



April 29, 1999

Mr. Larry Spaciano  
Dallas Area Municipal Authority  
530 South Memorial Highway  
Shavertown, PA 18708

Dear Larry:

Enclosed are three copies of the Yard Waste Composting Facility Application Form. Please enclose two copies with a cover letter on your letterhead and forward them to the Northeast Regional Office of the Pennsylvania Department of Environmental Protection for their review and approval.

If you have any questions concerning the enclosed information, please do not hesitate to call me at (717) 730-0404.

Sincerely:

Richard M. Schlauder, Jr.  
Director of Environmental Services, Pennsylvania Office

Enclosures

## YARD WASTE COMPOSTING FACILITY APPLICATION FORM

Please familiarize yourself with the Pennsylvania Department of Environmental Protection GUIDELINES FOR YARD WASTE COMPOSTING FACILITIES prior to filling out this form.

- |  |                         |
|--|-------------------------|
| <b>Operator (Name and Mailing Address)</b>   | <b>Telephone Number</b> |
| Dallas Area Municipal Authority (DAMA)<br>530 South Memorial Highway<br>Shavertown, PA 18708 | (570) 696-1133          |
  
- |                                    |  |
|------------------------------------|--|
| <b>Name of Facility:</b>           | Dallas Area Municipal Authority Compost Facility   |
| <b>Contact Person:</b>             | Larry Spaciano                                     |
| <b>Contact Telephone Number:</b>   | (570) 696-1133                                     |
| <b>Property Owner's Name:</b>      | Dallas Area Municipal Authority                    |
| <b>Street Address of Facility:</b> | 530 South Memorial Highway<br>Shavertown, PA 18708 |
| <b>City-Borough-Township:</b>      | Kingston Township                                  |
| <b>County:</b>                     | Luzerne  |
| <b>Sponsoring Municipality:</b>    | Dallas Township                                    |

A U.S.G.S. 7.5 minute topographic map (Kingston Quadrangle) outlining the site of the DAMA Composting Facility is provided as Attachment-A.

- |  |                            |
|--|----------------------------|
| <b>The proposed composting method:</b>   | Medium-technology windrow  |
| <b>Total acres of the composting facility:</b>   | Approximately one (1) acre |
| <b>The maximum quantity of yard waste and composted materials to be on the site at any one time:</b> | 3,000 cubic yards          |
| <b>Yard waste in cubic yards:</b>  | 2,000 cubic yards          |
| <b>Finished compost in cubic yards:</b>  | 666 cubic yards            |

4. **Prepare and include in this application a general site plan for the facility which illustrates the location of the following items:**
- access roads in relation to the nearest public and private roads, wells, and property lines**
  - tipping area**
  - gate location**
  - surface water controls, erosion and sedimentation controls**
  - processing area including location, orientation, and size of compost piles or windrows**
  - curing or storage areas**
  - north arrow**
  - scale of drawing**

Attachment-B of this application is a General Site Plan for the facility that illustrates the items listed above.

5. **Please address the following items: (attach additional sheets if necessary)**

- **Provide a complete list of source(s) of yard waste to be received**

Kingston Township  
Dallas Borough  
Dallas Township

These municipalities currently use area in each of the individual municipalities. This site will allow for efficiencies and sharing of equipment. Currently, only the three municipalities listed above are committed to using the site, however, other municipalities in the Back Mountain region of Luzerne County may eventually deliver materials to this site if the area is sufficient to handle the additional materials. In addition, municipal residents (individuals) may drop off materials at drop off locations in each municipality listed above.

- **Describe how the yard waste will be collected and received at the facility**

All three participating municipalities will collect leaves at the curb with vacuum trucks and will deliver material to the site in the collection vehicles. The leaves will be deposited directly from the collection vehicles into windrows.

Drop off sites for grass, tree trimmings and brushy items will be located in each municipality for residential use. Grass will be collected from each of these sites on an every-other-day basis (during the growing season), transported to the composting site and mixed in with the composting leaves in a one-to-three ratio. Tree trimmings and brushy materials will be ground up on an as-needed basis with a mechanical grinding device to be purchased by the Authority. The grinding equipment will be transportable and will

allow for the bulky material to be ground up at each of the drop off sites. Ground material will then be transported to the compost site for incorporating with the leaves and grass or to be managed in a separate windrow depending on the interest of the communities in ground material as mulch.

- **Describe the method for inspecting incoming yard waste and for removing unacceptable material**

Authority personnel will visually inspect all materials delivered to the site. Contaminants from municipal deliveries will be removed by municipal personnel, loaded back into the delivery vehicle, and taken away for disposal. Similar contaminants in resident/individual deliveries to the compost site will be removed by Authority personnel and disposed of in a dumpster located on site.

- **Describe the windrow construction methods including equipment to be used**

Municipal materials will be discharged directly into windrows. A front end loader will be used to move materials as necessary to help in final windrow construction to the specifications indicated below.

- **Describe the windrow size:**

**Initial Dimensions:** 14 feet wide x 6 feet high and up to 210 feet in length.

- **Describe the source of supplemental water which will be used to maintain an optimal 40 to 60% moisture content of compost piles or windrows:**

To minimize the use of added water, windrows will be constructed with a slightly concave top that will allow precipitation to accumulate and seep into the windrows to provide moisture. Also, turning of the windrows during excessively dry periods will be minimized to reduce evaporation from the windrows.

When additional water is required, particularly when turning the windrows, water will be applied using a hose connected to a hose-bib located on the site.

- **Indicate the frequency of windrow turning:**

At least twice per month, depending on time of year, internal windrow temperatures and the need to incorporate grass material as required.

- **Indicate the temperature range to be maintained:** 90-140° F

- **Indicate the method of windrow turning:**

Front- end loader with bucket (NOTE: The Authority has submitted a Section 902 grant application for a windrow turner that will be used in the future.)

- **Describe the method for determining turning frequency:**

Windrows will be turned at least twice per month at a scheduled time. During the growing season when grass is being delivered to the site, an area of a windrow sufficient to provide a 1:3 mix of grass to leaves will be turned to incorporate the grass. Regular monitoring of the windrows will be used to determine if the turning should be more or less frequent. The intent will be to establish and maintain the desired temperature of approximately 130° F in each windrow to ensure weed seed and pathogen kill prior to turning each time.

- **Describe the approximate duration of the composting cycle (in days):**

300 days

- **Describe the composting process:**

Materials will arrive on site both in bulk (vacuumed materials) and materials delivered by individuals. The materials will be deposited directly into windrows. Authority personnel will use a front end loader as necessary to form windrows to appropriate dimensions.

Once in windrows, the material will be turned two times per month on a set schedule (except as noted above), using a front end loader (or a windrow turning machine in the future, once the funding is approved). As the size of the windrows decreases due to volume reduction, two or more windrows will be combined to maintain the optimum windrow dimensions (defined above) for decomposition. Over the approximately 300 day composting process, materials will be turned at least twenty times, beginning in October/November and ending in July/August, depending on when most of the materials are received in the fall.

Water will be added as needed during turning using a hose connected to a tap or fire hydrant located on site. Windrows will be monitored for moisture, and water will be added between turnings if needed to maintain sufficient moisture for decomposition.

- **Describe the curing period for compost:**

For a 30 to 60 day period the fully composted material in the windrows will be moved to one location at the site and stored in a large pile. Sometime between 30 and 60 days the material will be moved off site for municipal applications and residential distribution programs.

- **Indicate the time required for storage and distribution:** 30-35 days

- **Indicate the total time required for composting operation:** 365 days

- **Describe the marketing and distribution plan for the finished compost product:**

The finished compost will be used in applications around the facility and on Authority property. Municipalities that participate may pick up finished materials for their own use and distribution to the public. Finished compost remaining on site will be distributed to the public.

- **Describe the residue disposal plan and identify the disposal or processing site(s) to be used:**

Any contaminants viewed upon delivery will be reloaded onto the delivery vehicles and hauled away for disposal by the delivering entity. Any contaminants discovered later and during the composting process will be removed, placed in a dumpster on site, and disposed of by the Authorities contracted hauler.

- **Describe the plan for emergency response (fire, police, etc.):**

The following entities have been notified of the site location and are prepared to respond to emergency situations at the site:

Police: Kingston Township Police  
Fire: Trucksville Fire Company  
Other: Luzerne County HazMat

The Authority retains keys to the site, and Authority contact Larry Spaciano can be contacted for access to the site in the event of an emergency during non-operating hours.

- **Outline the public information and education program (attach samples of literature if available):**

The Authority currently uses an annual calendar and newsletters to educate the public about its recycling program. These materials will be used to educate the public about the composting operation. Each participating municipality will be required to advertise curbside leave collection programs and the requirements for residents using the designated yard waste drop off sites. Copies of the Authority's current public information materials are Attachment-C in this application. These materials will be revised to reflect information about the composting program.

Materials generated specifically to address the municipal and Authority sponsored yard waste collection and process systems will address the following:

- Make the public aware of the program, including access to drop-off of materials and pick up of finished compost.
- Define requirements for users.
- Encourage reduction in material to be processed or disposed through "grasscycling" and home composting.
- Ensure the public understands the value of yard waste composting.

Educational materials will be distributed through participating municipalities and made available to County residents in non-participating municipalities upon request.

The Authority will issue program updates through newsletters and news releases to local newspapers.

**Attachment - A**  
**Kingston Quadrangle Topographic Map**



**Attachment – B**  
**Site Map**

**Attachment – B  
(Continued)  
Compost Processing Area**

**Attachment - C**  
**Sample Public Information Materials**