

**Development Of Leaf And  
Yard Waste Composting  
Facility  
Chestnuthill Township,  
Monroe County**

**January, 2003**

**Prepared By**

**Alternative Resources, Inc.**

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# **FINAL REPORT**

## **Development/Permitting Of Leaf And Yard Waste Composting Facility Chestnuthill Township**

### **1.0 Overview**

Chestnuthill Township requested and received a Technical Assistance Grant for the siting, design and permitting of a Leaf and Yard Waste Compost Facility as per Pennsylvania Department of Environmental Protection (PADEP) Guidelines. Alternative Resources, Inc. (ARI) has been selected to provide consulting assistance.

The proposed facility will serve residents of Chestnuthill Township and drop-off sites located in Eldred, Polk and Ross Townships. The Townships, and residents will drop-off their leaf and yard waste.

Compost produced at the facility will be used by the municipalities and made available to their residents, free of charge.

### **2.0 Facility Sizing**

Based on an evaluation of the Townships 46 acre property only a 4.9 acre site is available to process the leaf and yard waste generated by the municipalities.

Chestnuthill has a population of approximately 14,500 residents. Given a (generally accepted) generation rate of 200 pounds per capita per year of yard waste times a population of 14,500 a

total of 2,900,000 pounds of leaf and yard waste is generated annually. Assuming an average bulk density of leaf and yard waste at 500 pounds per cubic yard, approximately 5,800 cubic yards of leaf and yard waste will be generated by the municipalities. Capture rates of leaf and yard waste (i.e.: material that is collected curbside or dropped off at the facility) will be significantly lower than the estimated 5,800 cubic yards in that the Township is rural/suburban and many residents compost. The Yard Waste Guidelines allow (as per Section 271 of the regulations) for 3,000 cubic yards of material per acre for the purpose of composting. The Chestnuthill site will provide for approximately 14,700 cubic yards of leaf and yard waste. The capacity, not used by Chestnuthill, will be available to other municipalities by agreement (i.e.: Eldred, Polk and Ross Townships).

### **3.0 Site Evaluation**

ARI conducted an evaluation of the property owned by the Township. The candidate site was evaluated based on various environmental, social and economic considerations and the limitations and requirements specified in the PADEP "Guidelines for Yard Waste Composting Facilities".

Factors which require careful consideration when evaluating the site include:

#### **3.1 Location**

Location of a municipal yard waste composting site is one of the prime consideration in the site selection process. The site ideally should be located convenient to the collection area to be served. A central location will minimize travel distance for

collection vehicles and resident desiring to drop-off material at the site. The site should be easily accessible preferably by a hard surface road. The most convenient composting site for many municipalities is in close proximity to the municipal building and/or maintenance building. Benefits often include enhanced security and cost savings for equipment and manpower. Location must be weighed against many other factors.

### **3.2 Site Characteristics**

Slope and topography - A gentle slope 2-4 percent is preferred for a site in order to prevent ponding of water (which can potentially cause an odor or vector problem). Ponded water can result in anaerobic conditions and generate malodor or act as a breeding ground for mosquitoes. A gentle slope will also assist in the control of surface water.

Soils Characteristics - Soil characteristics must be carefully evaluated. Soil types, percolation rates and depth to groundwater must be considered. Soils on the site should: be well drained to prevent ponding and assist in storm water runoff, have a structure that can support heavy vehicle use and have a depth to ground water of more than 3.3 feet, to prevent any potential for contamination.

### **3.3 Proximity to Water Supply**

Water is essential to the compost process a nearby water source is required to maintain proper moisture levels in the windrows. Also, water is important for safety (in the event of fire) and for seasonal dust suppression. The water source can be a well, hydrant, lake, river or stream or a tanker truck.

### **3.4 Acreage**

The acreage required is determined based on the volume of material to be processed and stored, at the site (see Facility Sizing) and the land available to the municipality.

### **3.5 Proximity to Residential Development and Sensitive Receptors**

Sites located in close proximity to residential properties or sensitive receptors (schools, hospital, nursing homes, etc.) should be avoided to the extent if possible. Noise from machinery, odor potential and visibility of the operation are potential nuisances. Noise reduction, odor potential, noise reduction and visual impact can be minimized but at additional cost to the project. Persons who suffer from immune disorders or respiratory problems may be adversely affected by naturally accruing fungal spores (*aspergillus fumigatus*).

### **3.6 Environmental Impact (land disturbance)**

Timber removal, grubbing of brush and excavation required to prepare a site and disturbance or destruction of existing habitat must be weighed carefully.

### **3.7 Site Preparation Costs**

Site preparation cost include: (clearing, grading, excavating, windrow pad and processing area preparation, access road construction and security (fencing and/or a gate).

### **3.8 PADEP Siting Restrictions (exclusionary criteria)**

Yard Waste composting operations, including storage, composting, and curing, shall not occur in the following areas or the

following distances, unless the operator takes special precautions and receives written authorization from the Department:

- a. In a 100-year flood plan.
- 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 operator demonstrates that only curing of compost is occurring within that distance.
- g. Within 300 feet of a water source.
- h. Within 3.3 feet of a regional groundwater water table.
- i. Within 100 feet of a perennial stream.

#### **4.0 Site Recommendation**

ARI evaluated a 46 acre property owned by Chestnuthill Township.

The property has been previously excavated and filled, used as a municipal dump many years ago, and is fringed by trees and natural vegetation.

A 4.9 acre site was recommended as suitable based on the following:

- Flat area graded to a 2-3 percent slope
- Close proximity and existing exit from hard surface road for access to site



- Site is secured by a cable and natural barriers
- Remote, no adjacent residential development or sensitive receptors
- Area is well drained
- Site preparation would have minimal impact on habitat only grubbing of brush need and limited grading done
- Minimal site development cost (do to existing conditions)

## **5.0 Registration/Permitting of Compost Facility**

PADEP regional personnel along with Township personnel conducted a site walk over and discussed the intended use and site suitability. ARI developed the design for the facility, completed all forms and narratives required under PADEP Guidelines and Regulations (see Attachment A). ARI submitted the compost facility application in February of 2003 to PADEP Regional Office. The application is pending approval.

## **6.0 Equipment Specification**

ARI reviewed with the Township the pros and cons of various processing equipment for the facility and recommend consideration of a small windrow turner and a grinder..

## **7.0 Operations**

Procedures for operations are detailed in the Application (see Attachment A). A trouble-shooting guide (for quick reference) is included in Attachment B.

## **8.0 Project Development/Costs**

ARI recommended that Chestnuthill Township prepare an Act 101,

Section 902 Grant Application to request financial assistance for site development costs, equipment and public education.

CHESTNUTHILL TOWNSHIP  
APPLICATION FOR OPERATION OF  
YARD WASTE COMPOST FACILITY

UNDER 25 PA CODE SECTION 271.103(h)  
PERMIT BY RULE

PREPARED BY  
ALTERNATIVE RESOURCES, INC.  
CONSULTANTS IN ENVIRONMENTAL RESOURCE  
MANAGEMENT  
706 MONROE STREET  
STROUDSBURG, PENNSYLVANIA 18360

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SECTION 1  
YARD WASTE COMPOSTING FACILITY  
APPLICATION

**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.

1. Operator (Name and Mailing Address) Telephone Number  
Chestnuthill Township (570) 992-7247  
P.O. Box 230  
Brodheadsville, Pennsylvania 18322

2. Facility: Chestnuthill Township Contact Telephone #  
Contact: Dave Albright (570) 992-7247  
Owner: Chestnuthill Township  
Street Address: P.O. Box 230  
Brodheadsville

State Pennsylvania Zip Code 18322  
City-Borough-Township of Chestnuthill  
County Monroe

Sponsoring Municipality Chestnuthill Township

Attach a United States Geological Survey 7.5 miles topographic map identifying the yard waste composting facility site boundaries outlined on it.

Provide proof the operator has the legal right to enter the land and perform the approved activities.  
See accompanying Base Map for Deed Numbers and Attachment A2 for Deed.

3. Method: Windrow (open air)  
Total Acres: 4.9 Acres  
Maximum quantity of yard waste and composted materials to be on the site at any one time: 14,700 cubic yards  
Yard waste in cubic yards: 14,700 cubic yards  
Finished compost in cubic yards: 8,820 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 - **at site of windrow formation.**  
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 - **will vary depending on space availability.**  
north arrow scale of drawing

## NARRATIVE SUPPLEMENT

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

- **Provide a complete list of source(s) of yard waste to be received.**
  - Chestnuthill Township will provide a drop off leaf collection program for residents at the site. and for leaf and yard waste collected from Eldred, Polk and Ross Townships.
  - Leaf waste collected from fall leaf collection program.
  - Yard waste generated from Chestnuthill Township projects; i.e. park maintenance projects, storm debris from trees, etc.
  - Yard waste collected by the municipalities during spring clean-up days.
  - Yard waste generated and dropped by residents of the municipalities.

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

Chestnuthill Township leaf and yard waste will be delivered to the site by the Township(s), local collectors, residents and local landscapers. Yard waste collected by Chestnuthill Township will also be delivered to the site.

Yard waste generated from municipal projects and spring clean-up days will be delivered to the site, in bulk, via municipal trucks.

All yard waste must either be delivered unbagged or must be taken out of the bags prior to placement at the site.

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

All loads of incoming leaves delivered by the Chestnuthill Township will be inspected during off loading to ensure the quality of incoming material. Off specification material will be culled by Township personnel, placed in containers



and properly disposed of.

Any plastic bags delivered will be opened and unacceptable material (if any) will be removed, placed in a container for proper disposal; bags will be removed by the collector resident delivering the material or Township personnel and place in an on-site container for proper disposal.

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

Residents delivering material and leaf collection trucks will unload leaves in the approximate location where a windrow is to be formed. A municipality owned front end loader with a one (1) cubic yard bucket will be used to form and turn windrows. The Township plans to purchase a windrow turner in the future.

- **Describe the windrow size: Initial dimensions will be 16' wide x 8' high x Varies\* length.**

\* Not to exceed 300' 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.**

Supplementary water will be provided by a 600 gallon tanker truck and if required from the Fire Department located 2.5 miles from the site.

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

Turning will occur every 1 to 3 months depending on indications of windrows (primarily temperature).

- **Indicate the temperature range to be maintained:**

A temperature range of 113°F to 140°F will be maintained.

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

A front end loader will be used to lift the material and mix it.

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

Turning frequency will be based on establishing the proper environment for maximum thermophilic microbial activity. The key indicator for establishing turning frequency will be internal windrow temperatures. Compost will be turned to keep temperatures in the lower thermophilic range (113°F to 140°F). The thermophilic temperature range should be reached within two weeks to a month of windrow formation. Once the inner core of the windrow exceeds 140°F the windrow will be turned. If the temperature of the pile drops below 113°F, the windrow will likewise be turned to add oxygen to the pile and increase microbial activity. Once the temperature drops below 113°F and turning the windrow does not result in an increase in temperature, the compost will be moved to a curing pile for final curing.

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

Describe the composting process: 120-180 days

Describe the curing period for compost: 30-90 days

Indicate the time required for storage and distribution: 0-90 days

Indicate the total time required for composting operation: 130-360 days

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

The compost will be used by cooperating municipalities for parks, around municipal buildings and to blend in soils. Compost may also be made available to residents when the volume is sufficient (in such a case, the municipality would place an advertisement in the local newspaper (Pocono Record) that compost would be available at the site on certain date(s) and time(s)).

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

Any waste or residue collected on site will be placed in designated containers. Waste Management Grand Central Landfill is the disposal site used by Township's transfer station. The Township will deliver waste to the transfer station.

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

A cellular telephone will be available on-site during operations. Both the police and fire departments will also be briefed as to the compost site, layout and standard procedures.

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

The municipality will discuss the program at public meetings and publish a display advertisement approximately two (2) times per leaf collection season, in a newspaper of general circulation (e.g.: The Pocono Record) and provide public service announcements to local radio station(s) (e.g.: WVPO and WSBG), if warranted. The municipality may also advertise the availability of compost in its newsletter. Brochures will be developed to encourage participation. Notices will be posted at the Municipal Building.

ATTACHMENT A

A1 SITE LAYOUT

(BASE MAP)



ATTACHMENT B  
SITING RESTRICTIONS

## **SITING RESTRICTIONS FOR YARD WASTE COMPOSTING OPERATIONS**

Chestnuthill Township's compost facility will not store, compost or cure leaf and yard waste in the following areas:

**a. In a 100-year flood plain.**

The facility is not located within a 100 year flood plain (see Attachment B, Flood Plain Map). Need Map\*

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

The "National Wetlands Inventory Map" does not identify any exceptional wetland within 300 feet from the compost site boundaries.

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

No wetlands exist within 100 feet of the site boundaries.

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

No karst geologic features are located on site (based on review of Monroe County Soil Survey) and there is no drainage into a sinkhole within 100 feet of the compost site boundaries. The area has previously been excavated and filled.

**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.**

The compost facility boundaries are in excess of 300 feet measured horizontally from any/all occupied dwelling.

**f. Within 50 feet of a property line, unless the operator demonstrates that only curing of compost is occurring within that distance.**

The compost facility is not located closer than 50 feet of a property line. It is surrounded by Township property.

**g. Within 300 feet of a water source.**

The site is not within 300 feet of a water source.

**h. Within 3.3 feet of a regional groundwater water table.**

The compost facility is a distance greater than 3.3 feet between the surface and the regional groundwater table.

**i. Within 100 feet of a perennial stream.**

No perennial streams are located within 100 feet of the site.



ATTACHMENT C  
TOPOGRAPHIC MAP

ATTACHMENT D  
NUISANCE CONTROL PLAN

## NUISANCE CONTROL PLAN

All on-site operations will be monitored on a daily basis. Any situation that is noted which might attract, harbor or cause breeding of vectors will be addressed as quickly as possible on a case-by-case basis.

Odor is a primary concern for composting operations. Malodors are almost always associated with anaerobic conditions, excessive temperatures, excessive water, etc. Monitoring and quick response to problems recorded will minimize the occurrence of odor causing conditions.

Improved drainage of the compost and site (gravel base on working surfaces and pads) will help eliminate the potential of standing water. Additionally, the windrows will run parallel to the slope allowing for proper drainage. Any ponding of water found on site will be subjected to corrective actions. These actions may include; adding fill material, re-grading or modifying drainage patterns.

Through the elimination of standing water, the regular turning of windrows and heat generated by the piles breeding of vermin and insects is inhibited. Regular monitoring of the compost and mulch windrows will also be accomplished.

Noise from operating equipment should not present a problem given

the rural nature of the site and the limited work effort to manage the relatively small volume of leaves.

Dust generated on access roads or by processing machinery will be suppressed with water spraying of roads (if required).

The Township will operate the compost site in a professional manner. The safety and well being of its employees, the public and environment are of the utmost concern. The operations will be monitored daily and any safety hazards or public complaints will be dealt with expeditiously.

Any litter generated by site activities or deliveries will be policed by Township personnel.

SECTION 2  
CONTINGENCY PLAN FOR  
EMERGENCY PROCEDURES

## **A. DESCRIPTION OF FACILITY/OPERATION**

### **A. 1 General Description of Activity**

Chestnuthill Township plans to develop a leaf and yard waste compost facility. The 4.9 acre site will be on a 46 acre parcel owned by Chestnuthill Township, Monroe County. The proposed project will not require additional zoning approval from the Township. The project is designed to process leaf and yard waste collected in Chestnuthill Township.

#### **COMPOST SITE**

The leaf and yard waste compost operation will occupy a 4.9 acre site within the 46 acre parcel. Materials that are to be accepted for composting are leaves, bush trimmings, grass and related yard debris as per Department "Guidelines for Yard Waste Composting Facilities". Green wood (tree limbs and bolts) from trimming and storm damage will also be processed into mulch/wood chips.

The acceptable materials will be composted aerobically using open air windrows and mechanized equipment to promote, accelerate and enhance decomposition.

All loads of incoming material will be inspected prior to and during off loading to ensure the quality of incoming material. Off

specification material will be culled by Township personnel and properly disposed of.

Any plastic bags containing acceptable materials will be immediately opened and their contents inspected. The bags will be removed by the resident delivering the material. It is anticipated that the majority of material delivered to the site will be in paper bags collected by private haulers, local landscapers and by the Township.

Leaves will be formed into windrows or incorporated into existing windrows using a front end loader. Windrows will be monitored to ensure the physical requirements of the compost are met temperature is the prime indicator, using long stemmed thermometers temperature will be monitored to maintain the thermophilic (active) 113° - 140°F range. If the windrow falls below or rises above the range, it will be turned by use of a front end loader. Once the windrow reaches a stabilized state (temperature does not increase when windrow is turned) the product can be; used at Municipal parks, buildings or distributed to the public.

## **A2. Description of Existing Emergency Response Plan**

This is a new facility and has no existing emergency Plan.

## **A3. Material and Waste Inventory**

Due to the simplicity of the composting, ancillary materials and waste materials are minimal. Those having potential for causing environmental degradation or endangerment of public health and safety gasoline and diesel oil used by the on site vehicles (no fuel will be stored on site).

#### **A4. Pollution Incident History**

This is a new facility and has no previous history of any pollution incidents.

#### **A5. Implementation Schedule**

Following registration/permitting of the composting site, operations personnel will be trained to follow procedures set forth in this PPC Plan.

### **B. DESCRIPTION OF HOW PLAN IS IMPLEMENTED BY ORGANIZATION**

#### **B1. Organizational Structure for Implementation of the PPC Plan**

In the event that an emergency situation occurs at the operation, it will be the responsibility of any on-site staff to immediately notify Joseph Weston, site operator, who will be designated as emergency coordinator. It is the responsibility of the operator to immediately implement all measures of the PPC Plan, as required. It is the



responsibility of the primary emergency coordinator to both coordinate emergency activities and to assure submission of the written Incident Report to the DEP as required under this Plan.

The PPC Committee will consist of Joseph Weston, operator as the primary emergency coordinator and David Albright as secondary coordinator. It will be the duty and responsibility of the PPC Committee to meet prior to start-up and annually thereafter (at a minimum) to: review and identify materials and wastes handled; identify potential hazards (if any); establish and review material and waste handling/storage procedures, accident reporting procedures; and visual inspection programs. The Committee will also review past incidents and the countermeasures utilized to assess effectiveness. In addition, the PPC Committee will be responsible for coordinating establishment of training and educational programs for personnel; and, periodic review/evaluation and improvement of the Plan. The Committee will review any future regulations, new equipment or process changes and incorporate any needed changes into the PPC Plan. If the PPC Plan is updated, copies will be given to the Department and made available to emergency response agencies/contacts.

## **B2. List of Emergency Coordinators**

Primary: Joseph Weston

Home Address: P.O. Box 382, Cresco, PA 18326

Home Telephone: (570) 595-7584

Business Address: P.O. Box 243

Brodheadsville, PA 18322

Business Telephone: (570) 992-7247

Secondary: David Albright

Home Address: 5202 Norbath Blvd, Northampton, PA 18067

Home Telephone: (610) 502-9770

Business Address: P.O. Box 243

Brodheadsville, PA 18322

Business Telephone: (570) 992-7247

### **B3. Duties and Responsibilities of the Emergency Coordinator**

Among other duties and responsibilities of the emergency coordinator will be routine inspection of the site to ensure that neat and orderly operations is maintained and to assure that walkways, areas between windrows, storage areas, operational areas, maneuvering areas and roadways remain accessible and free of nonessential items which might otherwise clutter and hinder operational safety and efficiency. During an actual or imminent emergency, the emergency coordinator will ensure adequate space is provided for unobstructed movement of emergency personnel and equipment to any operating area of the operation. The emergency coordinator will also ensure that all agencies listed in Section E of this Plan are offered a copy of the PPC Plan.

Although most of the materials processed and produced at the operations are not considered of a nature which would pose severe environmental consequences, even if mismanaged, it is recognized that it is the responsibility of the emergency coordinator to minimize any deleterious effect to personnel and the environment caused by an incident at the site. True emergency scenarios can realistically be limited to those involving fire. During an emergency, operations at the site would be discontinued. All delivery/shipment of materials would be halted. Access would remain open to allow for movement of emergency response personnel and equipment. In the event that the fire cannot be extinguished by use of on site extinguishers or

equipment, the fire company will be used as a primary response to a fire at the compost operation. The fire company is located 2.5 miles from the site.

Whenever there is an imminent or actual emergency situation, the operator/emergency coordinator must immediately:

1. Notify all on-site personnel;
2. Identify the character, exact source, amount and a real extent of the fire; and
3. Concurrently assess the actual and potential hazards to the public health and safety, public welfare and the environment that have resulted or may result from the fire. This assessment will consider both direct and indirect effects of the fire.

If the operator/emergency coordinator must assess possible hazards to human health or the environment that may result from a fire the assessment will consider both direct and indirect effects.

If the operator/emergency coordinator determines that the installation has had a fire which would threaten human health or the environment, he will immediately notify the applicable local authorities, indicating if evacuation of local area is advisable. Additionally, he

will immediately notify the Department by telephone at 570/626-2511 and the national Response Center at 800/424-8802 and report the following:

1. Name of the person reporting the incident;
2. Name, address and permit number of the operation;
3. Telephone number where the person reporting the incident can be reached;
4. Date, time and location of the incident;
5. A brief description of the incident, nature of the materials or wastes involved, extent of any injuries and possible hazards to human health or the environment;
6. The estimated quantity of the materials or wastes involved;
7. The extent of contamination of land, water, or air, if known;
8. Existence of dangers to public health and safety, public welfare, and the environment;
9. Nature of injuries; and

10. Parts of the Contingency Plan being implemented to alleviate the emergency.

During an emergency, the operator/emergency coordinator will take all reasonable measures necessary to ensure that fire does not occur, reoccur or spread to other materials at the site. These measures shall include, where applicable: stopping all operations and isolating the problem area.

If the site stops operation in response to a fire the operator /emergency coordinator will ensure that adequate monitoring continues to be conducted for excessive temperatures in windrows wherever appropriate.

After an emergency, the operator shall:

- a. Clean up the affected area;
- b. Treat, store, or dispose of recovered materials, in a manner approved by the Department (testing of the affected area may be necessary); and
- c. Prevent processing or storage of compostables in the area affected by the emergency until the area has been cleaned up and the Department has inspected and approved the cleanup.

The operator/emergency coordinator will ensure that no leaf/yard waste is processed or stored in the affected area, until cleanup procedures are completed and that all emergency equipment listed in the PPC Plan is cleaned and fit for its intended use before operations are resumed.

The coordinator will review and document the effectiveness of the emergency planning and control measures developed for subsequent evaluation.

Within 15 days after the incident, the emergency coordinator will submit a written report on the incident to the Department. The report will include the following:

1. Name, address, and telephone number of the individual filing the report;
2. Name, address, and telephone number of the operation;
3. Date, time, and location of the incident;
4. A brief description of the circumstances causing the incident;
5. Description and estimated quantity, by weight or volume, of materials or wastes involved;
6. An assessment of any contamination of land, water or air

that has occurred due to the incident;

7. Estimated quantity and disposition of recovered materials or wastes that resulted from the incident; and
8. A description of what actions will be taken to prevent a similar occurrence in the future.

**B4. Chain of Command**

Primary: Joseph Weston

Home Address: P. O. Box 382, Cresco, PA 18326

Home Telephone: (570) 595-7584

Business Address: P.O. Box 243

Brodheadsville, PA 18322

Business Telephone: (570) 992-7247

Secondary: David Albright

Home Address: 5202 Norbath Blvd., Northampton, PA 18067



Home Telephone: (610) 502-9770

Business Address: P.O. Box 243

Brodheadsville, PA 18322

Business Telephone: (570) 992-7247

## **C. SPILL LEAK PREVENTION AND RESPONSE**

### **C1. Pre Release Planning**

The Chestnuthill Township compost site has been designed to minimize the potential for risk to the environment, the public and operational personnel. Absorbent material will be available at the near by Township highway maintenance building in the event of an on site vehicle fuel leak. All operational personnel will be properly trained in their duties and responsibilities prior to functioning without direct supervision.

Leaf and yard waste which will be accepted at the site is considered solids and moisture in any load will be minimal. Clean up will consist of using a front end loader to collect the majority of solids, shovels and buckets will be used to collect the remnants and any minimal amounts of moisture will be collected with absorbent material.

## **C2. Material Compatibility**

The leaf/yard waste process does not involve the use of materials which are either corrosive or reactive.

## **C3. Inspection and Monitoring Program**

All composting windrows will be monitored on a regular basis (weekly for first month, then monthly thereafter). The inspection will include checking temperature at 50 foot linear intervals in the center the windrows. Windrows will be turned when temperatures exceed 140 degrees Fahrenheit. Water content will also be checked and adjusted as necessary to maintain a moisture content water around 50%.

Windrows will also be inspected for any non-compostables which will be manually removed and disposed of. The time, date, results of, and name of person conducting these inspections will be recorded in written documentation.

Emergency equipment will consist, at a minimum, of 3 pound A/B/C fire extinguisher located on all mobile processing equipment at the site. In addition to several 5-pound A/B/C fire extinguishers are located at the Township maintenance building. Routine inspection/maintenance of all fire extinguishers will be conducted annually.

Fifty pounds of absorbent material will be available at the Township Maintenance Building, along with a push broom, 5-gallon empty buckets,

and a square mouth shovel should fuel from vehicles leak on site.

#### **C4. Preventative Maintenance**

Preventative maintenance will be conducted on all operating equipment, both as presented through the manufacturers' recommendations and as revealed to be necessary through the continuing, routine inspection program. Repairs will be instituted as soon as operationally practical when a component failure or impending failure is detected. Parts and supplies which are required for routine preventive maintenance will be kept on site. All preventive maintenance will be recorded and filed for each individual piece of operating equipment.

#### **C5. Housekeeping Program**

A conscious effort will be continually made to assure walkways, pathways, operational areas, maneuvering areas and roadways remain accessible and free of nonessential items which might otherwise clutter and hinder operational safety and efficiency. Employees will gather and properly dispose of any litter found on the site. The composting site will be monitored for proper drainage, if any ponding is evident corrective measures will be taken (i.e. regrading or adding fill material). Any small spillage of diesel oil, gasoline, motor oil, will be immediately absorbed, placed in buckets and properly disposed of. All mechanical equipment at the operations will receive a regular wash down. Any spillage of material will be dealt with in

accordance with measures as prescribed within this Plan.

## **C6. Security**

Security for the composting site will be effectively provided through a traffic restricting gate. (Note locator map).

The common entrance and exit gate located at the entrance to the site will be secured and locked whenever the facility is vacant. Signs will be on the entrance gate and surrounding the site providing trespass notice to all unauthorized personnel. Any one visiting the site must first stop at the Township office, located a short distance from the site, and receive authorized permission to enter the site.

## **C7. External Factors**

A power outage will have little effect on operations mechanical equipment will be operating off of diesel fuel.

The site is located above the 100-year flood plain, therefore, flooding is not anticipated.

Snowstorms should have minimal effect since the windrows will not require turning nearly as often as in other seasons. Normal plowing of snow, to maintain site access, will be conducted.

## **C8. Employee Training Program**

Employees will be trained by the site operator to understand their particular responsibilities with respect to preventive maintenance and safety. Also all employees will know the location of emergency equipment (telephones, fire extinguishers, etc.) and emergency procedures. Ongoing training will include periodic safety/emergency response meetings. Such meetings will continue on an annual basis, at a minimum. Following start-up of the operations, all new operations personnel will receive initial training on site by the established operations staff. The primary emergency coordinator will annually review state and federal occupational safety laws, and the Township operational, safety and maintenance procedures to ensure requirements are being met.

## **D. COUNTERMEASURES**

### **D1. Countermeasures to be undertaken by the operations**

#### **D2. Countermeasures to be undertaken by Contractors**

Note: Section D1 and D2 were determined not required due to the nature of the operation.

#### **D3. Internal and External Communications or Alarm Systems**

Due to the open air nature of the operations, an internal communications system is not considered practical or necessary. External communications for summoning fire, police or medical assistance will consist of an on site cellular telephone.

#### **D4. Evacuation Plan for Installation Personnel**

Due to the nature of the operation, site evacuation is extremely unlikely. However, should such a situation arise, it will be the responsibility of the on-site emergency coordinator to advise all unnecessary personnel to leave the site. An elaborate alarm system is considered unwarranted. Evacuation of the area will proceed via the site access roadway.

#### **D5. Emergency Equipment**

In an attempt to maintain a ready posture for an unexpected emergency situation which might occur at the site, the following emergency equipment will be maintained on site, readily available and operational at all times:

Description (Location)	Intended Use	Capabilities
Absorbent Material (1)	Absorb spills	50#
Portable Fire Extinguishers (1)	Small fires	5# Type A/B/C
Portable Fire Extinguishers (2)	Small fires	3# Type A/B/C
First Aid Kit (2)	Cuts/Burns	
Eye Wash (1)	Eye irritants	
Stretcher & Blanket (1)	Injured personnel	
<p>Location Index:</p> <p>(1) Maintenance Building</p> <p>(2) On Equipment</p>		

#### **E. EMERGENCY SPILL CONTROL NETWORK**

##### **E1. Arrangements with Local Emergency Response Agencies and**

**hospitals**

Prior to initiation of operations at the site, the local police department, fire department, and hospital will be contacted by a Chestnuthill Township representative. The contacted agency will be advised of the forthcoming operations, given a description of the operations, to include identification of materials managed and identification of possible types of injury to be encountered. Additionally, the contacted agencies will be offered a follow-up meeting and/or site visit to better familiarize them with the site and process and will be offered a copy of the PPC Plan. Due to the nature of the operations, special provisions beyond those noted herein are not felt to be necessary.

**E2. List of Agencies to be Notified**

PA Dept. of Environmental Resources	570/826-2511
National Response Center	800/424-7362
PA Emergency Management Agency	570/622-3729
County Control Center	911 or 570/424-2400
Police Department	911 or 570/424-3061



Fire Department

911 or 570/992-9911

Hospital

911 or 570/421-4000