

**SWANA RECYCLING
TECHNICAL ASSISTANCE STUDY**

FINAL REPORT

**NEW LONDON TOWNSHIP
EVALUATION OF RECYCLING AND SOLID WASTE
COLLECTION ALTERNATIVES**



GANNETT FLEMING, INC.



HARRISBURG, PENNSYLVANIA

APRIL 2005

**SWANA RECYCLING
 TECHNICAL ASSISTANCE STUDY
 FINAL REPORT
 NEW LONDON TOWNSHIP
 EVALUATION OF RECYCLING AND SOLID WASTE
 COLLECTION ALTERNATIVES**

Table Of Contents

	<u>Page</u>
1.0 INTRODUCTION	1
1.1....Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act	1
2.0 BACKGROUND	3
2.1....Demographic Comparison	3
2.2....Estimated New London Municipal Waste Generation	4
3.0 EXISTING NEW LONDON AND NEIGHBORING TOWNSHIP SOLID WASTE AND RECYCLING COLLECTION SYSTEMS	5
3.1....New London Township and the SECCRA Drop-off Recycling Program.....	5
4.0 RECYCLING MARKETS.....	6
4.1....Single Stream Collection	6
4.2....Expanding International Recycling Markets.....	7
4.3....Chester County’s Cooperative Marketing Program.....	7
5.0 GRANTS AND AVAILABLE REVENUE	8
5.1....Section 902. Grants For Development And Implementation Of Municipal Recycling Programs	8
5.2....Section 904. Performance Grants For Municipal Recycling Programs	8
5.3....Section 701. Recycling Fee For Municipal Waste Landfills And Resource Recovery Facilities	9
5.4....Available Revenue	9
6.0 CONCLUSIONS AND RECOMMENDATIONS	10
6.1....Contracting Municipal Waste Collection Services.....	11
6.2....Recycling Collection Services	12

APPENDICES

- Appendix A – Bid Specifications
- Appendix B – Sample Solid Waste and Recycling Ordinances
- Appendix C – Sample Educational Materials
- Appendix D – PADEP Municipal Recycling List
 Chester County Recycling Table
 Recycling Flyer
- Appendix E - Processing and Marketing List of Participating Municipalities

**SWANA RECYCLING
TECHNICAL ASSISTANCE STUDY
FINAL REPORT
NEW LONDON TOWNSHIP
EVALUATION OF RECYCLING AND SOLID WASTE
COLLECTION ALTERNATIVES**

1.0 INTRODUCTION

Through the partnership with the Solid Waste Authority of North America (SWANA), the Pennsylvania State Association of Township Supervisors, and the Pennsylvania Department of Environmental Protection (PADEP), New London Township was awarded \$6,000 in technical assistance that was provided by Gannett Heming, Inc. Gannett Fleming (GF) assisted New London Township with the following three tasks:

- Task #1** GF assisted the New London Township citizen committee in assessing the available options for collecting and handling municipal solid waste and recyclables that are generated by Township residents and businesses.
- Task #2** GF researched and gathered sample documents that municipalities utilize in establishing their solid waste and recycling programs and the particular items that may be appropriate for New London Township to include in their documents.
- Task #3** GF researched and developed sample educational materials that the New London Township committee and officials can use as models.

New London Township requested this assistance due to its rising population and increased housing density, and the over all effect these changes have on the Township's legal obligations under Commonwealth law and its overall responsibility to its residents.

1.1 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act

The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, commonly called Act 101, stipulates the responsibilities of municipalities for establishing residential, curbside recycling programs:

Section 1501. Municipal implementation of recycling programs.

(b) Small population.-Within three years after the effective date of this act, each municipality other than a county that has a population of more than 5,000 people but less than 10,000 people, and which has a population density of more than 300 people per square mile, shall establish and implement a source-separation and collection program for recyclable materials in accordance with this section. Population shall be determined based on the most recent decennial census by the Bureau of the Census of the United States Department of Commerce.

It must be noted that Act 101 does not require municipalities to provide curbside collection of waste for its residents. In addition, the Pennsylvania Department of Environmental Protection (PADEP) recognizes three basic systems that municipalities can use to provide curbside collection of recyclables:

- Collection of recyclables by the municipality and municipal workers
- Collection of recyclables by one private collection company (in some cases more than one company) under a sole contract with the municipality
- Collection of recyclables by any number of private collection companies under private subscription with residents

The last option (private subscription) can be the simplest method for the affected municipality because there is often very little municipal involvement and the residents are primarily responsible for securing collection service. New London Township has chosen to research the feasibility of establishing the second option (contracting with a single hauler) for both waste and recyclable collection services for its residents.

Based on year 2000 US Census data, New London Township is not currently mandated to provide curbside collection of recyclables. However, the Township is growing and the population / housing density may support the implementation of a contracted curbside collection system. New London Township officials are also assessing the need for, and viability of, establishing contract waste and recycling collection services in protecting the health and safety of their residents and the overall environmental conservation and protection of resources.

Determining whether New London Township should provide curbside solid waste & recycling collection services to its residents requires analyzing a number of factors and several key data indicators. Two categories are of specific importance: the geographic and demographic nature of the municipality, and the collection and handling services (e.g. markets) available in the area surrounding the municipality.

Sections 2.0 and 3.0 of this report look at these two important categories, including New London Township's existing population; recent & projected population growth rates; population density; the number of housing units; and the housing unity density. Analysis of this data, combined with industry standards of generation rates for residential solid waste and recyclables, helps define the overall need, relative cost, potential benefits, and possible disadvantages of a providing these municipal services to residents.

Sections 4.0 and 5.0 review the impact that recycling markets and the availability of grants and projected revenue would have on New London Township's ability to establish a municipal-wide curbside recycling program. Section 6.0 offers conclusions and recommendations, based on the data and analysis contained in the previous sections and other pertinent criteria.

Several sections of information have been included separately as appendices.

Appendix A provides general content of bid specifications for solid waste and recycling collection services. **Appendix B** provides a sample solid waste and recycling ordinance. **Appendix C** provides example educational materials that may be needed or helpful for New London Township to implement solid waste & recycling collection services to its residents.

Appendix D contains a PADEP municipal recycling list, a Chester County Recycling Table, and a Chester County Recycling Flyer. **Appendix E** provides a list of municipalities currently participating in Chester County’s cooperative marketing program that is described further in Section 4.3 of this report.

2.0 BACKGROUND

This section lists the geographic & demographic data for New London Township and the surrounding area. New London Township is located near the south central border of Chester County. The Chester County Planning Commission designates New London Township as Rural/Suburban in character.

2.1 Demographic Comparison

The following three tables provide a relative comparison of New London Township with its six bordering municipalities in important demographics. West Grove Borough is not included in this comparison due to the significant differences in the demographic features of this Borough with that of New London Township.

Municipality	Square Miles	1990 Population	1990 Population Density	2000 Population	2000 Population Density	2010 Estimated Population	2010 Estimated Population Density
East Nottingham	20.03	3,841	191.8	5,516	275.3	7,240	361.5
Elk	10.23	1,129	110.4	1,485	145.2	1,520	148.6
Franklin	13.25	2,779	209.7	3,850	290.7	5,130	387.2
London Grove	17.21	3,922	227.9	5,265	305.9	6,870	399.2
Lower Oxford	18.21	3,264	179.2	4,319	237.2	5,580	306.4
New London	11.86	2,721	229.4	4,583	386.5	6,390	538.8
Penn	9.59	2,257	235.3	2,812	293.2	3,610	376.4

Municipality	1990 Population	2000 Population	1990 – 2000 Population % Increase	2010 Estimated Population	2000 - 2010 Estimated Population % Increase
East Nottingham	3,841	5,516	43.6%	7,240	31.3%
Elk	1,129	1,485	31.5%	1,520	2.4%
Franklin	2,779	3,850	38.5%	5,130	33.2%
London Grove	3,922	5,265	34.4%	6,870	30.5%
Lower Oxford	3,264	4,319	32.3%	5,580	29.2%
New London	2,721	4,583	68.4%	6,390	39.4%
Penn	2,257	2,812	24.6%	3,610	28.4%

Municipality	Sq. Miles	2000 Housing Units	2000 Housing Density	2000 Persons per Household
East Nottingham	20.03	1,837	91.7	3.13
Elk	10.23	527	51.5	2.88
Franklin	13.25	1,237	93.4	3.18
London Grove	17.21	1,698	98.7	3.12
Lower Oxford	18.21	1,018	55.9	3.04
New London	11.86	1,390	117.2	3.36
Penn	9.59	1,093	114.0	2.65

The above tables indicate that New London Township has the highest population density, the greatest percentage of projected population increase (2000-2010), and the greatest number of people per household (year 2000), when compared to these surrounding municipalities.

These demographic factors significantly influence both the necessity for, and the economic feasibility of New London Township providing curbside solid waste and recycling collection services to its residents.

2.2 Estimated New London Municipal Waste Generation

Using the Township's population, the municipal solid waste generation can be calculated. First, the standard waste generation rate, as determined by the US EPA, is approximately 0.8 tons per person per year. Using this figure and New London Township's current and projected population, approximately 3,700 tons of municipal solid waste were generated by New London Township in 2000. This figure is estimated to rise to 5,100 tons in 2010. Chester County, however, typically reports a higher waste generation rate to PADEP. Using the higher Chester County rate, the projected amount of waste generated New London Township is expected to increase to approximately 6,800 tons in 2010.

Given New London Township's geographic size and housing density, the waste is being generated in less than 12 square miles by approximately 1,400 households. As the number of residents and housing units in New London Township rise, the quantity of waste generated per square mile will also increase. As these changes occur, the cost of collecting each ton of waste decreases.

The total cost of providing residential solid waste collection services typically includes the actual collection service and disposal cost of the waste (i.e. tip fee). Under the Chester County Solid Waste Plan, the municipal solid waste generated and collected from within New London Township must be taken the Southeastern Chester County Refuse Authority (SECCRA) Landfill. The per ton price of waste disposal for New London Township is, therefore, a known, fixed cost and will not be impacted by the quantity of waste generated or collected.

3.0 EXISTING NEW LONDON AND NEIGHBORING TOWNSHIP SOLID WASTE AND RECYCLING COLLECTION SYSTEMS

New London Township and the six neighboring townships listed in Section 2.0 of this report currently do not provide solid waste and recycling collection services to their residents through either direct municipal or contract collection. Residents of these communities privately subscribe with one of several local haulers at an average cost of \$240 per year.

West Grove Borough is the closest municipality to New London that has a contract collection system for municipal waste and recyclables. West Grove Borough is not included in this overall comparative analysis due to its distinct demographic difference with New London Township.

Neither New London Township nor the surrounding municipalities previously considered municipal contract collection feasible or efficient due to relatively low population and housing density. The timing appears ripe, considering New London's growth and other factors, for taking a hard look at contracting with a hauler to provide curbside collection services. There may also be some opportunity for New London to join with one or more local municipalities in securing a hauler for curbside collection services. For example, as stated in Section 1.0 of this report, London Grove was recently mandated by Act 101 to provide a curbside recycling program. This may present an opportunity for New London Township to partner with London Grove in providing curbside waste and recycling collection services for their residents. Another example is Penn Township, located to the north of New London. Penn Township, like New London, is a rapidly growing municipality that has a sizeable hospital, a number of smaller businesses, and a growing number of residents that may benefit from a contract for municipal waste and recyclables collection services. Penn Township, however, has been resistant to moving in this direction alone. There may be an opportunity to work together in a joint or multi-municipal arrangement with this municipality.

More generally, the majority of Chester County recycling programs accept commingled recyclables in one container and paper in a separate container. For additional information on these programs, a municipal recycling list from PADEP, the curbside recycling table for Chester County municipalities, and a recycling flyer provided by Chester County's Recycling Coordinator has been included in **Appendix C**.

3.1 New London Township and the SECCRA Drop-off Recycling Program

New London Township has one drop-off recycling site that is implemented by SECCRA as part of a program that offers individual homeowners (in a number of municipalities with drop-off sites) an opportunity to recycle. The SECCRA drop-off program has approximately eleven public drop-off sites and encourages residents to participate in recycling by not charging a fee. In discussions between GF and a representative from SECCRA, SECCRA indicated that it did not encourage haulers under contract with a municipality to provide curbside recyclables collection to take collected recyclables to SECCRA for consolidation and transport to market. SECCRA wishes to continue to offer recycling services to residents at no cost. Additionally, SECCRA recognizes the additional processing and transportation costs resulting from accepting loads of recyclables would increase costs to a point where SECCRA would have to charge residents a fee for providing recycling services. SECCRA currently takes recyclables to Blue Mountain Recycling in Philadelphia.

4.0 RECYCLING MARKETS

When developing a curbside program it is important to identify the best local recyclables outlets, understand recycling market trends, and when possible, take materials to the closest recycling markets that are being successfully used by other local municipal recycling programs. In other words, be consistent with what other programs are already doing. Based on discussions with the Chester County Recycling Coordinator, the majority of curbside programs in Chester County have implemented recycling programs that collect commingled materials in one container and paper in a separate container. The typical recyclable materials collected at the curbside are presented in the recycling flyer presented in **Appendix D**. This list of materials represents materials already being accepted by markets serving as outlets for Chester County, and is a good reference for determining what materials could be accepted in a curbside recyclables collection program for New London Township.

Over the past few years, the collection, handling, and marketing of recyclable materials has both expanded and consolidated. The major national collection and disposal corporations have developed new, more efficient systems for collecting both waste and recyclables. These same companies have implemented routine operational systems at many of their material recovery facilities (MRF's) to meet the emerging international demands and standards. The overall waste and recycling handling stream has been impacted by two specific factors described in the following two subsections.

4.1 Single Stream Collection

First, is the development of "single stream" collection of recyclable materials. In single stream recycling programs, all materials - cans, bottles, paper and other recyclables - are commingled in one container by residents for collection at the curb. The goal of single stream recycling is to increase participation by making recycling more convenient for residents, while reducing labor and equipment costs at the point of collection.

Companies are beginning to collect recyclable materials from one bin and transport them in one truck to a central separation and processing center. Some municipalities that enter into contracts for these streamlined services are finding that the cost of collection is reduced and their residential participation rates rise due to the simplicity of the system. This single stream system has also affected the overall market for recyclable materials and end use options. The increased participation and associated increase in recyclable material collected has provided more stable sources of material for end users. End users are often willing to pay higher prices for the increase quantity and stability of delivery. However, this mixed handling process has had a somewhat negative affect on glass and paper recycling markets. Small broken glass fines mix with paper and can be difficult to remove at the end use facilities for paper. The additional handling of glass throughout this central system increases the quantity of mixed fines and reduces the amount of glass available for "glass to glass" recycling. Some studies have shown the additional processing costs of single stream are equal to or outweigh the benefits of the single stream recycling system. Locally, Blue Mountain Recycling in the Grey's Ferry area of Philadelphia has recently been equipped to handle single stream collection and is a potential single stream market option for New London recyclables. The pilot program in Philadelphia (RecycleBank) plans to involve 6,000 households when it is fully implemented. There may be an opportunity (commingled

collection or single stream) for New London to share risks and revenues - considering Philadelphia has been consistently paid for its recyclables since the summer of 2002. However, the distance to Blue Mountain recycling (~45 miles) coupled with traffic delays may make Blue Mountain an unfeasible option for a single hauler to take only New London recyclables directly to this market. Although SECCRA currently transports consolidated recyclables from public drop-offs to the Blue Mountain Recycling facility, SECCRA does not wish to begin accepting truckloads of recyclables from haulers (refer to Section 3.1) Therefore, SECCRA is not an outlet for recyclables collected curbside in New London Township.

4.2 Expanding International Recycling Markets

The second factor that has most recently affected recycling markets is the expansion of international markets for recycled materials. For example the international demand for all grades of recycled paper has affected both the price and availability of these items across the U.S. Both municipalities and recycling companies have benefited from a rise in their per ton price for paper materials. However, some U.S. paper mills are finding it more difficult to obtain recycled fiber at an affordable price.

Single Stream recycling and international markets may affect New London Township's options for establishing a curbside residential recycling program. The Township will need to consider the viability of single stream collection and understand how international markets impact the local market prices (and potential revenue share) for New London generated recyclables.

4.3 Chester County's Cooperative Marketing Program

Chester County offers municipalities the opportunity to participate in a cooperative marketing contract with BFI Waste Systems, Inc (BFI). The program is a Processing and Marketing contract (P & M program) with the King of Prussia Recyclery, a facility currently owned by BFI. The program uses the increased recyclables volume generated by all participants to negotiate/obtain favorable pricing for the materials. While all materials are covered under the County's contract, municipalities with pre-existing paper contracts may opt to keep them. The P & M program is administered by Chester County and includes the Chester County Solid Waste Authority and any Chester County Townships or Boroughs that have joined the group program. Currently, 11 municipalities participate in the P & M program (see **Appendix E**). Participants must agree to deliver recyclables to the King of Prussia Recycling, located on 372 S. Henderson Road in King of Prussia, PA.

Although recyclables prices fluctuate often and even significantly, BFI is currently giving \$40 per ton for mixed paper and \$6 per ton for commingled materials. Depending on the current market price for materials, BFI will either send a reimbursement check, or a bill (if markets price are low enough to be a cost to BFI), directly to the municipality for the recyclables generated by that municipality. Municipalities must have an agreement in place that directs their local recyclables collection hauler to the King of Prussia Recyclery.

If New London elects to move forward with a curbside recyclables collection program, it should consider joining Chester County's cooperative marketing program. Although the King of Prussia Recyclery is somewhat distant from New London (~40 miles), this option should not be

discounted solely on distance – other markets should be closely compared. Current market prices are favorable under the cooperative program and may present an opportunity to off a small portion of the cost to the Township. It is noted that revenue from sale of recyclables alone should not be expected to offset the full cost of the recycling collection contract/ program.

5.0 GRANTS AND AVAILABLE REVENUE

Solid waste and recycling programs should not rely on grant funding as the support mechanism for these programs – grants are not guaranteed funding sources.

GRANTS: Under Act 101, the Pennsylvania Department of Environmental Protection offers two different but related grant programs designed to assist municipalities in developing and implementing residential recycling programs. The following sections of Act 101 describe these two programs:

5.1 Section 902. Grants For Development And Implementation Of Municipal Recycling Programs

- (a) *Authorization.-The department shall award grants for development and implementation of municipal recycling programs, upon application from any municipality which meets the requirements of this section. The grant provided by this section may be used to identify markets, develop a public education campaign, purchase collection and storage equipment and do other things necessary to establish a municipal recycling program. The grant may be used to purchase collection equipment, only to the extent needed for collection of recyclable materials, and mechanical processing equipment, only to the extent that such equipment is not available to the program in the private sector. The application shall be made on a form prepared and furnished by the department. The application shall explain the structure and operation of the program and shall contain such other information as the department deems necessary to carry out the provisions and purposes of this act. The grant under this section to a municipality required by section 1501 to implement a recycling program shall be 90% of the approved cost of establishing a municipal recycling program. The grant under this section to a municipality not required by section 1501 to implement a recycling program shall be 90% of the approved cost of establishing a municipal recycling program.*

5.2 Section 904. Performance Grants For Municipal Recycling Programs

- (a) *Authorization.-The department shall award annual performance grants for municipal recycling programs, upon application from a municipality. The application shall be made on a form prepared and furnished by the department. The application shall contain such information as the department deems necessary to carry out the provisions and purposes of this act.*
- (b) *Availability.-The department shall award a grant under this section to a municipality based on the type and weight of source-separated recyclable materials identified in section 1501 that were recycled in the previous calendar year, and the population of the municipality.*

- (c) *Amount.*-The amount of the grant shall be based on available funds under section 706 and shall be available to all municipalities which have a recycling program in existence on or will initiate a program after the effective date of this act.

These two grant programs were designed to work in concert with each other. Section 902 grant money is intended to help municipalities purchase equipment and supplies needed to establish a residential recycling program. However, Section 902 money cannot be used for operational expenses of a recycling program. Section 904 grant money is intended to help municipalities operate their existing residential recycling programs and rewards municipalities based on their success and “performance.” New London Township would be eligible to apply for both of these grants, even though the Township is not “mandated” to provide curbside recycling services under Act 101. However, PADEP typically establishes a priority of needs and awards the Section 902 grants based on this hierarchy. For example, assisting the municipalities that were mandated by Act 101 to establish recycling programs after the 2000 US Census was a previous priority need.

These two grant sources have been available to municipalities over the past fifteen years, since Act 101 was fully implemented. They are funded by a fee authorized in Chapter 7 of Act 101:

5.3 Section 701. Recycling Fee For Municipal Waste Landfills And Resource Recovery Facilities

- (a) *Imposition.* - There is imposed a recycling fee of \$2 per ton for all solid waste processed at resource recovery facilities and for all solid waste except process residue and nonprocessable waste from a resource recovery facility that is disposed of at municipal waste landfills...

At this time, the continuation and viability of these grants may be in question. Over the past five years, the funding source for these grants has been tapped for other programs. Also, as the recycling infrastructure has grown in Pennsylvania, so has the need for revenue to maintain and expand the existing recycling programs. In addition, the legislature is currently reviewing the overall practice of funding grant programs with a tipping fee applied to municipal waste. This debate is continuing and may affect the availability of both grants.

5.4 Available Revenue

The sale of recyclable materials provides a source of revenue for a number of municipalities. Access to this money is typically negotiated and stipulated during the bidding and contracting process. Information on developing bid specifications is provided in **Appendix A**. The amount of money a municipality will receive is directly affected by a number of factors, some of which are within municipal control, some of which are not.

First and most obvious, are the quantity of recyclable materials generated in the Township and the associated collection costs. The amount of material available for collection in New London Township alone and the cost of collection services may keep the available revenue at a minimum. To mitigate both of these factors, some municipalities across both Pennsylvania and the nation are partnering with surrounding municipalities to obtain both better collection services

and additional revenue. End users typically pay a higher price for greater quantity of materials from stable sources.

Second, the quality of recyclable materials, specifically the percent of contamination mixed with the glass, paper, or plastic, significantly affects the price that the municipality can expect to receive for the materials. Although New London Township cannot affect the amount of recyclable material generated, it can minimize contamination and maximize its potential revenue by developing and implementing an effective education and outreach program.

Due to its particular nature, some municipalities are excluding glass from curbside collection and instead providing drop-off centers where residents can bring color sorted glass. This system preserves the quality of paper fiber that is collected curbside and increases the potential revenue. In addition, color-sorted glass has increased value in the market place when compared to mixed glass. The amount of glass that is collected may decrease using drop-off collection only, but the overall revenue may increase due to a higher quality of material.

For some municipalities, establishing a supplemental drop-off center affords an opportunity to collect additional recyclable materials that can be distributed to local or regional markets. Waste Not Technologies, LLC is a new plastic recycling business in Monroe County Pennsylvania was recently awarded a \$250,000 expansion grant from the PADEP - and will be accepting recyclable plastics. PADEP also announced the formation of the Recycling Market Development Center that will help new and emerging companies research and develop new recycling businesses. These companies will most likely create local and regional markets for additional types of materials that may be collected at local municipal drop-off centers.

As stated in Section 4.0 of this report, international markets for recyclable materials may directly impact prices municipalities receive for their recyclable materials. New London Township obviously has no control or impact on this factor, but can identify and work with local recycling vendors to improve market revenue. As stated in Section 4.3, GF's experience in working with other comparable municipalities indicates the Township should not expect to offset the cost of a curbside recycling program through sale of material alone. However, the Township can, through the bidding process, make every reasonable attempt to obtain its "fair share" of the revenue from the sale of recyclable materials. Section 7.0 of this report provides more detail on bid specifications.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on GF's review of background information related to New London Township municipal waste and recycling needs, understanding of the local recycling markets and general recycling market trends, understanding of the existing Chester County municipal solid waste and recycling programs, and the demographic analysis included in this report.

6.1 Contracting Municipal Waste Collection Services

Based on background information attained during this project and based on current and projected demographic data for New London Township and the surrounding area, it appears feasible and reasonable for New London Township to seek contracted curbside municipal waste collection services for its residents. Given the characteristics of the Township, it also appears reasonable to offer waste collection services to small apartment complexes, (four or less units), and small businesses for an additional fee. If the Township moves forward with a contract collection system, it is recommended the Township implement a solid waste and recycling ordinance. The ordinance should correspond to the contracted municipal waste and/or recyclables collection services spelled out in the bid specifications (refer to **Appendix A** for guidance on bid specifications). Sample solid waste recycling ordinances and municipal contracts are provided in **Appendix B**. It is recommended the Township work closely throughout this process with a solicitor, as well as during the ongoing implementation of a solid waste and recycling program. Further, it is important the Township be consistent (where applicable) with Act 101 ordinance requirements as specified in the Municipal Waste Regulations.

A detailed feasibility of a curbside municipal waste and recycling program cannot fully be determined at this time because the specific costs for these services are unknown. The true costs for contracting curbside collection services will only be provided (by one or more haulers) after the Township enters, and has responses from, a competitive bid process for these services. There may be benefits (e.g. cost savings) associated with partnering with one or more neighboring municipalities in securing these services, as discussed in more detail in Section 3.0.

It is recommended the Township move forward with a contracted collection system, where the Township enters into a contract or agreement awarded as the result of a competitive bid/procurement process. The award may be with one (or more) hauler for specific collection services. Depending on the contract terms, this approach can often be both cost-competitive and cost-effective (when compared to private subscription service). Competition can be promoted through periodic re-bidding (usually on a three-year term). As suggested previously, several municipalities may combine in a single bid process to obtain a better bid price, by offering a larger number of customers in the bid. As a worst-case scenario, the Township should understand it has the ability to “reject all bids” if there are no acceptable bid responses, which support the feasible implementation of a curbside collection system.

This recommendation for a contract system is sensible because a bid for collection services may yield cost savings (seen in the lower cost per household) achieved from the resulting waste collection and/ or recycling contract (due to a larger customer base – bid competition, and increased efficiency), and may help the Township have an increased level of service, and increased oversight/ control of waste collection services.

There are other considerations relating to the health and safety of New London Township residents that should be considered and have been emphasized by the Township. Providing contract collection service for residential waste gives the Township more contractual control over many health and safety issues related to the proper handling of municipal waste. Historically, problems related to improper waste handling are difficult to correct and enforce when residents have individual/ private subscription service.

In a contract collection system for municipal waste:

- Contract services reduce the number of waste trucks on the roads as one hauler collects all the waste instead of numerous haulers and vehicles servicing each neighborhood.
- Under contract services, the Township can stipulate and restrict the collection of waste from highly sensitive areas, for example school zones during early morning and mid-afternoon and road that experience rush hour traffic.
- The Township can mandate that the contract maintain adequate insurance and bonding that covers both the Township and its residents
- The Township can require the contractor to collect types of waste that are typically not collected under private subscription services. This can help reduce both litter and illegal dumping.
- The Township can limit the number of collection days allowed for pickup for trash and recyclables

Concerns related to improper disposal of waste may become more evident as New London Township grows and the population density increases.

6.2 Recycling Collection Services

Again, based on the demographic data for New London Township, which indicates a favorable population and housing density to support a curbside collection program, it appears feasible and reasonable for New London Township to seek contracted curbside recycling collection services for its residents.

Given the types of collection and processing (markets) available in the region, it is also reasonable for New London Township to expect proposals for single stream collection of recyclable materials. The current markets available to New London Township have favorable pricing for paper, aluminum and steel food containers, and PET and HDPE plastic bottles and jars. New London Township should consider including these items in their collection contract, and as feasible, implement a program that is consistent with other successful Chester County recycling programs.

New London Township has one existing recyclables drop-off site, which is administered by SECCRA. In some instances, municipalities offer residents/ businesses a supplemental recycling drop-off that serves to compliment the curbside collection service. It is recommended, if a contracted curbside recyclables program is implemented, the Township work with SECCRA to determine if it is feasible to continue the existing recyclables drop-off site. If the Township feels it is necessary to offer a supplemental drop-off program, the Township can contract a hauler to provide this service (e.g. the same hauler providing curbside collection services). The Township should understand that a supplemental drop-off site would be an additional service (and cost), since all households would receive service, and be billed, under a contracted curbside collection program for recyclables.

As previously stated, glass collected in a single stream system may be problematic because it can contaminate recyclables and increase processing costs. Glass collected and color sorted at a drop-off center may yield a higher price per ton. If New London Township elects to move

forward with a supplemental drop-off, the center should accept: sorted glass, OCC (old corrugated cardboard), and possibly additional types of plastics (those not collected at the curb). As described earlier, this same drop-off center could be used to collect other recyclable materials for existing and emerging local or regional markets.

Given the current growth patterns of the region, New London Township should explore the feasibility of partnering with surrounding townships on joint service contracts for both waste and recyclables collection. London Grove Township, located adjacent to New London, was recently mandated to provide curbside recycling services, has relatively dense housing, and appears to be a potential candidate for New London to work with in a solid waste partnership to secure curbside municipal waste and/or recycling services. A multi-municipal contract may also consider inclusion of West Grove Borough, already experienced in using a single hauler to provide contracted curbside collection for municipal waste and recyclables.

APPENDICES

Appendix A
Bid Specifications

BID SPECIFICATIONS

Bid specifications should be written to meet the specific needs of the Township. The bid document should be written with the cooperation and advice of the recycling and solid waste coordinator and/or consultant and the Township solicitor. There are, however, typical sections and items that are common to most bid specifications.

- Requirements & Instructions to Bidders
 - Instruction for the preparation of bid and bidding procedures
 - The required bid security
 - Stipulation that all bidders are current on all taxes and hold all necessary licenses
 - Requires all bidders obey laws and follow proper safety procedures, etc.
 - Details the qualifications and disqualification of bidders to ensure that only qualified and reputable companies are eligible
 - Stipulates that all bidders attend a mandatory pre-bid meeting and may require bidders to inspect municipality
 - May allow the option of bidding on selected services – waste only, waste & recyclables, recyclables only, yard waste, bulky waste, etc.

- The bid specification should include detailed information about the municipality: Size, Population, Number of households, Miles of roads, etc.

- Scope of Work:
 - Collection and disposal of waste services that the municipality desires including:
 - Type of units that are to be serviced such as: Individual households, small apartment units, small retail or office units, etc.
 - Frequency of collection, once or twice per week
 - All items that the contractor must collect under the contract price. Some municipalities include tires, bulky waste, and appliances. Some municipalities specify an additional cost that the contractor is allowed to charge for collection of these items.
 - The type of collection container that is either mandated or allowable. Some bid specifications stipulate that the contractor may supply containers to residents for an additional fee.
 - Hours of day that collection is allowed throughout the municipality, including specific restrictions around schools, business districts, and other sensitive areas
 - Clear definition of when the contractor takes ownership and responsibility for the waste
 - Procedures for handling complaints such as missed collections including the responsibility of both the municipality and the contractor
 - List of the items that are not to be collected such as household hazardous waste, residual, and commercial waste
 - Requirements and procedures for waste collection from municipal buildings, parks, and special community events, specifically name routine events

- Requirement that disposal of all waste comply with the county Solid Waste Management Plan and that any disposal facilities used by the contractor hold all proper permits
 - Requirements and procedures that the contractor notify the municipality of any transfer stations and landfills to be used
 - Required record keeping and procedures for submitting the records to municipality
 - Collection, processing, and sale of recyclables
 - Materials to be collected and whether they are to be separated or commingled, or if the municipality will allow single stream collection.
 - Collection and handling of yard waste
 - Frequency of collection (e.g., semi-weekly, weekly, bi-weekly, monthly)
 - The type of recycling containers to be used and the responsibilities of the municipality and contractor for both initial and on-going distribution and replacement
 - Strict mandate for separate collection of recyclables and waste, including a penalty for mixing
 - Requirement that recyclables be kept in marketable condition, prohibit disposal of recyclables at landfills or incinerators
 - Clear definition of when the contractor takes ownership and responsibility for the recyclables
 - Procedures and requirements for collection of recyclables from municipal buildings, parks, and special community events, specifically name routine events
 - Required assistance at and with municipal recycling drop-off center
 - Designate recycling processing facilities or allow contractor to determine facility
 - Required record keeping and procedures for submitting the records to municipality
 - The revenue sharing system that the municipality anticipates and expects. Depending on the size of the municipality and the quantity of recyclables generated, the municipality may stipulate a “floor price” based on market rates at the time the bid specifications are issued. Smaller municipalities may require that a percent of the revenue from all recyclables be paid to the municipality.
 - Optional services –
 - Semi-annual bulky waste collections
 - Individual requests for special collections
 - Others as identified
- Required Bonds and Insurance
- Penalties and deductions for non-compliance – be very specific in describing all fines and penalties that the municipality may assess for violations of the contract and the procedures that the municipality and contractor must follow to enact and pay or negotiate the fines and penalties

- Payments, Invoicing, & Reporting – This section will vary greatly based on the individual municipal organization and administration. It should require that the contract supply the all the information in the form and detail that the municipality will need to file both the grant applications and annual reports with the PADEP:
 - The tons of waste collected and the disposal facilities to which the waste was taken
 - The quantity of each recyclable material collected that is eligible under the Section 904 grant and all the documentation and tracking of the recycling stream as required by the PA Department of Environmental Protection

This section should also clearly stipulate the method used to calculate both invoicing from the contractor to the municipality, and payment of recycling revenues from the contractor to the municipality.

APPENDIX B
Sample Solid Waste and Recycling Ordinance

DRAFT

NEW LONDON TOWNSHIP ORDINANCE

**AN ORDINANCE TO ESTABLISH A PROGRAM FOR THE
COLLECTION OF RECYCLEABLE MATERIALS, and for
the COLLECTION AND DISPOSAL OF SOLID WASTE,
AND PROVIDING PENALTIES FOR THE VIOLATION
THEREOF**

The Township of New London hereby ordains as follows:

SECTION I – SHORT TITLE

This Ordinance shall be known as the “Refuse and Recycling Ordinance”.

SECTION II – DEFINITIONS (shown alphabetically)

Act 101 -- The Pennsylvania Municipal Waste Recycling, Planning and Waste Reduction Act (Act 101 of 1988) requires mandated municipalities to implement a recycling program.

Agricultural Waste – Poultry and livestock manure, or residual materials in liquid or solid form generated in the production and marketing of poultry, livestock, fur bearing animals, and their products, if the agricultural waste is not hazardous. The term includes the residual materials generated in producing, harvesting and marketing of agronomic, horticultural and silvicultural crops or commodities grown on what are usually recognized and accepted as farms, forests, or other agricultural lands.

Aluminum Cans – Empty containers made and fabricated of aluminum and most commonly used as beverage and food containers.

Bi-metal Containers – Empty food or beverage containers made from two metals; usually consisting of ferrous sides and bottom and an aluminum top.

Commercial Establishment – An establishment engaged in nonmanufacturing or nonprocessing business, including but not limited to stores, markets, office buildings, restaurants, shopping centers, and theaters.

Community Activities – Any event sponsored or organized by a public or non-profit organization for recreation, educational or civic purposes, which will be attended by two hundred (200) or more individuals per day.

Construction Debris – Customary, non-hazardous waste building materials resulting from construction, remodeling, repair or demolition operations.

Corrugated Paper – Any structural paper material with an inner core shaped in rigid parallel furrows and ridges.

Disposal – The transportation of waste to an incinerator, sanitary landfill, resource recovery facility or other lawful site, and making final disposition.

Ferrous Containers – Empty food or beverage containers made primarily from steel, or tin and steel, including the commonly named ‘tin can’.

Garbage – Every accumulation of non-hazardous, non-contaminated waste (animal, vegetable and/or other matter) that results from the preparation, processing, consumption, dealing in, handling, packaging, canning, storage, transportation, decay or decomposition of meats, fish, fowl, birds, fruits, grains or other animal or vegetable matter including, but not by way of limitation, used tin cans and other food containers, and all Recyclables or easily decomposable waste animal or vegetable matter which is likely to attract flies or rodents.

Glass Containers – Products made from silica or sand, soda ash and limestone, the product being transparent, translucent, or colored, and being used for packaging or bottling of various matter or liquid; commonly known as glass, specifically including clear, green or brown glass and specifically excluding non-container glass, plate glass, blue glass and porcelain or ceramic products.

High-Grade Office Paper – Any bond, copier, letterhead or mimeograph paper typically sold as “white ledger” or “ledger” paper; and computer paper.

Household Hazardous Waste – Waste generated by a household that could be chemically or physically classified as a hazardous waste under the rules and regulations of the US Environmental Protection Agency and the Commonwealth of Pennsylvania but are specifically excluded from these regulations when purchased, used, and stored by and within households. . Examples include: drain cleaners, pesticides and oil-based paints.

Industrial Establishment – An establishment engaged in manufacturing or processing, including but not limited to, factories, foundries, mills, processing plants, refineries, mines, and slaughterhouses.

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

Large Household Items – Such items as stoves, water tanks, washing machines, furniture, and mattresses not containing hazardous materials and other non-hazardous items other than Construction Debris. The size of a ‘Large Household Item’ should be small enough to be lifted by 2 adults to truck level (150 pounds or less)

Leaf Waste – Leaves, primarily from deciduous trees that drop their leaves during the autumn of the year.

Magazines and Periodicals – Printed matter containing miscellaneous written pieces published at fixed or varying intervals, often printed on paper with a shiny or waxed coated surface.

Multi-Family Residential Establishments – Those properties used for multi-family residential buildings containing two or more dwelling units.

Municipal Establishment – Those properties used for New London Township offices or facilities.

Municipal Waste – – Garbage, rubbish, industrial lunchroom or office waste and other materials, including solid, liquid, semisolid, or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities. The term includes Large Household Items as defined in this Ordinance. The term does not include Agricultural Waste, Household Hazardous Waste, Construction Debris, and Vehicle Waste as defined in this Ordinance.

Newspapers – Paper of the type commonly referred to and known as newsprint and distributed at fixed intervals, having printed thereon news and opinions, containing advertisements and other matters of public interest; expressly excluded, however, are newspapers which have been soiled.

Person – Any natural person, association, partnership, firm or corporation.

Plastic Containers – Empty containers made and fabricated of plastics labeled with the plastics recycling logo 1 and 2 and most commonly used as beverage and food containers. Due to the large variety of types of plastics, Township recycling regulations, which may be promulgated from time to time, may further stipulate specific types of plastics which may, or may not, be recycled.

Recyclable Materials/Recyclables – Materials having an economic value in the secondary materials market. As defined in this Ordinance, those materials specified [designated] by the Township for collection in accordance with this Ordinance and recycling regulations which may be promulgated from time to time. Such materials may include aluminum cans, bi-metal containers, ferrous containers, newspapers, magazines and periodicals, plastic containers with the plastics recycling logos 1 or 2, and green, brown and clear glass containers. For commercial, industrial, institutional and municipal establishments this list shall include corrugated paper and high-grade office paper. The list of designated Recyclable materials may be changed from time to time by the Township.

Recycling Containers – The containers used for the storage and collection of Recyclables from Single Family Residential Units in New London Township.

Refuse – All Municipal Waste generated within the township.

Refuse Containers – The containers used for the storage and collection of Residential Refuse.

Residential Refuse – All Refuse generated within a Single Family Residential Unit located within the Township.

Single Family Residential Unit – A structure within the township occupied exclusively as a residence for only one family. Typically, this is one address for property tax purposes.

Solid Waste – Construction Debris, Municipal Waste, and Vehicle Wastes as defined by this Ordinance.

Township – New London Township, County of Chester, Commonwealth of Pennsylvania

Vehicle Waste – Parts of or liquids used in transportation vehicles and other equipment including but not limited to tires, batteries, mechanical parts, body parts, electrical components, motor oil, grease, and antifreeze.

Yard Waste – Leaf Waste and garden wastes, shrubbery and tree trimmings, grass clippings. The term also includes vegetative kitchen scraps that are generated within Single Family Residential Units. The term does not include meat and dairy scraps or Agricultural Wastes.

SECTION III – RESIDENTIAL REFUSE: STORAGE AND COLLECTION

The storage and collection of all Residential Refuse from Single Family Residential Units shall comply with the following:

1. Rules and Regulations for Residential Refuse: The Township may establish through resolution, from time to time, rules and regulations relating to the separation, preparation, placement and collection of Residential Refuse related to this Ordinance, provided, however, such rules and regulations shall be approved by the Board of Supervisors. The Township may change, modify, repeal or amend any portion of said rules and regulations at any time.
2. All Residential Refuse shall be contained to prevent rain accumulation and animal access. Refuse Containers such as those typically supplied by a Refuse hauling company may be used to store Residential Refuse. Any Refuse Containers not fitted for lifting and dumping by mechanical means must be light enough to be lifted by two adults (generally less than 110 pounds).
3. Township residents are responsible for providing the Refuse Containers required to store and collect the Residential Refuse generated by the operation of their individual households.
4. All Refuse that contains liquid or semi-liquid materials shall be securely sealed to prevent leakage during storage and collection.

5. Refuse shall be adequately contained so as not to become dispersed during the storage and collection process.
6. Recyclables are to be separated from other Refuse.
7. It shall be unlawful to permit the accumulation of residue of liquids, solids, or a combination of such material on the bottom or sides of Refuse Containers. The interior of Refuse Containers shall be kept clean by thorough rinsing, draining, and disinfecting as often as is necessary in order to prevent odor and accumulation of residue.
8. Each Refuse Container shall be securely closed and placed at curbside on days and times designated by the Township for collection. Curbside refers to that portion of right-of-way adjacent to Township roads, or approved private roads. Refuse Containers shall be placed as close to the roadway as practicable without interfering with or endangering the movement of vehicles or pedestrians including sight obstruction.
9. Items that do not fit inside of a Refuse Container must be secured as a bundle of material not exceeding three (3) feet in length and three (3) feet in diameter, and not more than 35 pounds in weight.
10. Bulk containers, such as dumpsters used to store and remove Construction Debris and other heavy trash not considered a Large Household Item shall be placed at ground level at a point on the residential property which will not interfere with or endanger the movement of vehicles or pedestrians including sight obstruction, and will enable clear and easy access to the container by the collector's vehicle.
11. Bulk containers shall not be permitted to overflow or to have waste strewn or left about them on the ground. A violation of this provision shall be deemed a violation of this Ordinance by the person on whose property the bulk container is located, if it is located on private property.
12. It shall be unlawful to place or dispose of Residential Refuse as provided for in this Ordinance unless the same is contained and collected as provided for in this Section – Items 2 through 10.
13. The storage and collection of all Solid Waste shall be practiced so as to prevent the attraction, harborage, or breeding of vectors, insects and/or rodents, and to prevent conditions in any way harmful to the public health or which create safety hazards, odors, unsightliness or public nuisances.
14. Storage and collection of Township designated Recyclables shall be handled separately from other Refuse.

SECTION IV – RESIDENTIAL RECYCLING

This ordinance establishes a recycling program for all persons within the Township of New London. Collection of materials to be recycled shall be provided regularly by the Township or its designated agent. This recycling program is ordained pursuant to the requirements of Act 101, The Municipal Waste Planning, Recycling and Waste Reduction Act.

1. Rules and Regulations for Recycling: The Township may establish through resolution, from time to time, rules and regulations relating to the separation, preparation, placement and collection of recyclable materials and any other matters required to implement this Ordinance, provided, however, such rules and regulations shall be approved by the Board of Supervisors. The Township may change, modify, repeal or amend any portion of said rules and regulations at any time.
2. Separation and preparation of Recyclables and placement for collection: All cans, bottles, or other food containers shall be drained and cleaned before storage for recycling. Recyclable materials shall be further separated, prepared, and placed in Recycling Container(s) in accordance with the Rules and Regulations issued by the Township.
3. The Recycling Container(s): The specification, purchase and payment, and distribution of Recycling Containers shall be handled in accordance with the Rules and Regulations issued by the Township. Recycling Containers shall be placed at the curb, or other designated areas as approved by the Township. Residential Recyclables collection may be concurrent with Residential Refuse collection or may be on a different schedule than Residential Refuse collection, with such times and days as may be established by the Township.
4. Ownership of Recyclable Materials: From the time of placement of Recyclable Materials at the curb or other approved areas for collection by the Township or its designated agent, pursuant to this Ordinance and any rules and regulations adopted hereunder, the Recyclable Materials shall become the property of the Township or its authorized agent.
5. Collection by unauthorized persons: It shall be a violation of this Ordinance for any person, unauthorized by the Township, to collect or pick up or cause to be collected or picked up any Recyclable Material placed at the curb or other approved areas for collection by the Township or its designated agent. Each and every such unauthorized collection in violation hereof shall constitute a separate and distinct offense punishable as hereinafter provided.
6. Alternative collection of Recyclable Materials: Any person may donate or sell Recyclable Materials to another person provided the materials are either delivered to the person receiving the materials or the person receiving the materials collects the donated or sold materials.

7. Specifically addressing Yard Waste: An individual resident may collect Yard Waste from their individual property and has the specific right to compost such materials on their property. Any home composting activities must be conducted in accordance with the policies and guidance for home composting that are available from the PA Department of Environmental Protection, Penn State Cooperative Extension, or the Chester County Health Department. If composting is not possible on their individual property, then residents may hire a Yard Waste collection service. Safe burning of Leaf Waste is addressed in the Rules and Regulations for Recycling. Nothing herein requires a resident to rake or otherwise collect leaves or grass clippings from their individual property.

SECTION V – RESIDENTIAL COLLECTION FEES AND APPORTIONED TAXES

The committee will ask the Township solicitor for appropriate language that will authorize the Township to enter into a contract for the collection of Residential Refuse and Recyclables.

SECTION VI – COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY RESIDENTIAL REFUSE AND RECYCLABLES

1. Every owner of a Commercial, Industrial, Institutional, or Multi-Family Residential Establishment, or any premises other than a Single-family Residential Unit, or a sponsor of a Community Activity shall provide for storage and collection of Refuse and Recyclables as provided for in this section and in compliance with all applicable state and federal regulations.
2. An owner, as defined in Paragraph 1 shall contract with a waste hauling company that is Authorized by the Commonwealth of Pennsylvania and registered in New London Township.
3. An owner, as defined in Paragraph 1, shall contract with a Recyclables collection company that is registered in New London Township.
4. The premises as defined in Paragraph 1 above shall have proper containers for the storage and collection of Refuse and Recyclables which shall be made of durable, watertight, rust-resistant material having a close-fitted lid and any necessary handles to facilitate collection. Any cracked, rusted or otherwise improper container shall constitute a public nuisance, and shall be removed from the premises on or before the next collection day.
5. All Refuse that contains liquid shall be securely sealed to prevent leakage before storage for collection.
6. Refuse shall be adequately contained so as not to become dispersed during the storage and collection process.

7. All cans, bottles, or other food containers shall be drained and where appropriate cleaned before storage for recycling.
8. It shall be unlawful to permit the accumulation of residue of liquids, solids or a combination of such material on the bottom or sides of containers used for the storage and collection of Refuse and Recyclables. The interior of such containers shall be kept clean by thorough rinsing, draining, and disinfecting as often as is necessary in order to prevent odor and accumulation of residue.
9. An owner, as defined in Paragraph 1 of this Section, shall provide for the proper handling, storage, and collection of the Construction Debris and Vehicle Waste that is generated on their premises or through the operation of their establishment, in accordance with the provisions of this Ordinance and all applicable state and federal regulations.
10. The storage of all Solid Waste and Recyclables shall be practiced so as to prevent the attraction, harborage, or breeding of vectors, insects and/or rodents, and to prevent conditions in any way harmful to the public health or which create safety hazards, odors, unsightliness or public nuisances.
11. Bulk containers, such as dumpsters used to store and remove Construction Debris and other heavy trash shall be placed at ground level and at a point on the property which will not interfere with or endanger the movement of vehicles or pedestrians including sight obstruction, and will enable clear and easy access to the container by the collector's vehicle.
12. Bulk containers shall not be permitted to overflow or to have waste strewn or left about them on the ground. A violation of this provision shall be deemed a violation of this Ordinance by the person on whose property the bulk container is located, if it is located on private property.
13. It shall be unlawful to place or dispose of Refuse unless such Refuse is placed in an approved container, as provided for in this ordinance.
14. Storage and collection of Recyclables must be handled separately from other Refuse. Recyclables are defined in this ordinance and may be further described in Rules and Regulations for Recycling prepared and distributed by the Township.

SECTION VII – DISPOSAL OF REFUSE

1. It shall be unlawful to store or dispose of Refuse or garbage as provided for in this ordinance unless the same is contained as provided for in Sections III, IV and VI.
2. All Solid Waste accumulated on any property in the Township shall be collected, transported, and disposed of only at a landfill that is fully licensed and permitted by the Pennsylvania Department of Environmental Protection. The collection and

disposal of all Solid Waste must comply with the Chester County Solid Waste Management Plan.

3. Untreated Agricultural Wastes may be spread in thin layers and plowed under in conformity with sound and lawful agricultural practices and the rules and regulations of the PA Departments of Environmental Protection and Agriculture and any other federal or state agency with the authorization to regulate farming activities.
4. Township residents are responsible for proper disposal of the Household Hazardous Waste that is generated within their individual homes Household Hazardous Waste shall be transported by individual residents to specified collection locations that are established by the Chester County Health Department on a periodic basis. Household Hazardous Waste shall not be collected and hauled with Residential Refuse.
5. All Persons are responsible for proper disposal of Construction Debris, Vehicle Wastes and heavy trash not considered a Large Household Item. All Persons should make every attempt to recycle these materials whenever and wherever possible and may obtain information from the Township, the Chester County Health Department, and the PA Department of Environmental Protection. Persons may self-haul these materials from their individual properties to a permitted disposal or recycling facility and may also contract with a state Authorized waste hauling company that is registered with the Township.

SECTION VIII – DUMPING; LITTER

1. It shall be unlawful for any person to store, dump, discard, or deposit, or to permit the storage, dumping, discarding, or depositing of Solid Waste and/or Recyclables in any manner and in any amount upon the surface of the ground or underground within the Township, except in proper containers for purposes of storage and collection. It shall be unlawful for any person to dump or deposit Solid Waste and/or Recyclables in any manner and in any amount in any stream, body of water or any public right-of-way within the Township.
2. The presence of any articles containing a person's name among Solid Waste and/or Recyclables shall create a rebuttable presumption, for purposes of this Ordinance, that said items are the property of the person whose name is found therein. This presumption can only be rebutted by clear and convincing evidence to the contrary.
3. Every owner of property, or occupant thereof, responsible for such property's day-to-day operation and maintenance shall pick up and discard in an appropriate receptacle any Solid Waste, Recyclables, or other debris deposited or accumulated on the sidewalk or gutter in front of or adjacent to such property. All owners or operators of commercial, industrial, institutional and municipal establishments in the Township shall take all reasonable precautions to prevent the deposition and accumulation of debris in front of their premises, and in furtherance of that end,

may place appropriate waste containers on sidewalks in front of or adjacent to their premises at a point which will not create a hazard to traffic or pedestrians. Any such receptacles so placed shall be emptied on a regular basis and maintained in a neat and clean appearance.

4. Nothing contained herein shall prohibit a farmer from carrying out the normal activities of his farming operation, including composting and spreading of manure or other farm-produced agricultural wastes, provided that such activities are conducted in accordance with the rules and regulations of the PA Departments of Environmental Protection and Agriculture and any other federal or state agency with the authorization to regulate farming activities

SECTION IX – OPEN BURING

1. No person shall ignite, cause, feed, permit, or maintain any open fire for the destruction of Municipal Waste, Construction Debris, Household Hazardous Waste, Vehicle Wastes, Large Household Items, or Recyclables on any property under his/her control, except as hereinafter provided.
2. Open fires may be set in the performance of an official duty of any public officer if the fire is deemed necessary for the prevention or control of a fire hazard which cannot be abated otherwise, and for the protection of public health.
3. Nothing contained herein shall prohibit a farmer from carrying out the normal activities of his/her farming operation provided that such activities are conducted in accordance with the rules and regulations of the PA Departments of Environmental Protection and Agriculture and any other federal or state agency with the authorization to regulate farming activities

SECTION X – REGISTRATION AND CONTRACTING OF REFUSE AND RECYCLING COLLECTIONS

1. A Person in the business of collecting and hauling Solid Waste and Recyclables within New London Township shall register with the Township. A hauling company that has a contract with New London Township will be registered through the contract.
2. Only a Person Authorized by the Commonwealth of Pennsylvania may collect Solid Waste within New London Township.
3. For a waste hauling company holding a state Authorization, the Township Registration shall be valid for the same period as the state Authorization and must be renewed when the state Authorization is renewed. For a hauling company that solely collects Recyclables, the terms of the Township Registration shall be established by the Township Board of Supervisors.

4. Registration shall be made on a form established by the Township and submitted at the Township office.
5. Registrations are not transferable from one collector to another.
6. The Registration form will be established by the Board of Supervisors through resolution. The following items will be included as part of the Registration information:
 - a) A photocopy of the state license to collect Refuse shall be attached.
 - b) Contact information shall be clearly presented, including the locations, addresses, hours of business, and telephone numbers of the collector's business offices to receive calls, visits or correspondence from persons in the municipality who receive collection service.
 - c) It is expected that the landfill facility of the Southeastern Chester County Refuse Authority (SECCRA) will be the primary disposal site for Residential Refuse. Solid waste not accepted at SECCRA will be taken to an alternate disposal facility that is fully licensed and permitted by the PA DEP if located in the Commonwealth of Pennsylvania or the agency with the authority to regulate and license municipal waste disposal facilities if the alternate disposal facility is located in another state. The registration should list alternative sites that the company may use.
 - d) The recycling facilities and companies where the Recyclables will be taken shall be listed on the registration form.

SECTION XI – PERSONS RESPONSIBLE FOR COMPLIANCE AND THE PAYMENT OF FEES

Every person producing waste, Refuse, garbage, Recyclables, or like material as referred to in this ordinance, or being responsible for the existence or disposal of such material, or for whom such material, or being the owner of the premises on which such material is in existence or is produced, or which accumulations require removal, shall be responsible to pay the taxes and other charges provided for herein, and shall be the proper subject of the enforcement procedures as provided for herein.

SECTION XII – PENALTIES

1. Any person who shall violate any provision of this Ordinance shall upon conviction by a District Justice be sentenced to pay a fine of not less than \$50.00 but not more than \$500.00.
2. Each day's continuance of a violation of this ordinance shall constitute a separate offense.

3. The Township may enforce the terms of this ordinance by appropriate proceedings in law or equity.

SECTION XIII – EFFECTIVE DATE, CONSTRUCTION AND SEVERABILITY

1. Effective Date – This Ordinance and Rules and Regulations established hereby shall become effective on _____.
2. Construction and Sever Ability – If any provision of this ordinance is invalid, such invalidity shall not affect or impair the other provisions; it is the Board of Supervisors’ intent that the remaining valid provisions shall be and remain in full force and effect.
3. All ordinances and resolutions and parts of ordinances and resolutions, insofar as they are inconsistent herewith, are hereby repealed or rescinded.

This Ordinance is hereby enacted on _____.

[signatures]

APPENDIX C
Sample Educational Materials



**REDUCE – REUSE – RECYCLE
IN NEW LONDON TOWNSHIP**

This would be on the front
of the post card.

John/ Jane Doe
123 Main Street
New London Township

**Curbside Recycling has come to New
London Township!!!!
These items go....
IN THE BIN**



When...

Put your recycle-
ables out on

This would be on the back
of the post card.

Food & Beverage bottles, cans, & jars

Glass—all colors

Plastic— 1 or 2 in this symbol

Metal—aluminum & steel



Preparation...

Clean all food con-
tainers.

Bundle & tie all
newspaper

Paper products

Magazines & junkmail

Newspaper



NOTE: The information below is provided as an example, but should be customized to reflect the actual recycling program that will be implemented under contract.



REDUCE – REUSE – RECYCLE IN NEW LONDON TOWNSHIP

New London Township has entered into a trash and recyclable collection contract with (company). The service is available to individual households of New London Township

This flyer explains... Which items go in the recycling bin & which go into the trash can.
When & Where to put them out for collection &
How to prepare and store your recyclables and trash, and...
What to do with everything else.



IN THE BIN

Food & Beverage bottles, cans & jars

Glass—all colors

Plastic—# 1 & # 2

Metal—aluminum & steel

Paper:

Magazines & junkmail

Newspaper



IN THE TRASH CAN

All regular household trash

Packages that cannot be recycled.

Food scraps that cannot be com-
posted.

Bulky items weighing less than
110 pounds.

When & Where...

Put your recycleables & trash out on???

How to prepare & store your recycleables & trash

Recyclables:

Clean all food containers.

Bundle & tie all newspaper.

Store the recycling container in a dry place.

Trash:

Seal all containers that have liquid.

Place all garbage in a closable trash can.

Store the trash to not attract animals.

Place both the recycling container & trash can near the curb on collection day.

What to do with everything else...

Do not put the following items out with your regular trash:

- Household Hazardous Wastes (HHW)
- Vehicle Waste such as motor oil, antifreeze, & tires
- Constructin Debris
- Bulky items weighing more than 150 pounds

Suggestions for handling these items are on the reverse side of this flyer.

APPENDIX D
PADEP Municipal Recycling List
Chester County Recycling Table
Recycling Flyer

**THE PA DEPARTMENT OF ENVIRONMENTAL PROTECTION LIST OF
CHESTER COUNTY MUNICIPAL RECYCLING PROGRAMS**

MUNICIPALITY	PROGRAM DESCRIPTION		MATERIALS COLLECTED
Avondale Borough	Weekly	Voluntary	`Al, G1, G2, N, S, P1, P2, Mag, Mx, Of
Caln Township	Weekly	Mandatory	`Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1
Coatesville, Cty of	Weekly	Mandatory	Al, G1, G2, N, S, C, Mag, Mx, Of, Yd1
Downingtown Bo rough	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Mx, Of
East Bradford Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Mx, Of, Phone books
East Brandywine Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1
East Caln Township	Weekly	Mandatory	Al, G1, G2, S, P1, P2, Mag, Mx, Of, Yd1
East Fallowfield Township	Bi-weekly	Mandatory	Al, G1, G2, N, S, P1, C, Mag, Mx, Of, Yd1
East Goshen Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Of, Yd1
East Pikeland Township	Varies	Mandatory	Al, G1, G2, N, S, P1, P2, Mx, Yd1
East Whiteland Township	Varies	Mandatory	Al, G1, N
Easttown Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mx, Yd1
Elverson Borough	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, P7, Mag, Mx, Of
Kennett Square Borough	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Mx, Of, Phone books, Al Scrap
Malvern, City of	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1
Modena Borough	Weekly	Mandatory	Al, G1, G2, N, Mag, Mx, Of All scrap, Of
New Garden Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of
North Coventry Township	Varies	Mandatory	Al, G1, N
Oxford Borough	Varies	Mandatory	Al, G1, G2, N, S, P1, P2, Yd1
Parkesburg Borough -Weekly	Mandatory		Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1, Al Scrap, Of
Phoenixville Borough Weekly	Mandatory		Al, G1, G2, N, S, P1, P2, Mx, Yd1
Schuylkill Township	Varies	Mandatory	Al, G1, G2, P1, P2, Mx, Yd1
South Coatesville Borough	Weekly	Mandatory	Al, G1, G2, N, C, Mag, Mx, Of, Yd1, Phone books, Of
Spring City Borough	Weekly	Voluntary	Al, G1, G2, N, S, P1, P2, Yd1, Al Scrap
Tredyffrin Township	Weekly	Mandatory	Al, G1, G2, N, C, Mx, Yd1

Material Codes: Al - Aluminum G1 - Clear Glass G2 - Colored Glass N - Newspaper S - Steel/Bi-metal P1 - PET Plastic P2 - HDPE Plastic P7 - Mixed Plastic C - Corrugated Cardboard Mag - Magazines Mx - Mixed paper Yd1 - Leaves Yd2 - Grass Of - Office paper

MUNICIPALITY	PROGRAM DESCRIPTION		MATERIALS COLLECTED
Upper Uwchlan Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1
Uwchlan Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1
Valley Township	Weekly	Voluntary	Al, G1, G2, N, S, Mag, Mx, Of
West Bradford Township	Weekly	Mandatory	Al, G1, N, S, P1, P2, Mag, Mx, Of, Yd1
West Brandywine Township	Weekly	Mandatory	Al, G1, G2, S, P1, P2, Yd1
West Chester Borough	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1, Al Scrap, Of
West Goshen Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Mx, Of,
West Grove Borough Weekly	Mandatory		Al, G1, G2, N, S, P1, P2, Mag, Mx, Of, Yd1, Phone books, Al Scrap, Of
West Whiteland Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Mx, Of, Phone books
Westtown Township	Weekly	Mandatory	Al, G1, G2, N, S, P1, P2, C, Mag, Yd1, Phone books
Willistown Township Bi-weekly	Mandatory		Al, G1, G2, P1, P2

Material Codes: Al - Aluminum G1 - Clear Glass G2 - Colored Glass N - Newspaper S - Steel/Bi-metal P1 - PET Plastic P2 - HDPE Plastic P7 - Mixed Plastic C - Corrugated Cardboard Mag - Magazines Mx - Mixed paper Yd1 - Leaves Yd2 - Grass Of - Office paper

CURBSIDE RECYCLING SERVICE

MUNICIPALITY	CANS		PAPER		CORRUGATED CARDBOARD	GLASS		PLASTIC BOTTLES			OTHER	BULK FREQUENCY	YARD WASTE	
	ALUM	BIMETAL	NEWS *1	MIXED *2		CLEAR *3	COLOR *3	SODA (#1) *3	MILK/WATER /DETERGENT (#2) *3				LEAF	BRUSH
Avondale Borough 610-268-8501	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	WHITE GOODS 1 X MONTH		✓	✓
Caln Twp. 610-384-0600	✓	✓	TOGETHER		✓	✓	✓	✓	✓	✓	1 ITEM BULK PER WEEK	1x Week	Yard Waste	4x Fall Xmas Trees
Charlestown Twp. 610-240-0326	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Coatesville City 610-384-0300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1 BULK ITEM BI-WEEKLY	Every 2 weeks	✓ Mobile Chipping Service Every 2 weeks	✓
Downingtown Borough 610-269-0344	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	XMAS TREES 1/1 - 2/15	Once a month	✓	✓
East Bradford Twp. 610-436-5108	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	CHIPPING SERVICE @ TWP. BUILDING	Once a month	✓ Xmas Trees 3 Fall - 1 Spring	✓
East Brandywine Twp. 610-269-8230 Ext.6	✓	✓	✓	✓		✓	✓	✓	✓	✓	BULK - LAST THURSDAY OF MONTH	Thursday	✓ Mobile Chipping Service	
East Caln Twp. 610-269-1989	✓	✓	TOGETHER		✓ Thursdays	✓	✓	✓	✓	✓	BULK - 1X A MONTH	3rd Thursday	✓ 3x Oct. - Nov.	
East Fallowfield Twp. 610-384-7144	✓	✓	✓	✓		✓	✓	✓	✓	✓		1 Item Per Week	✓ Xmas Trees	Drop off at Twp.
East Goshen Twp. 610-692-7171	✓	✓	✓	✓		✓	✓	✓	✓	✓	1 BULK ITEM PER WEEK	Call Township for day	6 Fall 6 Spring Xmas Trees	
East Marlborough Twp. 610-444-0725	✓	✓	✓ AND PERIODICALS			✓	✓	✓	✓	✓				
East Pikeland Twp. 610-933-1770	✓	✓	✓		Drop Off	✓	✓	✓	✓	✓	TIRES, OIL, SCRAPMETAL, BATTERIES 2X YR.	2x a Year	Compost Delivery Call Township Xmas Trees	✓
Easttown Twp. 610-687-3000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	WHITE GOODS INCLUDED WITH BULK	1 Item per Month	3x Fall 1x Spring	1x Xmas 1x Spring
East Whiteland Twp. 610-648-0600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		White Goods Call Hauler	✓	✓
Elverson Borough 610-286-6420	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TIRES 2X YEAR BULK WHITE GOODS	2x a Year	Xmas Trees 2x year in Fall	
Honey Brook Borough 610-273-2020	✓	✓	✓			✓	✓	✓	✓	✓		Bulk 2x Year May & October	Leaves 2x Year	
Kennett Square Borough 610-444-6020	✓	✓	✓			✓	✓	✓	✓	✓		Weekly		

MATERIALS CODES - Mixed Paper (magazines, junk mail, office & computer paper, telephone books, paperback books, etc.) Newspapers - Place flat in grocery bags into bundles with string.

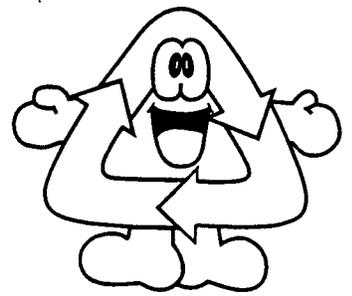


Recycle Right!

Provided by
The Chester County Board of Commissioners
Chester County Health Department
Division of Solid Waste Management

610-344-5937

<http://www.chesco.org/health/dswm1.html>

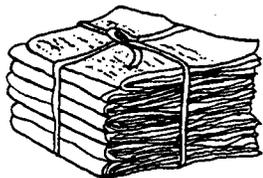


THE ITEMS COLLECTED THROUGH INDIVIDUAL PROGRAMS VARY: CONTACT YOUR HAULER, MUNICIPALITY OR DROP-OFF RECYCLING CENTER TO VERIFY THE ITEMS THEY COLLECT

Household items typically collected are:

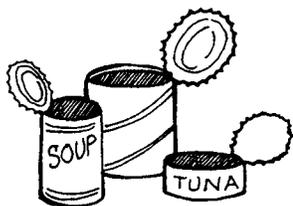
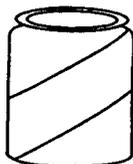
Yes

Glass - clean food & drink bottles and jars only. Rinse and remove lids. Labels need not be removed.



Newspapers - stack in brown bag or tie.

Aluminum - beverage cans only. Rinse.

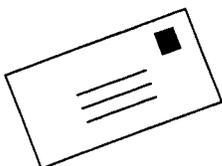


Metal - food & beverage cans. Rinse.

Plastic - #1, #2, narrow-necked bottles and jars. Rinse & remove caps.



Mixed Paper - cardboard, paper bags, magazines, all mail, phone books, home, office & school paper. *Check with your hauler or municipality.*



No



light bulbs

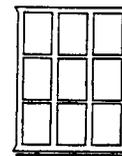


plate glass
window glass



drinking glasses



crystal



ceramic cups
and plates



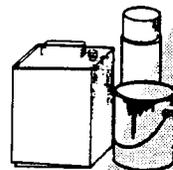
flower pots



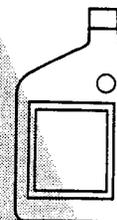
mirrors



ovenware



aerosol and
paint cans



no oil
cans or
bottles



plastic tub
container

- food wrappers
- plastic bags
- wax or plastic coated boxes
- tyvek plastic envelopes
- tissues, towels, napkins
- metallic wrapping paper

CALL 610-344-5937 FOR DROP-OFF LOCATIONS

APPENDIX E
Processing and Marketing List of Participating Municipalities

Chester County Cooperative Marketing Participants

Gregory Prowant
Caln Township
P.O. Box 149
Thorndale, PA 19372

Steve Sullins
Borough of Downingtown
4 W. Lancaster Ave.
Downingtown, PA 19335

Mark Miller
East Goshen Township
1580 Paoli Pke.
West Chester, PA 19380

Kit Trolier
Upper Uwchlan Township
140 Pottstown Pk.
Chester Springs, PA 19425

Bob Wilpizeski
Borough of West Chester
401 E. Gay St.
West Chester, PA 19380

Linda Formica
West Brandywine Township
198 Lafayette Rd.
Coatesville, PA 19320

Chuck Bracken
Contracts - Courthouse

Robert A. Watts
Chester County Solid Waste Authority
P.O. Box 476
Honey Brook, PA 19344

Barb Kelly
East Caln Township
P.O. Box 232
Downingtown, PA 19335-0232

Brian Watson
Phoenixville Borough
140 Church Street
Phoenixville, PA 19460

Linda Phiel
Uwchlan Township
715 N. Ship Rd.
Exton, PA 19341

Jack Hines
West Bradford Township
1385 Campus Dr.
Downingtown, PA 19335

Ray Halverson
West Goshen Township
1025 Paoli Pike
West Chester, PA 19380