00**	**11.75**
NOVEMBER	2	68.00	67.00	136.00	2.00	1.00	0.00
	5	51.00	49.00	164.00	4.00	1.50	0.50
	7	33.00	32.00	82.00	3.00	2.00	0.00
	9	113.00	105.00	270.00	9.00	4.50	1.00
	12	48.00	42.00	112.00	9.00	7.50	0.50
	14	42.00	38.00	238.00	7.00		3.50
	16	72.00	68.00	147.00	11.00	4.50	2.50
	19	63.00	58.00	188.50	10.00	7.00	3.00
	21	34.00	32.00	57.50	4.00	3.50	2.00
	23	32.00	32.00	70.25	2.00	1.50	0.00
	26	38.00	34.00	195.00	7.00	5.50	0.75
CLOSED	28	0.00	0.00	0.00	0.00	0.00	0.00
	30	55.00	50.00	113.50	9.00	6.00	1.00
TOTAL		**649.00**	**607.00**	**1,773.75**	**77.00**	**44.50**	**14.75**
DECEMBER	3	45.00	39.00	114.00	5.00	4.00	2.00
	5	9.00	9.00	27.50	0.00	0.00	0.00
	7	27.00	25.00	56.00	2.00	0.50	0.50
	10	25.00	25.00	79.00	0.00	0.00	0.00
	12	18.00	18.00	86.00	0.00	0.00	0.00
	14	31.00	31.00	45.25	1.00	0.00	0.00
TOTAL		**155.00**	**147.00**	**407.75**	**8.00**	**4.50**	**2.50**
GRAND TOTAL		**5,811.00**	**5,452.50**	**14,407.70**	**1,060.00**	**634.50**	**158.80**

Attachment 4

General Permit WMGM017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTE MANAGEMENT

DIVISION of MUNICIPAL and RESIDUAL WASTE

GENERAL PERMIT WMGM017

SOURCE SEPARATED COMPOSTING

Issued: September 20, 2022

Expires: September 20, 2032

A. Description:

1. This general permit authorizes the composting**,** vermicomposting and hermetiacomposting of wastes identified in this section and beneficial use of the processed compost, vermicompost and hermetiacompost produced per the terms and conditions of this permit.

2. The waste streams accepted for on-farm composting shall be non-liquid waste[1] and limited to the following categories of wastes: manure, yard waste, source separated food waste from food markets, grocery stores, restaurants, food banks, food distribution centers, recreation centers, community centers, libraries, meal sites, residential households and municipal, school cafeterias and institutions, source-separated newspaper, and source-separated corrugated paper (cardboard).

3. The waste streams accepted for non-farm, small scale composting facilities shall be non-liquid waste as defined in Section B (relating to definitions) and limited to the following categories of wastes: yard waste, and source separated pre- and post-consumer food waste.

4. The waste(s) accepted for composting may not be mixed with other garbage or wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste, as the terms are defined in 25 Pa. Code § 271.1. The beneficial uses of finished compost, vermicompost and hermetiacompost approved in this permit are for the marketing or distribution as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch.

B. Definitions:

The following terms, when used in this permit, have the following meanings:

Composting – The process by which organic solid waste is biologically decomposed under a controlled anaerobic or aerobic environment to yield a humus-like product.

Composting Facility – A facility for processing solid waste by composting.

Composting Pad – An area within a composting facility where compost or solid waste is processed, stored, loaded, or unloaded.

Curing – The final stage of the composting process in which stabilization of the compost continues but the rate of decomposition has slowed to a point where turning or forced aeration is no longer necessary.

Frass – Debris or excrement produced by insect larvae.

General Permit – Except as provided in Subchapter J (relating to beneficial use of sewage sludge by land application), a regional or Statewide permit issued by the Department of Environmental Protection (DEP) for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability or registration, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

Hermetiacomposting – Composting by using larvae of the black soldier fly, *Hermetia illucens*, to convert organic material into a humus-like product.

Hermetiacomposting Facility – A facility for processing solid waste by hermetiacomposting.

Institutional establishment – An establishment engaged in service, including, but not limited to, hospitals, nursing homes, orphanages, schools, and universities.

Landowner – The person or municipality in whom legal title to the surface of the land is vested.

Leaf Waste – Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Manure – Waste that is produced by animals on a farm.

Non-Liquid Waste – Wastes that do not contain free liquids, as determined using the paint filter liquid test (EPA Method 9095) as described in the EPA Publication No. SW-846.

Normal Farming Operations – The customary and generally accepted activities, practices and procedures that farms adopt, use or engage in year after year in the production and preparation for market of poultry, livestock and their products; and in the production, harvesting and preparation for market of agricultural, agronomic, horticultural, silvicultural and aquacultural crops and commodities, if the operations are conducted in compliance with applicable laws, and if the use or disposal of these materials will not pollute the air, water or other natural resources of this Commonwealth. The term includes the storage and utilization of agricultural and food processing wastes, screenings, and sludges on land where the materials will improve the condition of soil, the growth of crops or in the restoration of the land for the same purposes.

Permit Area – The area of land and water within the boundaries of the permit which is designated on the permit application maps as approved by DEP. The term includes areas which are or will be used or affected by the waste processing or disposal facility.

Small-scale Composting Facilities – Non-farm composting facilities that are no larger than two (2) acres in size.

Source Separated Recyclable Materials – Materials that are separated from municipal waste at the point of origin for the purpose of recycling. The term is limited to clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper (cardboard), plastics and other marketable grades of paper.

Source Separated Food Scraps – Pre and postconsumer food wastes that are separated from municipal waste at the point of origin for the purpose of recycling and composting.

Storage – The containment of waste and derivatives on a temporary basis in a manner that does not constitute disposal of the waste. It shall be presumed that containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

Vermicomposting – Composting by using *Eisenia fetida* or other approved worm to convert organic material into a humus-like product

Vermicomposting Facility – A facility for processing solid waste by vermicomposting.

Yard Waste – Leaves, grass clippings, garden residue, tree trimmings, chipped shrubbery, and other vegetative material.

Yard Waste Composting Facility – A facility that is used to compost leaf waste, or leaf waste and grass clippings, garden residue, tree trimmings, chipped shrubbery, and other vegetative material. The term includes land affected during the lifetime of the operation, including, but not limited to, areas where compost actually occurs, support facilities, borrow areas, offices, access roads, associated onsite or contiguous collection and transportation activities, and other activities in which the annual surface has been disturbed as a result of or incidental to operation of the facility.

C. Application Requirements:

1. Application Requirements for On-Farm Source Separated Composting, Vermicomposting or Hermetiacomposting Operations:

A person or municipality that proposes to compost**,** vermicompost or hermetiacompost under the terms and conditions of this general permit after the date of permit issuance must obtain a “Determination of Applicability” (“DOA”) from the appropriate DEP Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed application on forms provided by DEP along with the

application fee for a DOA must be submitted to the appropriate DEP Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by DEP.

2. Application Requirements for Non-Farm, Small Scale Composting Operations, Vermicomposting or Hermetiacomposting Operations:

A person or municipality that proposes to operate a small-scale composting facility under the terms and conditions of this general permit after the date of permit issuance must obtain a registration from the appropriate Department Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed application on forms provided by the Department along with the application fee for a Registration must be submitted to the appropriate Department Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by the Department.

D. Operating Conditions for All Permittees:

1. The compost, vermicompost or hermetiacompost facility (which shall include all raw material and waste storage areas, the processing, composting and curing areas, and the finished material storage areas) shall be operated in a manner which results in the active biological decomposition or consumption of the organic materials received.

2. Approval to operate under this general permit is limited to facilities which meet all three of the following criteria:

   a. Does not exceed five (5) acres for on-farm composting, or two (2) acres for non-farm, small scale composting.

   b. Does not store more than 500 tons or 1,000 cubic yards per year of source separated food scraps.

   c. Does not store more than 3,000 cubic yards per acre of total materials at any one time.

3. Incoming food waste must be incorporated into the composting process, such as in windrows, aerated static piles, or in vessels, including worm or larvae feeding vessels, within 24 hours of receipt of the food waste at the facility. Incorporation of all other materials must occur within one week of receipt, unless otherwise approved by DEP in the approved plans provided as part of the application.

4. This permit requires the use of windrows, aerated static piles, or in-vessel methods for composting. The temperature of the compost during the composting phase of the operation shall be maintained at a minimum of 55 degree Celsius (131°F) or greater for at least 15 days for the windrow method and for at least 72 consecutive hours for the static aerated pile or in-vessel method. For the windrow method, turning shall be

consistent with currently accepted science-based composting technology. In addition, the compost shall be cured for a minimum of 30 days.

5. Putrescible waste, other than manure, must be stored in closed, leak-proof containers. Putrescible waste may not be held in closed containers for more than 24 hours prior to being incorporated into the composting, vermicompost or hermetiacompost process. In addition, non-putrescible waste and compost may not be stored for more than one (1) year at the permitted facility unless authorized by the DEP in writing. Manure must be stored in accordance with DEP's "Manure Management Manual".

6. The composting area shall be constructed in a well-drained area with a workable surface and slope of 2-4 percent to prevent ponding and control surface water. All storm water runoff should be diverted away from the composting area. The working surface should be firm, uniformly graded, and dry. Compost pad options include:

   a. A compacted mixture of select granular material with adequate fine-grained particles to bind it together and reduce permeability,

   b. Using lime stabilized soil blends, and

   c. Paving with concrete, asphalt or geosynthetics.

7. Adequate space shall be maintained between windrows and at the site to allow the un-obstructed movement of emergency personnel and equipment.

8. Use of food processing sludge, spent mushroom substrate and materials other than the wastes specified in Section A. (Description) of this general permit are prohibited.

9. The finished compost, vermicompost or hermetiacompost produced under the terms and conditions of this general permit shall cease to be a waste when the compost, vermicompost or hermetiacompost:

   a. Is used, sold, or distributed as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch;

   b. Does not present a greater harm or threat of harm than the use of wastes which the compost, vermicompost and hermetiacompost is replacing; and

   c. Is not abandoned or disposed.

10. Unless authorized by DEP in writing, the maximum amount of the finished compost material shall not be stored for more than one (1) year.

11. Non-compostable materials, prohibited materials or wastes otherwise rejected by the receiving facility shall be segregated from the acceptable incoming wastes and shall be managed properly at a permitted disposal facility or recycled with sufficient frequency to prevent a nuisance.

12. An operational plan must be developed and implemented at the facility. The operational plan must include the following information:

    a. A general site plan which contains the following information:

        i. Access road,

        ii. Tipping area,

        iii. Surface water and storm water controls for all compost related areas located outdoors,

        iv. Water tank or water source location and size.

    b. An operational narrative that includes the operational hours for receiving waste.

    c. The volume of waste processed during the previous year or expected to be processed during the first year of operation.

    d. A detailed description of the compost, vermicompost or hermetiacompost system(s).

13. The operator of the facility shall not cause or allow conditions that are harmful to the environment or public health, or which create safety hazards, odors, noise, or other public nuisances cause or allow the attraction, harborage, or breeding of vectors.

14. Areas at the permitted facility where incoming materials or waste and finished compost materials are stored, processed, composted, or cured shall not be located:

    a. In the 100-year floodplain of waters of this Commonwealth;

    b. In, or within 300 feet of, an exceptional value wetland;

    c. In, or within 100 feet of, a wetland other than an exceptional value wetland;

    d. Within 100 feet of a sinkhole or area draining into a sinkhole;

    e. Within 300 feet measured horizontally from an occupied dwelling unless the owner has provided a written waiver consenting to the facility being closer than 300 feet;

    f. Within 50 feet of a property line unless the owner has provided a written waiver consenting to the facility being closer than 50 feet;

    g. Within 100 feet of a perennial stream;

    h. Within 300 feet of a water source unless the owner has provided a written waiver consenting to the facility being closer than 300 feet.

    i. Within 3.3 feet of a perched, seasonal, or regional ground water table.

Waivers to required setbacks may be approved by DEP, in writing, if the storage and processing activities occur within an enclosed building and there is adequate protection from operational activities that may be harmful to the environment and public health or safety.

15. The beneficial use(s) of the compost, vermicompost and hermetiacompost as listed in Section A. (Description), is contingent upon compliance with this permit and if sold, the Pennsylvania Fertilizer Act, and the Pennsylvania Soil and Plant Amendment Act of the Pennsylvania Department of Agriculture. (Information relating to this law may be obtained from the Department of Agriculture by writing the Bureau of Plant Industry, Division of Agronomic Services, 2301 North Cameron Street, Harrisburg, PA 17110-9408.)

16. Upon cessation of operations at the composting facilities, the operator shall remove any wastes and structures or other materials which contain or have been contaminated with waste and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; the environmental protection acts and the regulations promulgated thereunder.

17. Any waste generated from the composting process shall be managed in accordance with the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; the environmental protection acts, and the regulations promulgated thereunder.

18. The activities authorized by this permit shall not cause or allow conditions that are harmful to the environment, public health or safety, including but not limited to, odors, noise, or other public nuisances. The permittee shall not cause or allow the attraction, harborage, or breeding of vectors. Storage of the active compost, curing materials, and finished compost shall be covered to prevent dispersal by wind or water erosion and in a manner that prevents fire or explosion. The active compost, curing materials and finished compost may not be stored in a manner that causes ground or surface water contamination.

19. The activities authorized by this general permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth. DEP may modify, suspend, revoke, and reissue the authorization granted in this general permit if it deems necessary to prevent harm or the threat of harm to the public health, and the environment or if they cannot be adequately regulated under the conditions of this general permit.

20. The local police, fire department, or other appropriate state or local emergency response agencies shall be contacted immediately in the event of a fire, spill, or other hazard arising from the storage and curing of produced compost that threatens

public health, safety, and welfare, or the environment, and whenever necessary in the event of personal injury related to such storage.

21. The permittee shall develop and implement a Preparedness, Prevention and Contingency Plan (PPC) that is consistent with the DEP's most recent guidelines.

22. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent the permit states otherwise, the permittee shall utilize materials as described in the permit application.

23. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (relating to standards for contaminants) issued under the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, 35 P.S. §4005, and shall comply with all the applicable provisions of 25 Pa. Code §§123.1 and 123.2 (relating to prohibition of certain fugitive emissions and fugitive particulate matter).

24. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §§4000.101, et seq.

25. As a condition of this general permit and of the permittee's authority to conduct the activities authorized by this general permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the DEP, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, compost, soils, water, or gases; take photographs; perform measurements, surveys, and other tests; inspect any monitoring equipment; inspect the methods of operation and inspect and/or copy documents, books, and papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 6018.608 and 6018.610(7) of the SWMA, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the SWMA.

26. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this general permit shall be subject to compliance history review by DEP prior to performance of any activities, as specified by the SWMA.

27. Failure of measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules, and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.

28. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. DEP may require an individual permit be obtained if the permittee cannot comply with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the public or the environment of this Commonwealth.

29. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the processing areas, waste storage areas, composting windrows, curing areas, or enclosed vessels to the land or waters of the Commonwealth.

30. Best Management Practices shall be implemented to divert storm water run-on from the processing areas, curing areas, and finished product storage area(s). Storm water runoff shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder. Prior to beginning operations at the facility, the operator must obtain all necessary storm water management permits.

31. The permittee shall maintain in force and affect a general liability insurance policy in accordance with 25 Pa. Code, Chapter 271, Subchapter D (relating to Financial Assurances Requirements) to provide continuous coverage during operation of the facility and until DEP issues a final closure certification.

32. Equipment used for the composting, vermicomposting, or hermetiacomposting process, storage, and transportation of the finished materials shall be maintained in good operating condition to prevent the finished materials from being unintentionally conveyed out of the storage area(s). Weekly inspections of each storage area and their surrounding environs are to be conducted to determine compliance of the terms and conditions of this general permit, and for evidence of failure.

33. Storage of finished materials by the permittee shall be in a manner that complies with the requirements set forth in 25 Pa. Code, Chapter 285 (relating to storage, collection and transportation of municipal waste).

34. Wastes authorized for composting under this general permit shall not be mixed with, stored with, or beneficially used with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste, as the terms are defined in 25 Pa. Code § 271.1.

35. Wastes that are not authorized under this general permit are not allowed to be received, mixed, stored or beneficially used with the raw materials for composting.

36. Analytical testing required by this general permit shall be performed by a laboratory accredited under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, 27 Pa. C.S.A. §§ 4101-4113.

E. Operating Conditions Specific to On-Farm Composting Operations (not Including Vermicomposting or Hermetiacomposting Operations)

1. The approval herein allows for composting activities to be conducted at sites that meet the definition of a normal farming operation.

2. An operational plan must be developed and implemented at the facility. The operational plan must include the following information:

    a. A general site plan which contains the following information for on farm composting sites:

        i. Access road,

        ii. Tipping area,

        iii. Surface water and storm water controls for all compost related areas located outdoors,

        iv. Farm Soil Conservation Plan, and

        v. Nutrient Management Plan if available

    b. An operational narrative that includes the operational hours for receiving waste.

    c. The volume of waste processed during the previous year or expected to be processed during the first year of operation.

    d. A detailed description of the compost system(s).

3. A copy of an approved soil conservation plan by the County Conservation District must be maintained at the facility at all times. The soil conservation plan must be implemented during all phases of operation of the facility. A copy of the approved soil conservation plan must be provided to DEP with the application.

F. Operating Conditions Specific to Vermicomposting and Hermetiacomposting Operations

1. This permit requires the area designated as the active vermicomposting or hermetiacomposting portion of the operation to occur in an enclosed structure(s) or vessel(s). Sufficient insulation, heating, cooling, ventilation and/or irrigation systems shall be provided as necessary to maintain optimal conditions for the proper husbandry of worm or black soldier fly lifecycles.

2. Quantities and loading rates of incoming food wastes and other feedstocks shall be limited to the capacity that the worms or black soldier fly larvae can effectively process so that the operation does not create excessive odors, leachate, wastewater or unprocessed material. Seasonal variations that may cause processing capacity

fluctuations shall also be taken into consideration when determining proper feedstock quantities and loading rates.

3. Vermicomposting and hermetiacomposting facilities that accept food scraps or manure shall include a composting pad constructed to meet the specifications listed in Condition D.6. The composting pad shall be utilized to:

   a. Incorporate an optional pre-composting step in the vermicomposting or hermetiacomposting process, or

   b. Provide a contingency in the event that the worm or black soldier fly larvae population is unable to effectively process incoming quantities of waste materials. The time and temperature requirements listed in Section D.4. shall be adhered to. The 30-day curing period is not required for the pre-composting processing step.

G. Operating Conditions Specific to Small Scale Composting Operations (not On-Farm Composting)

1. Applications for coverage under this general permit for small composting facilities must include a facility design and operation plan that provides the following information:

   a. A detailed description of the source(s), quality, and quantity of waste(s) the permittee anticipates receiving for composting, including any seasonal variations that may impact the waste type(s) and quantity;

   b. A detailed description of the methods and equipment that will be utilized prior to, during, and after processing to ensure removal of other wastes and incidental materials that cannot be, or are not authorized to be, processed by the permittee.

   c. The anticipated tonnage and volume of waste for each stage of the facility flow schematic. See Section E.5 on the Department's Form 20 for detailed information requirements of this schematic.

   d. The anticipated processing duration, from the time waste is received by the facility to through the completion of composting, and up to the distribution of the final product;

   e. The proposed length, width, and height of windrows if windrows will be used at the facility;

   f. A description of the method used to control surface water run-on and run-off, and to manage generated leachate, including the method for treatment or disposal of leachate generated.

   g. A description of how the permittee will control unauthorized access to the site through use of a fence, gate or other barrier, and how the permittee will ensure

integrity of this access control when an attendant is not on duty. This description should include the proposed height of the fence, gate, or other barrier.

h. A nuisance minimization and control plan that includes the following:

i. A detailed description of how the operator will control and minimize the attraction, harborage or breeding of vectors that are harmful to the environment or public heath, or which create safety hazards, odors, dust, unsightliness and other public nuisances;

ii. A litter control plan that ensures the operator will not deposit or allow for the dispersal of solid waste, compost or other waste materials offsite.

iii. An odor control and response plan that describes how odors will be monitored and how any odor problems will be addressed.

i. A description of the proposed beneficial use for the finished compost, including the approximate quantity of finished compost, the frequency of distribution, and the method for removing finished compost from the facility.

2. For small-scale composting facilities that accept for processing a total volume greater than 3,000 cubic yards per year, the permittee shall maintain a bond in sufficient guarantees in accordance with 25 Pa. Code, Chapter 271, Subchapter D (relating to financial assurances requirements) to provide continuous coverage during operation the facility and until the Department issues a final closure certification.

H. Recordkeeping:

1. The permittee shall maintain records of all analytical evaluations conducted in accordance with this permit, and records shall be made available to DEP upon request. Required records shall be retained for a minimum of 5 years. Records of analytical evaluations must include, at a minimum, the following for each sample: the dates of sampling and testing, sampling procedures utilized, name of the individual who collected the sample, the volume or weight of the sample, each parameter tested, the analytical results, the name of the analytical laboratory used, and the analytical methodologies employed.

2. The permittee shall maintain records of all waste accepted by the facility, and records shall be made available to DEP upon request. Required records shall be retained for a minimum of 5 years. Records of each source of incoming waste must include, at a minimum, the following: the name, address, and phone number of each source of incoming waste; the date of receipt; the quantity of waste received; the results of visual observations; and the name, address, and phone number of the destination of each outgoing shipment of waste. The permittee shall also maintain records of spills or releases that include, at a minimum, the following: the location,

date, time, identification, and quantity of spilled or released material, and a description of how the material was cleaned up. The permittee shall also maintain records of all reports submitted to DEP or to the U.S. Environmental Protection Agency.

I. Reporting:

1. Any person that operates under the provisions of this permit shall immediately notify DEP via certified mail of any changes in: the company name, address, owners, operators, and/or responsible officials of the company, compliance status, and the status of any permit issued by DEP or federal government under the environmental protection acts.

2. Persons operating under the provision of this general permit shall submit to the appropriate DEP Regional Office (see attached list), an annual report on the beneficial use activities conducted under this permit by March 1 for the preceding calendar year. This report shall include: records of each source of incoming waste including the name of each source; the date of receipt; the quantity of waste received; the results of visual observations; the quantity compost sent for beneficial use; the quantity of each outgoing shipment of waste, the name of the destination of each outgoing shipment of waste, and updated bond calculation worksheets, if applicable.

3. The permittee shall immediately notify DEP's Emergency Hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office (see attached list) of any accidental spills and shall take appropriate immediate action to protect the health and safety of the public and the environment.

J. Renewal:

A generator or supplier that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by DEP for submission at a later date. The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following:

1. General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application),

2. Form B (Professional Certification),

3. Form 20 (Application for a Municipal or Residual Waste General Permit),

4. Form 27M (Acceptance of General Permit Conditions), and

5. Updated Bond Calculation Worksheets, if applicable,

6. DOA or Registration application fee (whichever is applicable) in the amount identified in Section A (General Information) of the Form 20. A check shall be made payable to the "Commonwealth of Pennsylvania."

A copy of the renewal application shall also be sent to DEP's Bureau of Waste Management, Division of Municipal and Residual Waste, Rachel Carson State Office Building, 400 Market Street, P.O. Box 69170, Harrisburg, PA 17106-9170.

In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the issuance or denial of the renewal for permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit.

Department of Environmental Protection
Regional Offices
(and Counties Served)

I. Bucks, Chester, Delaware, Montgomery, Philadelphia.

Southeast Regional Office
2 East Main Street
Norristown, PA 19401
Phone: (484) 250 - 5900

II. Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming.

Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18711-0790
Phone: (570) 826 – 2516

III. Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York.

Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8200
Phone: (717) 705 – 4706

IV. Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union.

Northcentral Regional Office
208 West 3rd Street - Suite 101
Williamsport, PA 17701
Phone: (570) 327 – 3653

V. Allegheny, Beaver, Cambria, Fayette, Greene, Somerset, Washington, Westmoreland.

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone: (412) 442 – 4000

VI. Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, Lawrence, McKean, Mercer, Venango, Warren.

Northwest Regional Office
230 Chestnut Street
Meadville, PA 16335-3481
Phone: 814-332-6848