



Recycling Technical Assistance Project # 510

Borough of West Reading, Berks County, PA

**Yard Waste Collection Options for a Non-
Mandated Recycling Community**

*Sponsored by the Pennsylvania Department of Environmental Protection
through the Pennsylvania State Association of Township Supervisors*

FINAL REPORT

November 2012

MSW CONSULTANTS

MidAtlantic Solid Waste Consultants

6225 Sawyer Road, New Market, MD

(301) 607-6428

842 Spring Island Way, Orlando, FL

(407) 380-8951

www.mswconsultants.us



This report was delivered electronically. If it is necessary to print hard copies, please do so on post-consumer recycled paper and recycle.

TABLE OF CONTENTS

1. STATEMENT OF THE PROBLEM	1
2. SUMMARY OF WORK COMPLETED.....	1
3. POSSIBLE SOLUTIONS	1
4. RECOMMENDATION	2
4.1 West Reading Borough Recycling	2
4.2 Potential Sites for Establishing a Yard Waste Drop-Off Facility	3
4.3 Contracted Curbside Seasonal Ward Waste Collection.....	5
4.4 Contracted “On-call” Yard Waste Collection Service.....	5
4.5 Fee for Service Approach	5
4.6 Amending Educational Aspects of West Reading Borough’s Web Site	6
4.7 Conclusion	6

List of Appendices

Appendix A – Kutztown Borough Yard Waste Management

Appendix B – Mechanicsburg Borough Leaf Waste Collection

Appendix C – North Cornwall Township Leaf Waste Management

Appendix D – North Lebanon Township Yard Waste Management

Appendix E – North Londonderry Township Yard Waste Management

Appendix F – Partial List of Yard Waste Hauling Contractors Serving the West Reading Borough Area

TABLE OF CONTENTS

This page intentionally left blank.

Recycling Technical Assistance Project #510

West Reading Borough, Berks County, PA

Yard Waste Collection Options for a Non-Mandated Recycling Community

1. Statement of the Problem

West Reading Borough intends to incorporate yard waste collection into its residential recycling program. This project examined the collection approaches of similar-sized municipalities and the availability of suitable locations for a yard waste drop-off site. Recommendations are made for a drop-off site location, site upgrades, and changes to the Borough's public outreach program for yard waste management.

2. Summary of Work Completed

The scope for this project included the following tasks:

- Surveying sites within, and adjacent to, West Reading Borough for yard waste drop-off site potential and examination of the Kutztown Borough yard waste drop-off site, service requirements and collection experience.
- Provision of up to three examples of municipal leaf waste or yard waste collection programs meeting Pennsylvania Act 101/PA DEP collection requirements.
- Recommendation of a yard waste drop-off site location for West Reading Borough, site improvements for public access, and for servicing the removal of yard waste.
- Recommendation of upgrades to the West Reading Borough public information outreach for yard waste management.
- Development of a draft project report for review and comment by the Township, and a final project report.

West Reading Borough Manager, Richard Sichler, was interviewed to elicit details about the Borough's current recycling and yard waste management practices and to gain a sense of direction for where he wishes to lead the Borough in improving yard waste collection options for Borough residents. Potential locations for a yard waste drop-off site were surveyed within West Reading Borough as well as a site in adjacent Wyomissing Borough. A site visit was made to Kutztown Borough, Berks County, to observe its yard waste facility and to obtain details of Kutztown's approach to recycling and yard waste management. A Kutztown Borough Yard Waste Management report is contained in Appendix A. The leaf and yard waste management practices of other similar municipalities were gathered and are reported in Appendices B through E. The recycling and yard waste education aspects of the West Reading Borough web site were reviewed to determine how the information could be amended to reflect a new approach to yard waste collection in the Borough.

3. Possible Solutions

The following potential options, or a combination of options, could be implemented by West Reading Borough if the costs can be borne by the Borough's budget or on a fee for service basis.

- Development of a controlled access yard waste drop-off site to be serviced by the Borough's Highway Department or the private sector.

- Contracted curbside yard waste collection service provided on a seasonal basis.
- Establishment of “on-call” yard waste collection through contracted service.

4. Recommendation

West Reading Borough should develop a request for bids for yard waste collection services. The bid document should be constructed to seek proposals for three alternate approaches to yard waste collection: 1) Seasonal curbside collection on a bi-weekly basis, 2) “On-call” curbside collection, and 3) Service to a yard waste drop-off collection site. A bidder may reply to any of the options. Evaluation of the responses to the request for bids will determine which approach, or approaches, are cost feasible. If none of the approaches are feasible, the Borough should weigh whether to base drop-off collection, or on-call collection, on a fee for service basis for those utilizing the service. The approaches are described in the following sections.

4.1 West Reading Borough Recycling



West Reading Borough sits west of, and opposite, the Schuylkill River from the City of Reading in Berks County. Streets within the Borough total approximately 60 miles. The Borough’s 2010 population of 4,212 is contained within an area of 0.6 square miles. Of 1,738 residential housing units, 1,625 were occupied in 2010. The Reading Hospital Medical Center and the VF Outlet Village are major employers in the Borough. With a population of less than 5,000, West Reading is not among the municipalities mandated to recycle by Pennsylvania’s recycling law, Act 101 of 1988. The Borough

contracts for municipal waste and curbside recycling collection but does not have residential curbside yard waste collection.

Over the past two years, West Reading has shifted its practice of using leaf vacuums and a three to four-man crew to collect leaves in the fall. It has successfully utilized a street sweeper to accomplish leaf collection via regular sweepings as leaves accumulate as well as a thorough curb-to-curb sweeping on each street twice each fall. Parking along the affected streets is restricted during the curb-to-curb sweepings. The collected leaves are deposited in bunkers at the Borough’s maintenance facility.

West Reading owns the shade trees along “planting strips” in the Borough. Collection of green waste, branches, and leaves from the planting strips is part of the Borough’s maintenance routine. Residents are responsible for maintaining trees on their properties, but may schedule tree trimming through the Public Works Department. Christmas tree collection is also part of West Reading’s program from the day after Christmas through January. Residents may place ornament-free trees within the planting strips for collection. Leaves in the Borough Park are collected with a small street sweeper. The Borough stockpiles the collected yard waste materials in bunkers at its maintenance facility. The materials are removed from the bunkers as capacity is reached, using Borough equipment and trucks, and delivered to one of several facilities.

Borough Manager Richard Sichler analyzed disposal and recycling quantities reported from December 7, 2010 to March 29, 2011. Using the figure of 496.94 tons collected over 112 days, Mr. Sichler projected that 1,619.5 tons of combined municipal solid waste (MSW) and recyclables are generated per year, for an average of 4.4 tons generated per day. He further determined an average generation rate of 0.38 tons per capita per year and an average of 0.97 tons per household generated per year.

The Borough's MSW and recycling collection contractor is Eagle Disposal of East Earl, Lancaster County. The Borough's single stream recyclables are processed at the Waste Management Recycle America Facility in York County. The landfill tipping fee for MSW was reported as \$78/ton.

West Reading sought a price for curbside collection of yard waste in its previous bid for municipal solid waste and recycling services but found that the \$14,000 per year quote was too expensive to include in the collection contract. The Borough budgeted \$366,458 for MSW and recycling collection, processing and disposal in 2011 and spent \$361,712.

4.2 Potential Sites for Establishing a Yard Waste Drop-Off Facility

West Reading Borough has very little open space available that could be developed to accommodate a yard waste drop-off facility. Sites examined for this project included:

- The West Reading Borough Park at Parkside Drive and Museum Ave.,
- The Joint Municipal Authority of Wyomissing Valley property in Wyomissing Borough, and
- The West Reading Borough Maintenance Facility at S. First and Chestnut Streets.

West Reading Borough Park

The 23-acre West Reading Borough Park contains a community swimming pool, tennis and basketball courts, an athletic field, a stone pavilion, walking trails and a playground. A strip of vacant grassy ground is located near the far eastern end of the park just north of Wyomissing Creek. Although the area is limited to several hundred square feet, it could support locating a 30 or 40 cubic yard roll-off container on the grounds in which residents could deposit grass clippings, leaves, brush and branches through an open door on one end of the roll-off.



A paved roadway to the site is accessible from Parkview Road opposite the West Reading Fire Department; however, a paved turnaround area for vehicles would need to be provided. The area is shielded from the park's athletic field by park buildings but, is visible from a playground above the site.



Project #510
West Reading Borough, Berks County, PA
Yard Waste Collection Options for a Non-Mandated Recycling Community

The Joint Municipal Authority of Wyomissing Valley property



A maintenance area east of the Joint Municipal Authority of Wyoming Valley’s wastewater treatment facility sits within Wyomissing Borough. Although West Reading Borough is a founding member of the Joint Municipal Authority, permission from the Authority would be required for the Borough to develop a yard waste drop-off site on the property. Since Wyomissing Borough provides contracted yard waste collection for its residents, potential use of a drop-off facility by Wyomissing residents might limit Wyomissing’s interest in having a yard waste drop-off facility within its boundaries.

The Authority’s maintenance area has excellent access from Old Wyomissing Road, as the road ends just east of the site and traffic is limited. Entrance into the maintenance yard is restricted by a locked gate. Materials presently stored on the site would need to be relocated in order to accommodate a yard waste drop-off site. One or both of the two buildings on the site could host a surveillance camera to monitor the site. The natural relief at the rear portion of the site might be utilized to create a pad several feet below the elevation of the maintenance yard on the Wyomissing Creek side. A 30 or 40-yard roll-off container stationed on the pad would permit patrons to unload their vehicles by dumping materials down into the roll-off, a technique used at the Kutztown Borough yard waste drop-off facility (Appendix A).



The West Reading Borough Maintenance Facility



West Reading Borough currently stockpiles collected leaf and yard waste in bunkers at its Maintenance Facility at South First and Chestnut Streets. The area leading to the bunkers is fenced and has two access gates. The gate at the mid-point of the area offers the best access to the property.

Four railroad tie bunkers sit beneath an elevated highway. Although the site is mostly sheltered by the roadway, there is a need to improve drainage should it be designated for public access. Since the site is on Borough property with controlled access, it offers the best opportunity for development into a public drop-off site for yard waste. It is located, however, within the flood plain of the Schuylkill River.



The Borough uses a loader-equipped backhoe and a skid steer, equipped with a high reach loader attachment to load its 20-ton capacity tri-axle dump truck when it is necessary to remove the accumulated yard waste for processing. Truckload quantities range from 10 – 15 tons/load. The frequency of removal ranges from once every two months during winter, spring and summer, to as much as four times a month in the fall leaf collection season. The Borough pays \$120/truckload to unload the materials at Ridgewood Soils in Reading. West Reading has also delivered yard waste to Zwicky Processing and



Recycling in Robesonia, Berks County, for a fee. A preferred destination is a private landowner who does not charge a fee for deposit of the material for use as a mulch to suppress understory plant growth in his woodlot. West Reading Borough budgeted \$2,000 for leaf disposal fees in 2011.

4.3 Contracted Curbside Seasonal Ward Waste Collection

Restricting the number of months requiring contracted collection of yard waste within the Borough may result in a lower bid price for the service. Neighboring Wyomissing Borough contracts for weekly yard waste collection from mid-March to mid-December, or approximately 10 months/year. Reducing a collection timeframe to seven months (say, mid-May to mid-December) and/or reducing the collection frequency to twice monthly should result in a lower price quote in a competitive bid. A list of West Reading area yard waste haulers is presented in Appendix F.

4.4 Contracted “On-call” Yard Waste Collection Service

The Borough of Mechanicsburg, Cumberland County, has used an “on call” system for yard waste collection, and is again requesting a price for the service in its 2012 bid for services.¹ The Borough’s annual cost for the service, under its current contract has held at \$12,000/year for five years. That cost, however, is tempered by a requirement that collected materials be deposited by the contractor at the Borough’s Joint Composting Facility that is operated with neighboring Silver Spring Township. There is no tipping fee for deposit of yard waste at the facility, which is located next to the Borough’s Wastewater treatment plant. West Reading could similarly require collected yard waste to be deposited at its Maintenance Facility to avoid a collection contractor’s tipping fee at an alternate site. Additional details on Mechanicsburg’s approach can be found in Appendix B.

4.5 Fee for Service Approach

The Greater Lebanon Refuse Authority, Lebanon County, charges a tipping fee per load for yard waste brought to its composting site, and charges for compost products taken off site. Several municipalities within Lebanon County charge their residents, and some charge residential contractors, for dropping off leaf or yard waste at municipally operated composting facilities. Access to the composting sites is restricted to those residents who pay the fee. This approach puts some of the burden of funding facility operational costs on those using the service. The system is akin to operating the composting facilities as a business.

The municipal fees are typically assessed through an annual registration program with costs in the range of \$25 to \$30 per year for residents. North Lebanon Township accommodates residential contractors for a fee of \$250 per year. North Lebanon and North Londonderry Townships issue

¹ The Mechanicsburg contract was too long to be included as an appendix to this report, but a copy was provided to West Reading Borough as part of this project.

access key cards that electronically trigger their facility gates when swiped across a sensor mechanism. In North Lebanon Township, the annual fee entitles registrants free access to mulch produced at the facility if it is self-loaded into vehicles or trailers. If Township equipment is used to load the vehicles, or if material is delivered, charges are applied according to the size of the loads. North Londonderry Township sells its compost products by the container or by the cubic yard. North Cornwall Township requires site users to display an inexpensive printed mirror hang tag in their vehicles to access its drop-off site. The tags are color coded by the municipalities using the site. Appendices C through E describe details of these Lebanon County Township programs.

4.6 Amending Educational Aspects of West Reading Borough's Web Site

Since a clear direction for altering the yard waste collecting practices of West Reading Borough will ultimately be determined by the Borough, specific recommendations for improving educational messages on the Borough's web site cannot be offered as part of this report. Generalized recommendations include:

- Notifying residents of the yard waste drop-off program participation requirements, should it develop, including registration procedures, the location of the facility and its days and hours of operation, acceptable materials for delivery to the drop-off facility, and prohibited materials such as oversized tree parts and plastic bags.
- Notifying residents of the features of an on-call yard waste collection program, should it be adopted, including call-in requirements, collection days, acceptable materials, materials preparation requirements, and prohibited materials.
- Encouraging "grasscycling" through the use of mulching mowers in order to avoid a need to place grass clippings at the curb for collection.
- Encouraging back yard composting techniques with the assistance of the Berks County Cooperative Extension.

4.7 Conclusion

Improving yard waste collection practices in West Reading Borough will come at a cost. A least cost approach would be to continue present services without change, including seasonal removal of leaves from West Reading streets, servicing of the planting strips containing Borough-owned shade trees, residential tree trimming by Borough staff, and collection of Christmas trees. Establishing a yard waste drop-off site by allowing residential access to the bunkers at the Borough Maintenance Facility, and controlling that access, should be achievable without a significant increase to existing operational costs. The cost of establishing an on-call curbside collection program for yard waste can be tempered by setting collections on a twice-per-month basis and limiting the number of months the service is available. A competitive bid for the service can compare the private sector cost against the Borough's Highway Department's cost.

If the costs of expanding access to the drop-off site, or the cost of on-call curbside yard waste collection service prohibit implementation, a fee-for-service registration approach could pass the cost of service back to those residents using the service.

The Borough of West Reading should weigh these options and determine whether to institute a change to its present approach to managing the yard wastes generated within its boundaries.

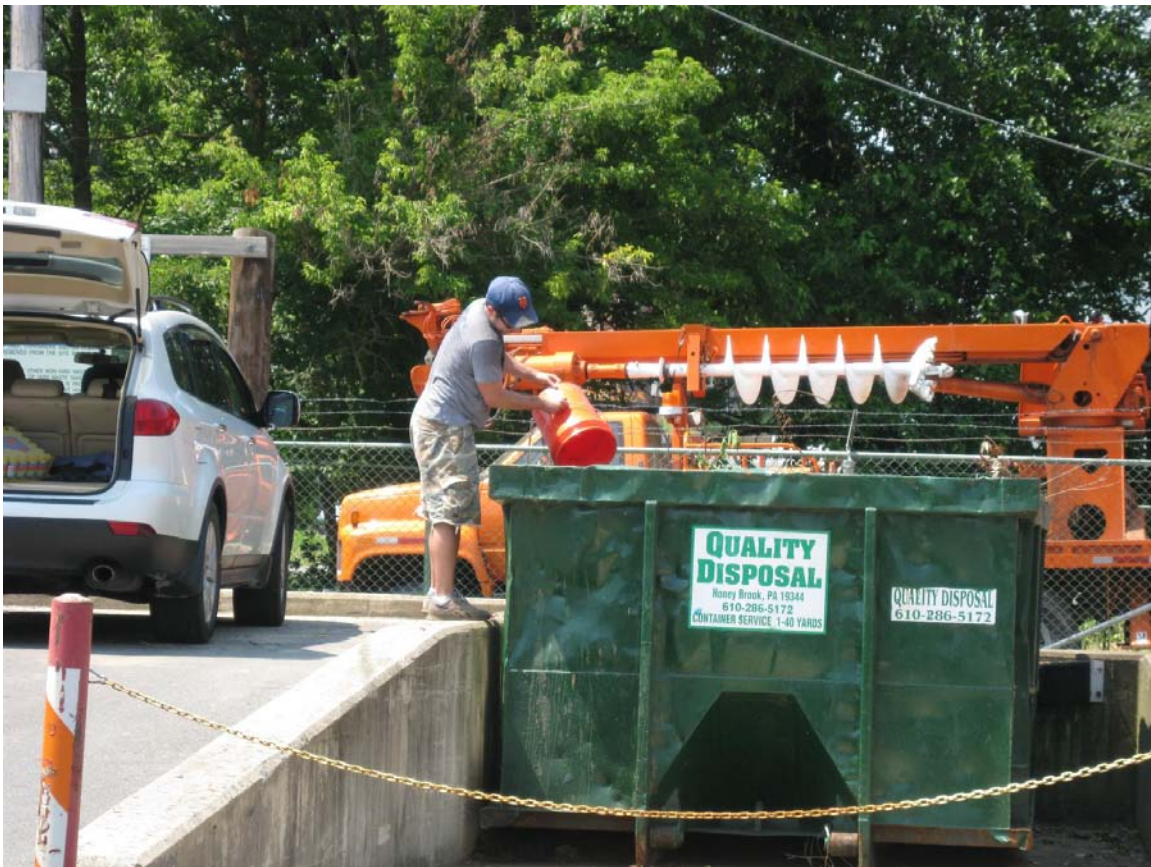
APPENDIX A
KUTZTOWN BOROUGH YARD WASTE
MANAGEMENT

This page intentionally left blank.

Kutztown Borough Yard Waste Management

Kutztown Borough, Berks County, Pa. (population 5,012) has a unique approach to municipal waste management; the Borough provides all MSW and recycling collection service within the Borough. Kutztown continues to rely on source separated collection of recyclables from residents, businesses and schools. The Borough maintains the separation of three colors of glass, aluminum cans, steel cans, HDPE plastic containers and PET plastic containers at its storage facility at the public works yard. The Borough directly markets the recyclables. Glass is crushed and sold loose by color, and the remaining materials are processed into bales with a down stroke baler.

In addition to providing seasonal leaf collection, Kutztown Borough maintains a drop-off facility for leaf and yard waste. The facility consists of a wide, ramped, elevated and paved platform with twin 30 cubic yard roll-off containers on either side of the platform. This configuration allows residents to pull their vehicles up the ramp and park on the platform to unload leaf and yard waste down into the container.



Signs posted above the platform remind users of the acceptable materials that may be placed in the containers. Two surveillance cameras provide an extra measure of quality assurance. The facility was constructed in 2004 for \$50,000. Ninety percent of the capital cost was reimbursed to the Borough through a PA DEP Act 101 Section 902 Recycling Grant.

Kutztown advertises a bid for services annually for transporting the roll-off containers to a PA DEP approved composting facility. The contractor at the time of the June 2012 site visit was Quality Disposal of Honeybrook, Chester Co., Pa. The Borough budgets \$24,000 annually for the collection and transportation service.





Kutztown Boro. Yardwaste Composting Facility, 45 Railroad Ave, Kutztown, PA 19530.
Norm Milnes, Public Works Supt., (610)-683-3202, publicworks@kutztownboro.org

This page intentionally left blank.

APPENDIX B

**MECHANICSBURG BOROUGH LEAF WASTE
COLLECTION**

This page intentionally left blank.

Mechanicsburg Borough Leaf Waste Collection



The Borough of Mechanicsburg, Cumberland Co., Pa. (population 8,981), offers three leaf waste management options for its residents: Self-haul to the Mechanicsburg Borough-Silver Spring Township Joint Composting site, seasonal leaf vacuum collection in the fall, and on-call leaf waste collection between April 1 and October 31 each year.

The on-call leaf waste collection program was a feature of the Mechanicsburg's bid for Refuse and Recycling Collection in September 2007. The Borough requested a separate price quote from potential bidders for the on-call leaf waste collection service. Mechanicsburg received four responses ranging from \$0.23 to \$1.15 per dwelling unit/month. The winning bidder, Penn Waste of Emigsville, York Co., offers the service for \$0.25/dwelling unit/month or \$3/dwelling unit/year. Mechanicsburg's current one-year cost is \$9,894 to provide the on-call leaf waste collection service for 3,298 dwelling units. The cost of the service has been paid from Mechanicsburg's Act 101 Section 904 Recycling Performance Grant over the current five year contract period.

In order to have leaf waste collected curbside, a resident must call the Borough office to schedule collection. Mechanicsburg provides a list of leaf waste stops to the hauler by 3:00 on the day prior to collection day (presently Wednesday). The hauler is required to keep the collected leaf waste segregated from other materials and deliver the leaf waste to the Joint Composting Facility. For the purposes of the collection service, leaf waste is defined as "garden residue, shrubbery, tree trimmings and similar materials no longer than six (6) feet in length and six (6) inches in diameter."

The Borough has been very pleased with the service provided by its current hauler, according to Glenda Boyer, Mechanicsburg's Assistant Secretary and Recycling Coordinator. The Borough's MSW and Recycling collection contract will go out for bid in September 2012 and will again include the on-call leaf waste collection service.

Mechanicsburg Borough, 36 W. Allen St., Mechanicsburg, PA 17055.
Glenda Boyer, Assistant Secretary and Recycling Coordinator, (717) 691-3310 x102,
gboyer@mechanicsburgborough.org

Joint Compost Facility Rules

- You must be a resident of Silver Spring Township or the Borough of Mechanicsburg. This site is for waste generated on properties from the municipalities listed and transported by the resident or by municipal staff, NOT BY COMMERCIAL LANDSCAPING BUSINESSES.
- Leaves, brush, and shrubbery clippings are acceptable.
- Grass clippings, garbage, dirt, stones, fruits and vegetables WILL NOT be accepted. (including CORN FODDER)
- Treated lumber, landscaping timber, cross ties, painted wood, wooden furniture and construction & demolition debris are not acceptable.
- Trash, household hazardous waste, medical waste, bulky items (appliances, furniture), tires & scrap metal are prohibited.
- No branches over twenty four (24) inches in diameter, and no tree stumps permitted.
- NO BAGS OR CONTAINERS TO BE LEFT AT THE SITE.
- This site is under video surveillance 24 hours a day and you are so notified that your visit to this site will be recorded.
- Anyone Violating any of the above rules will be subject to applicable fines and/or penalties as the law allows.
- No skateboarding, rollerblading, bicycling or similar activities permitted.
- Use of this site is at your own risk. Due to the possibility of numerous residents entering and exiting the site simultaneously, there is a need to exhibit extra caution and care when utilizing this facility.
- If you have any questions please call the Township office at (717)766-0178 or Borough office at (717)691-3310

Rules sign at entrance to the Mechanicsburg Borough & Silver Spring Township Joint Composting Facility.

APPENDIX C
NORTH CORNWALL TOWNSHIP LEAF WASTE
MANAGEMENT

This page intentionally left blank.

North Cornwall Township Leaf Waste Management

North Cornwall Township, Lebanon County, Pa. (population 6,403) created a leaf waste drop-off feature at its Recycling Drop-off Site in 2008. The facility is open to residents of North Cornwall Twp., South Lebanon Twp. and Cleona Borough on a permit system at an annual cost of \$30 per permit. The Township does not offer permits to the private sector. Participating residents are issued mirror hang tags, color coded by municipality, to access the site, which is located adjacent to the Township building. Access to the facility is also available on a pay-as-you-go rate of \$4.00 per 35 gallon bag or container of leaf waste. Larger quantities of leaf waste will only be accepted under the annual permit fee system.



North Cornwall Township applied for, and received, an Act 101 recycling grant for a key card access system to control access to the drop-off site. Residents using the facility under the annual permit system will be issued plastic key cards in place of the color-coded mirror hangers when the construction of the access gate is completed (expected in 2012). The cost of the key card system is estimated at \$8,900, including 500 access cards. Installation of the key card system is expected to be completed by the fall of 2012.

The Township may consider incorporating a security camera to the drop-off site at the same time the key card system is installed. The cost of the security camera system is approximately \$2,200 and will be at the Township's expense.



The drop-off facility consists of a pit that receives leaf waste unloaded by residents. The pit is sized to house a 30 cu.yd. roll-off container. Based on experiences with uneven loading, the roll-off container is now placed outside of the pit. Leaf waste materials deposited in the pit are loaded with the Township's front-end loader into the roll-off on an as-needed basis. The roll-off is hauled by the Township's Highway Department approximately 1-2 times/month to the City of Lebanon compost facility, where the leaf

waste is transferred. The City of Lebanon contracts with Natural Soil Products in Tremont, Schuylkill Co., for disposition of its yard waste.

Grass clippings are not accepted at drop-off facility. Instead, the Township promotes grasscycling with mulching mowers and backyard composting as alternatives. North Cornwall Township provides seasonal leaf waste collection for its residents in the spring and fall, including two weeks in April and October. The Township collects leaves during the fall in October through December. Christmas trees have been accepted from any resident for the past three seasons.



North Cornwall Township Leaf Waste Drop-off Site, 320 South 18th St, Lebanon, PA.
Jean Long, Recycling Coordinator, (717) 273-9200, jlong@nctown.org

APPENDIX D

**NORTH LEBANON TOWNSHIP YARD WASTE
MANAGEMENT**

This page intentionally left blank.

North Lebanon Township Yard Waste Management

North Lebanon Township, Lebanon County, Pa. (population 10,629) controls entry to its yard waste drop-off facility through a key card access gate. Residents pay \$30/year to utilize the site. Contractors serving North Lebanon Township residential properties are permitted to use the Township's compost facility for a \$250 annual fee. The fees have been adjusted once since 2004, when residents were charged \$20 and contractors \$200.

The current drop-off facility replaced a yard waste drop-off site that was subject to illegal dumping problems. The site was located next to the Township's salt shed; it was accessible from a major road and was not visible from the Township building. The Township took several steps to control the problem. The drop-off site was relocated to an area directly adjacent to the Township office. Next, the Township applied for and received a PADEP Act 101 recycling grant for a key card access control system, site fencing and site paving, which cost \$18,185.50 in 2004 dollars. Two surveillance cameras were added to the facility in 2006 at a cost of \$3,963.90. With the new location, key card access and surveillance cameras, the Township was able to control who and what was entering the facility, and identify persons abusing the site.

The Township initially issued 400 access cards at a cost of \$1,056. Beginning in January each year, patrons buy a new card to access the site. 1,100 key cards were in use in 2012.



North Lebanon Township key card gate access swiping mechanism.

North Lebanon Township uses two leaf vacuums to collect leaves in the fall. In 2011, 3,633 tons of the Township's leaves were hauled by Natural Soil Products to its compost facility in Tremont, Schuylkill County. The Township performs a spring clean-up collection for assorted yard waste with a grapple-mounted front-end loader. Materials collected in 2011, including 86 truckloads between 10 and 20 cu.yds. each, were delivered to the yard waste drop-off facility for processing into wood chips through a Bandit Model 2680 Beast horizontal grinder.

After an initial grind, leaves and grass clippings dropped off at the site are added to the wood chips for a second grind that produces a mulch product. The mulch is free to any resident who has an access card. The Township charges a loading fee of \$10/scoop for residents who don't or can't load mulch themselves. The Township also delivers mulch for a fee of \$30 for three loader scoops or \$70 for a six scoop truckload.



North Lebanon Township automated gate in open position.

The Township designates an area for the drop-off Christmas trees by any resident outside of the facility gate. North Lebanon is in the process of expanding its yard waste drop-off facility to include windrow composting.

North Lebanon Township Yard Waste Drop-off Facility, 725 Kimmerlings Rd., Lebanon, PA 17046. Bonnie Grumbine, Recycling Coordinator, (717) 273-7132, bgrumbine@comcast.net

APPENDIX E

**NORTH LONDONDERRY TOWNSHIP YARD
WASTE MANAGEMENT**

This page intentionally left blank.

North Londonderry Township Yard Waste Management

North Londonderry Township, Lebanon County, Pa. (population 6,771) provides seasonal leaf waste collection and monthly curbside brush chipping for its residents, and operates a yard waste composting facility. Residential yard waste is accepted at the composting facility during daylight operating hours on a seasonal schedule, seven days/week. The facility is paved with asphalt and is surrounded by fencing. The Township uses the windrow method of composting.



The Township restricts access to the site to residents who pay a \$25 annual registration fee. Those registering are provided with a plastic key card that opens an automated gate with a swipe of the card. The key cards are not available to the private sector as the facility does not accept commercial yard waste.



North Londonderry Twp. compost site access key card and swiping sensor.

Approximately 50 percent of the operating cost of North Londonderry Township's yard waste composting facility is covered by the access key card registration fees.

Four segregated concrete bunkers are provided inside the compost facility for drop-off of grass clippings, leaves, garden residues, and branches and shrubbery. Grass clippings are tow-behind windrow turner. The addition of a nitrogen source such as grass clippings boosts the decomposition of leaves into compost. Brush and branches are ground into wood chips with a refurbished tub grinder. Wood chips are sold as is or are stacked with a front-end loader into piles where they render into mulch over time. The Township uses a trommel screen to remove undesired items from the compost and mulch and size them into nursery quality products.



Any person with proof of Township residency may purchase the three products produced at the facility: mulch, plant bedding, and wood chips. Sample buckets of each material are displayed in the Township office where a flyer is available with a schedule of product costs and operating hours. 30-gallon containers may be filled with any of the products for \$2.00. The Township provides bulk loading with its front-end loader on Fridays at a cost of \$12/scoop (approx. 2 cu.yds.). The cost for self loading the same quantity of mulch, plant bedding, or wood chips is \$12/load.



Three roll-off containers are stationed within the site for drop-off of recyclable cardboard, newspaper and office paper. The Township is considering moving the roll-off container to the outside of the fenced area; however, incidents of dumping are better controlled through the key card access system.

North Londonderry Township Yard Waste Composting Facility, 655 E. Ridge Rd, Palmyra, PA 17078.

Mike Booth, Assistant Manager, (717) 838-1373. MikeB1@Nlondtwp.com.

APPENDIX F

**PARTIAL LIST OF YARD WASTE HAULING
CONTRACTORS SERVING THE WEST READING
BOROUGH AREA**

This page intentionally left blank.

Partial List of Yard Waste Hauling Contractors Servicing the West Reading Borough Area

A J Blosenski, Inc.	Elverson, Chester Co.	(800) 343-6583
Cougles Recycling, Inc.	Hamburg, Berks Co.	(610) 562-8336
Eagle Disposal of PA, Inc.	East Earl, Lancaster Co.	(717) 255-9560
Quality Disposal Service, Inc.	Morgantown, Berks Co.	(610) 286-5172
Republic Services, Inc.	Leesport, Berks Co.	(610) 926-9132
Two Particular Acres	Royersford, Montgomery Co.	(610) 454-9635
Waste Management, Inc.	Gilbertsville, Montgomery Co.	(800) 869-5566
Zwicky Processing and Recycling, Inc.	Robesonia, Berks Co.	(484) 556-4213

This page intentionally left blank.