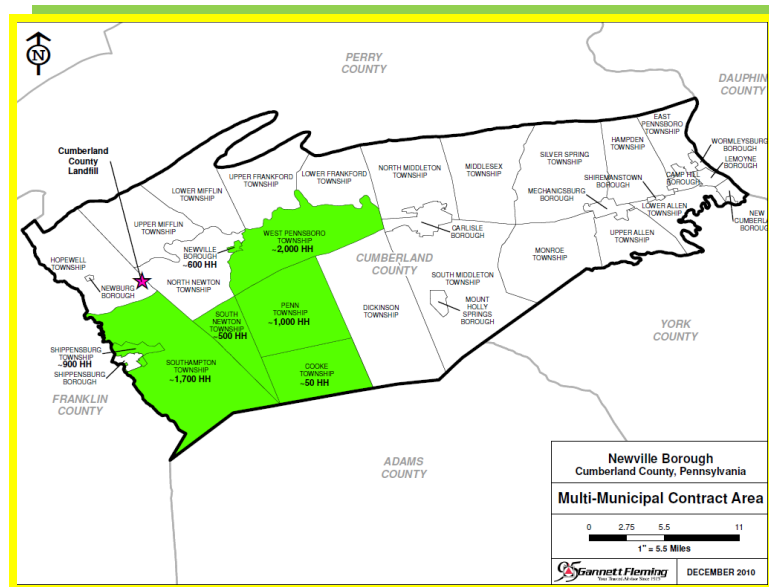


SWANA RECYCLING TECHNICAL ASSISTANCE STUDY

FINAL REPORT

BOROUGH OF NEWVILLE, CUMBERLAND COUNTY, PENNSYLVANIA

CONTRACTING FOR RESIDENTIAL WASTE & RECYCLABLES COLLECTION & INTERMUNICIPAL COMPOSTING



Prepared by
GANNETT FLEMING, INC.



HARRISBURG, PENNSYLVANIA

MAY 2010

**SWANA RECYCLING
TECHNICAL ASSISTANCE STUDY**
FINAL REPORT
BOROUGH OF NEWVILLE
**CONTRACTING FOR RESIDENTIAL WASTE
AND RECYCLABLES COLLECTION**

Table of Contents

	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
ES 1.0 - INTRODUCTION	ES-1
ES 2.0 - PROJECT CONCLUSIONS.....	ES-1
ES 3.0 - PROJECT RECOMMENDATIONS	ES-3
1.0 INTRODUCTION	1
1.1 Considerations for Contract Collection Service.....	1
2.0 EXISTING SOLID WASTE MANAGEMENT PROGRAM.....	2
3.0 MULTI-MUNICIPAL RESIDENTIAL CURBSIDE WASTE CONTRACT.....	3
3.1 Bid Results.....	4
4.0 SOLID WASTE ORDINANCE.....	5
5.0 BOROUGH RECYCLING GRANT ELIGIBILITY.....	6
6.0 NEWVILLE BOROUGH COMPOST FACILITY.....	7
6.1 Compost Site Visit.....	8
6.1.1 Compost Site - Key Findings	9
6.1.2 Compost Site Recommendations.....	10
6.2 Newville-West Pennsboro Joint Compost Agreement.....	12
6.2.1 CCSWA Compost Rental Fees (2011).....	13
7.0 CONCLUSIONS AND RECOMMENDATIONS	13
7.1 Conclusions.....	13
7.2 Recommendations.....	14

APPENDICES

- Appendix A - Draft Inter-Municipal Compost Agreement
- Appendix B - Compost Field Guide

FIGURE 1 - Multi-Municipal Service Area Map

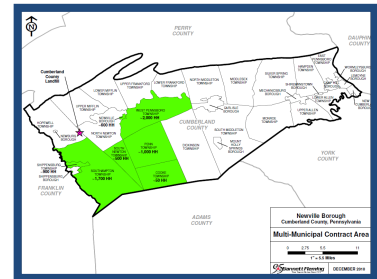
SWANA RECYCLING TECHNICAL ASSISTANCE STUDY
FINAL REPORT
EXECUTIVE SUMMARY
RESIDENTIAL WASTE AND RECYCLABLES
COLLECTION CONTRACT REBID

ES 1.0 - INTRODUCTION

The Borough of Newville (Borough) is located in the western end of Cumberland County, Pennsylvania. Through the SWANA Recycling Technical Assistance program, Gannett Fleming, Inc. (GF) provided technical support and guidance in the Borough's process to contract for curbside residential collection services for waste and recyclables from a single qualified vendor. Additionally, GF visited and evaluated the Borough's compost site and related inter-municipal arrangements. This Executive Summary and project Report summarizes the technical assistance that was provided to the Borough.

ES 2.0 - PROJECT CONCLUSIONS

Contracted Residential Waste Collection: By participating in the multi-municipal contract for curbside waste and recycling services, the Borough will see a dramatic improvement in the overall performance of its waste management system that will result in meaningful and long-term community benefits without raising taxes or other fees. Notable program achievements will include the following:



- **Saving most households over \$100 per year (over 25%) for trash service.**
- **Weekly bulky item service** (chairs, couches, etc.). As compared to separate bulky item pickup fees that range from \$25 to \$50 or more per item.
- **Convenient curbside recycling service and increased recycling** It is anticipated the **Borough recycling rate will increase by over 15%** in the first year and gradually improve the following two years.
- **Accountability and fair and equitable service.** All households will be billed an equitable fee, reducing the number of households who do not subscribe for trash service who often illegally dump waste or otherwise manage their waste in an environmentally irresponsible manner.

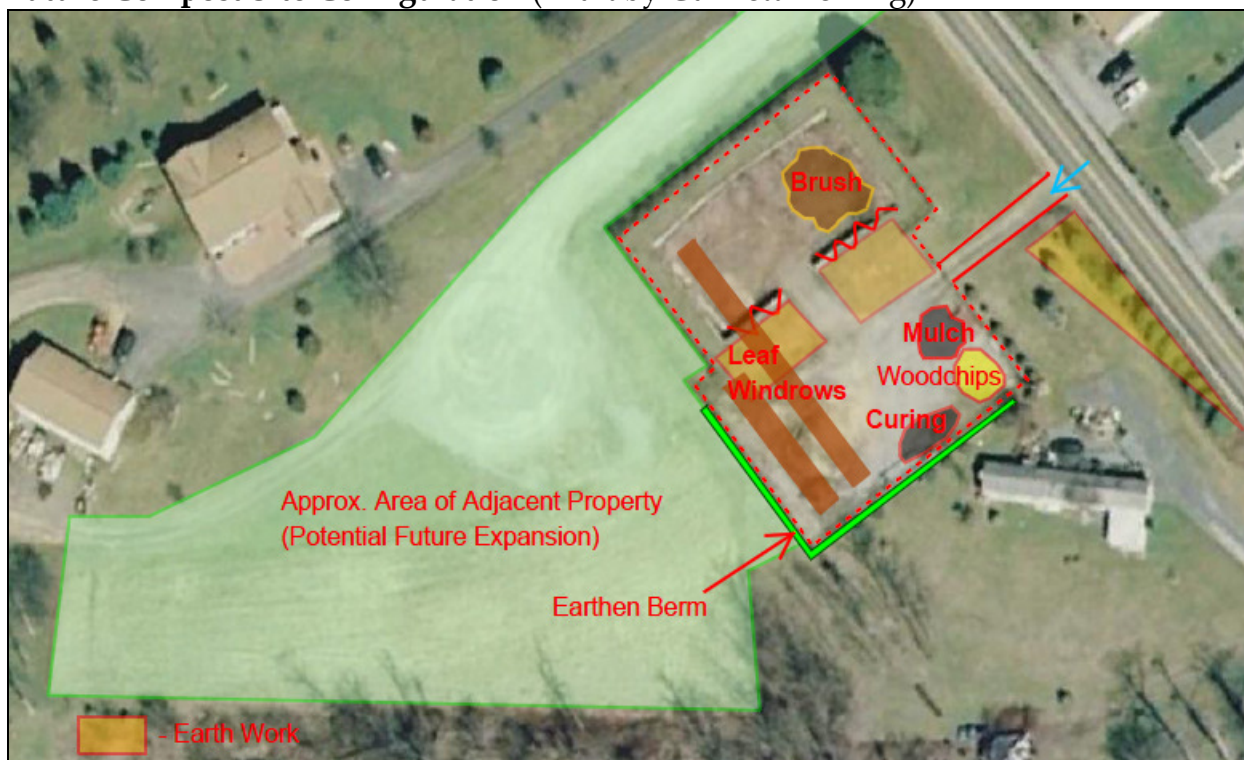
NEWVILLE BOROUGH RESIDENTIAL WASTE COLLECTION CONTRACT PROGRAM SUMMARY	
Service	Service Description
Trash collection (for all residential units)	Once-per-week curbside trash collection for all residential units
Weekly curbside recyclables collection	"Single-stream" recycling, where designated recyclables are placed in one container, for all households. Collected same day as trash.
Billing administered by Southampton Township.	Residents receive a trash bill directly from Southampton Township.
Once-per-week collection of one bulky item	One (1) bulky item will be collected during normal weekly trash collection and households will not be charged separately.
Cost Item	Newville Household Fee
Full Service - 95-gallon toter, weekly recycling, weekly 1 bulk item pick-up	\$48.90 per quarter or 195.60 per year
Senior Service - includes 95 gallon toter, weekly recycling, weekly 1 bulk item pick-up	\$46.74 per quarter or 186.96 per year
Bag Service - includes weekly recycling and weekly 1 bulk item pick-up. 12 Bag MIMIMUM per year.	\$3.50 per bag (Cost per year depends on # of bags purchased)

Composting: Yard waste composting is an important component of an integrated waste management program for Newville Borough. The goal for yard waste diversion by the Borough should not be to collect all or even a majority of grass, leaves and brush that is generated. A large portion of yard waste can be safely and effectively managed by homeowners through backyard composting and grasscycling. When collection of organics is required (e.g. leaves, downed trees, etc.), the material should be composted so valuable compost will be available for use on municipal projects or returned to the community for landscaping, as a soil amendment, or for

similar applications. Although the existing compost site is smaller than desired, it can be utilized more effectively if the proposed site modifications and material handling, composting, and distribution techniques are followed as recommended in this Report. The shared use of the compost site with West Pennsboro Township, improves the Borough's ability to cost-effectively manage organics.



Future Compost Site Configuration (Draft by Gannett Fleming)



ES 3.0 - PROJECT RECOMMENDATIONS

GF recommends the Borough:

- Update its solid waste ordinance to be consistent with the contracted residential curbside waste management program.
- Work closely with the contracted waste hauler to assure the hauler participates in residential education and program enforcement.

- Update the Borough's educational resources and website by creating a separate tab for "**Waste and Recycling**" including:
 - Waste and recyclables curbside collection schedule.
 - Waste and recyclables rules, acceptable materials and handling procedures, including limitations on the quantity and types of items that may be set out at the curbside.
 - Landlord/property owner requirements.
- Implement the compost facility recommendations and site improvements as provided in **Section 6.1.2**; as summarized to include the following:
 - Execute the inter-municipal agreement drafted by Gannett Fleming regarding the joint compost facility operation by the Borough of Newville and West Pennsboro Township (**Appendix A**);
 - Complete earthwork to improve site access safety and site utilization. Utilize on site soil piles and excavated soil to construct a 18" high seeded/vegetated berm around the site perimeter to contain storm water and leachate runoff;
 - Reuse concrete slabs from the reservoir to construct pushwalls to facilitate material pickup with a loader;
 - Initiate "windrow composting" techniques by forming leaves into long parallel rows, not large heaping piles;
 - Limit public access to the compost site, preferably to four (4) or fewer events each year in the spring and fall when visitors can drop-off yard waste or pick up finished mulch and compost. Utilize traffic police during events;
 - Use "satellite sites" like a local park and/or other parking lot as needed as offsite locations for distribution of compost and wood chips/shreds; and
 - Refer to the composting "Field Guide" provided by Gannett Fleming for guidance on composting methods.

**SWANA RECYCLING
TECHNICAL ASSISTANCE STUDY
FINAL REPORT
RESIDENTIAL WASTE AND RECYCLABLES
COLLECTION CONTRACT REBID**

1.0 INTRODUCTION

The Borough of Newville (Borough) is located in the rural, western end of Cumberland County. The Borough is interested in implementing a residential curbside waste management program through implementation of a contract collection program. Implementation of a contracted waste management program involves securing a single, qualified vendor to provide specified residential waste and recycling services through the competitive procurement process. A primary reason for executing contractual waste services is to improve the overall performance of waste collection and recycling, while lowering costs.

This Borough was awarded \$7,500 for this evaluation and professional services as provided by Gannett Fleming, Inc. (GF) through the Recycling Technical Assistance Program. The program is a 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), and the Pennsylvania Association of Township Supervisors (PSATS). The program supports municipalities interested in improving their waste management and recycling programs.

1.1 Considerations for Contract Collection Service

This is not the first time contractual waste management services have been considered in the Borough. In 2000, the Borough developed draft bid specifications for collection services, but there was insufficient support from Borough Council to release the bid and finalize and implement contracted waste services. The Cumberland County Solid Waste Authority (CCSWA) supported the Borough at that time and was engaged during the process as a technical resource. A contract curbside waste collection program is under consideration again because several needs continue to be important to the Borough and to the community:

- Residents have no curbside or drop-off recycling service within the Borough. The existing drop-off area for recyclables that was located in North Newton Township was recently moved five (5) miles from the Borough and is perceived to be inconvenient by some residents.
- Adjacent municipal neighbors that participate in a multi-municipal contract led

by Southampton Township are considering a rebid to optimize their services and cost-per-household. The rebid presents an opportunity for Newville Borough to piggyback onto this program and achieve a very cost-competitive service price that will be 25 to 35 percent lower than current household rates.

- There is limited uniformity and consistency within the existing waste collection program. The level of service is varied and limited (e.g. recycling is usually not provided) and a portion of residents do not subscribe for trash service.
- The Borough does not have, and cannot cost effectively pay for, a spring cleanup or other similar collection program for bulky items. Convenient bulky item pickup at the curbside would be available and affordable through a contract collection program.
- The cost (i.e. trash bills) for those homeowners who secure a private hauler under the private subscription program are high when compared to the cost of a competitively-bid curbside program. Annual savings of over \$100 per household are expected, along with added services (e.g. bulk item pick up).
- Environmental benefits. Although there are some passionate recyclers living in the Borough, the inconvenience of recycling or lack of recycling services results in a majority of recyclables being disposed at the Cumberland County Landfill.
 - Recycling is a benefit over disposal because the overall carbon footprint/environmental harm for recycling materials is less compared to the life cycle of extracting, transporting, and processing raw materials into new products that must be transported to market prior to public use and consumption.

2.0 EXISTING SOLID WASTE MANAGEMENT PROGRAM

The Borough has approximately 1,400 residents. The Borough is not mandated to recycle by Pennsylvania's Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), which is based on population size and density. The Borough does not operate a comprehensive municipal solid waste collection program at this time, but Public Works crews do provide curbside collection of leaves and brush that is recycled at the Borough's 1-acre compost facility. Without direct involvement in waste management by the Borough, the private sector waste haulers in the area offer solid waste collection services to Borough residents. At this time, the primary residential waste haulers include:

- **Interstate Waste Service (IWS)**
- **Waste Management (WM)**
- **Parks Garbage Service, Inc. (Parks)**

Most Borough residents do not receive regular curbside recycling services. Bulky item collections for items like furniture, tires, and white goods are not provided to most residents as part of standard trash service, but can be purchased from waste haulers for an additional fee.

3.0 MULTI-MUNICIPAL RESIDENTIAL CURBSIDE WASTE CONTRACT

At the outset of this evaluation, the contract options changed for the Borough. It was originally intended that GF would assist the Borough in finalizing the bid process and documents that had been drafted by the Borough, and for the Borough only. In a stroke of good fortune, the Borough was approached by Southampton Township about participating in its multi-municipal bid for residential curbside waste collection. Three years earlier, Southampton Township had secured a multi-municipal contract. Because adding more households increases the value of the bid package and competition among potential bidders, it was beneficial for all interested municipalities to take a close look at joining the multi-municipal waste and recycling bid.

Southampton's current multi-municipal waste collection program includes:

- **South Newton Township**
- **Penn Township**
- **Southampton Township**
- **Shippensburg Township**

It was evident to the Borough that competitive leverage would be gained by participating in the larger contract covering so many more households than the Borough acting alone. By working cooperatively, all affected households would be provided the greatest opportunity to achieve comprehensive waste and recycling services at a very competitive cost per household. Some primary advantages for the Borough to piggy back onto the multi-municipal rebid include:

- **Cost advantage:** Participating in a multi-municipal contract that collectively would include approximately 5,800 households created significant additional leverage during the competitive bidding process service. Bidding alone, the Borough's 600 households are comparatively less financially attractive to bidders.
- **Streamlined administration:** If the Borough bid independently, it would have a number of direct responsibilities that could include billing, contract administration, enforcement, education, etc. Some of these items could comparatively increase the cost paid by the Borough, and ultimately the residents. By piggybacking onto a proven multi-municipal contract, the administrative burden and cost burden of contract administration and billing is substantially minimized for the Borough.

- **Service Performance Leverage:** With multiple municipalities involved in a large contract, it is typically easier to work with the contracted waste hauler to ensure the contracted services are delivered as desired. In some instances, small municipalities with waste contracts struggle to enforce the services that are delivered as specified in the contract. In a large multiple municipal contract, the proportionate cost of additional and valued services like once-per-week bulky item pickup is greatly reduced. Residents will receive these important solid waste services at a low cost.

3.1 Bid Results

Bid results for multi-municipal contract collection were opened on March 21, 2011. The **5-year curbside residential waste and recycling contract** was awarded to IWS, and includes the following municipalities (see **Figure 1: Multi-Municipal Contract Area**):

- **South Newton Township**
- **Southampton Township**
- **Penn Township**
- **West Pennsboro Township**
- **Shippensburg Township**
- **Cooke Township**

The new contract secures comprehensive curbside waste, recycling and bulky item service at a reduced cost to residents. The waste management program structure and services for **Newville Borough** are summarized in the table below. The cost of residential services includes the cost of the contracted services with IWS plus billing and contract administration by Southampton Township and Newville Borough.

NEWVILLE BOROUGH RESIDENTIAL WASTE COLLECTION CONTRACT PROGRAM SUMMARY	
Service	Service Description
Trash collection (for all residential units)	Once-per-week curbside trash collection for all residential units
Weekly curbside recyclables collection	"Single-stream" recycling, where designated recyclables are placed in one container, for all households. Collected same day as trash.
Billing administered by Southampton Township.	Residents receive a trash bill directly from the Southampton Township.
Once-per-week collection of one bulky item	One (1) bulky item will be collected during normal weekly trash collection and households will not be charged separately.
Cost Item	Newville Household Fee
Full Service - 95 gallon toter, weekly recycling, weekly 1 bulk item pick-up	\$48.90 per quarter or 195.60 per year
Senior Service - includes 95 gallon toter, weekly recycling, weekly 1 bulk item pick-up	\$46.74 per quarter or 186.96 per year
Bag Service - includes weekly recycling and weekly 1 bulk item pick-up. 12 Bag MIMIMUM per year.	\$3.50 per bag (Cost per year depends on # of bags purchased)

4.0 SOLID WASTE ORDINANCE

A solid waste ordinance is a necessary component of any waste management program. The Borough should update its solid waste ordinance to be consistent with the contract collection program. The solid waste ordinance should reinforce the requirements and services including specific rules, guidelines and penalties applicable to the hauling entity and to Borough residents. For the Borough, implementing a solid waste ordinance that mandates trash collection in accordance with PADEP and Act 101 guidelines assures eligibility for Act 101 Recycling Grants.

5.0 BOROUGH RECYCLING GRANT ELIGIBILITY

Because the Borough is voluntarily implementing a mandatory waste management program that complies with PADEP and Act 101 requirements, it will be eligible for state Recycling Grants. The key components for Recycling Grant eligibility include:

- A solid waste ordinance that, at a minimum, requires residential trash collection and curbside recycling of at least three (3) Act 101 recyclables.
- Ordinance to prohibit open burning.
- “Leaf waste” collections service at least once in the spring and once in the fall, for programs like the Borough’s where a compost facility is open to the public for drop-off. Leaf waste as defined by Act 101 includes leaves, garden residues, shrubbery, tree trimmings and similar material, but does not include grass clippings. The two recycling grants that would be most applicable to the Borough would include:
 - **Act 101, Section 902 Recycling Grant:** The Borough can be reimbursed for 90% of approved costs associated with implementing recycling and composting programs. It is noted that PADEP has historically prioritized the allocation of funding to applicants that demonstrate their programs and needs support a multi-municipal or regionally based program. This grant program is highly competitive and grant applications are not guaranteed to result in award.
 - **Act 101 Section 904 Recycling Performance Grant:** The Borough can be awarded performance grants for their recycling programs based on the amount, type and weight of materials recycled and on the percentage of recyclables diverted from landfills and incineration. Accurate weights must be documented for submittal to PADEP. The reimbursement is on a per-ton basis and has historically resulted in a payback of \$20 per ton, but this was recently reduced by 40 percent due to funding limitations.

If the Borough recovers and reports recycling tonnage that would result in over \$10,000 awarded in Act 101 Section 904 Recycling Performance Grant funds, its waste program would be required to meet the following performance requirements to maintain grant eligibility:

- Requires, through ordinance, that all residents have waste and recycling service.
- Has implemented a residential recycling program and facilitates a commercial recycling program, or participates in a similar County or multi-municipal program.
- Has a residential and business recycling education program.

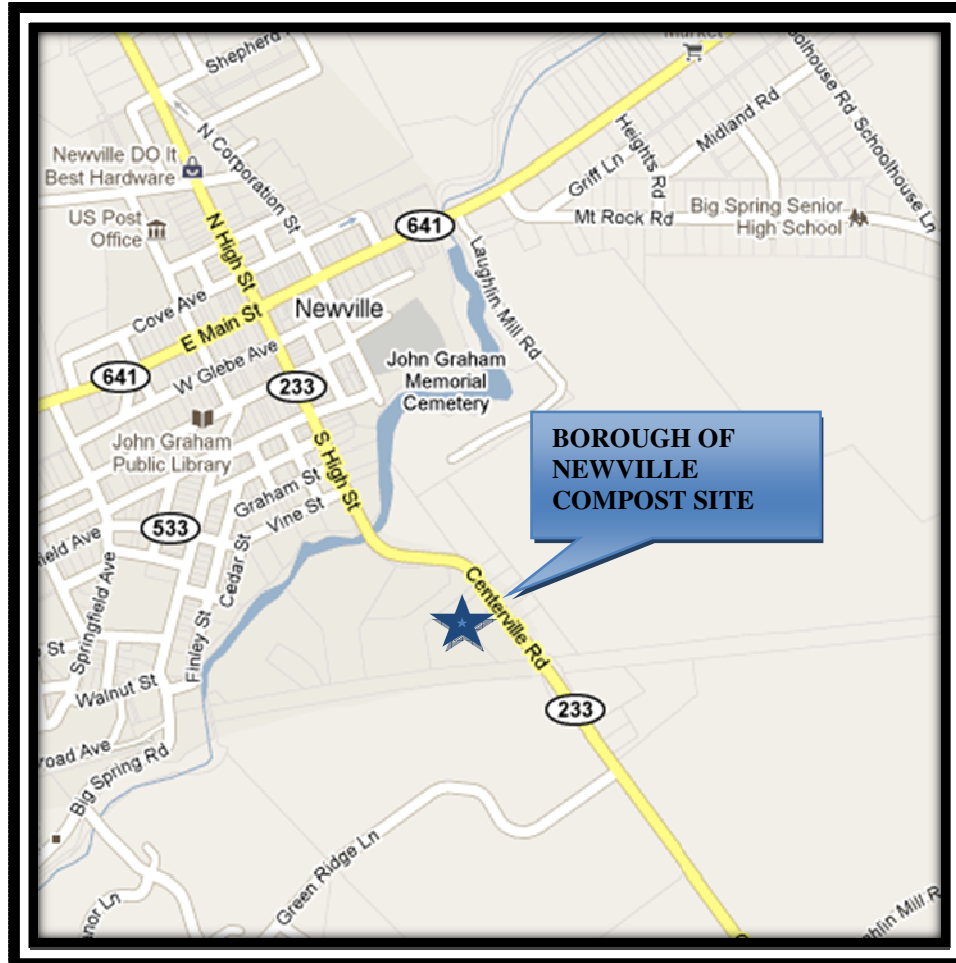
- Has a program of enforcement that periodically monitors participation, receives complaints, and issues warnings for required participants and provides fines, penalties, or both, in its recycling ordinance.
- Has provisions, participates in a county or multi-municipal program, or facilitates a private-sector program for the recycling of special materials.
- Sponsors a program, facilitates a program, or supports an organization to address illegal dumping and/or littering problems.
- Has a person or entity designated as a recycling coordinator who is responsible for recycling data collection and reporting recycling program performance in the municipality or municipalities.

Assuming the reimbursement level will be between \$10 and \$20 per ton under the 904 Performance Grant program, the borough would need to recycle, and have signed documentation, including weight receipts for over 500 tons of material at \$20 per ton or 1,000 tons at \$10 per ton for these requirement to affect the Borough. Since 600 households would likely generate about 1 ton of trash each, or about 600 tons of trash in total each year, it is not anticipated the Borough would not generate or recover sufficient recyclables to exceed the \$10,000 performance grant mark, unless a substantial quantity of eligible recycling was occurring and reported by one or more local businesses or industries.

6.0 NEWVILLE BOROUGH COMPOST FACILITY

As shown below, the Borough operates a 1-acre compost facility located off Route 233, south of the Borough. The site has been used for composting since 1996. According to Borough estimates for 2010, the compost site received and processed 144 tons of leaves and brush. The compost site is only open to Newville Borough residents on an on-call basis and during a few scheduled compost days that are advertised to residents each year. Public traffic is limited at the compost site by the Borough because there is a limited line of site and poor visibility of oncoming traffic.

Currently, only curbside collected leaves and brush collected by Borough municipal crews is processed at the site. After composting or processing, most material is given away to residents with small quantities used by the Borough. Additional leaves and brush generated from West Pennsboro Township will be processed at the site sometime in 2011 after an inter-municipal compost agreement is executed and the site is prepared to receive material. Gannett Fleming drafted the inter-municipal compost agreement in **Appendix A**, that will be executed between the Borough and Township. The joint agreement outlines the roles and responsibilities and cost-sharing arrangements for each respective municipality regarding the compost site.



6.1 Compost Site Visit

Gannett Fleming, Inc. (GF) visited the Borough Compost Facility on March 31st, 2011. The compost site is a little over one (1) acre and is fenced. A portion of the site is on the old footprint of a 1950's water reservoir. The reservoir concrete pad and concrete walls (see photos below) benefit the compost material staging and handling. The site is currently used to compost leaves using primarily a "static pile" composting method, with only occasional material moving/mixing with a loader. Brush is processed and ground on site using a Bandit 90xp chipper or a grinder rented from the Cumberland County Solid Waste Authority (CCSWA). CCSWA compost equipment rental fees are presented in Section 6.1.1. Tree trunks and stumps generated in the Borough are directed to other processors, primarily due to compost site space limitations. Photos of the compost site are provided below.



6.1.1 Compost Site - Key Findings

- The 1-acre site is smaller than desirable, but is suitable for managing current quantities and controlled additional quantities of leaf waste and brush.
 - The adjoining property includes an access road and land behind the existing compost site. This property has been on the market for sale, but the owner has experienced difficulty in selling the property. This land may present an opportunity for procurement and future expansion of the compost site.
- By staging leaf waste in one large, heaped and continuous pile (static pile) the composting process is not optimized:
 - In the static piles, the temperatures get too hot in some spots, too cool in others. At least portions of the pile do not sustain optimal temperatures of at least 131 degrees for three (3) to fifteen (15) days which is needed not only to help kill pathogens, but also to kill weed seeds that can be problematic when the compost is used for gardening and landscaping.
 - Moisture is trapped at the base and other parts of the pile, and some of the

material appears to exceed the 40% - 60% moisture content range optimal for active composting.

- Compacted leaves limit airflow, and this is magnified by the large heaped piles on site that promote increased density and compaction. Added airflow can improve microbial/bacterial activity.
- Some puddles or water ponding was observed on site in the leaf composting area (multiple rain events occurred within two weeks of observation).
- There is a limited line of site when entering and exiting the compost site off Route 233. Traffic visibility is substantially obstructed by a raised earthen berm and trees from the entrance/exit facing southeast along Route 233. Traffic hazards limit this site's potential for open public/residential access.

6.1.2 Compost Site Recommendations

- Execute the Newville-West Pennsboro Joint Compost Agreement as drafted by Gannett Fleming to begin shared use of the compost site and a value-added relationship.
- Prior to placing additional material on site (e.g. from West Pennboro), complete the following **site modifications**; some of which are depicted below in the **Future Site Configuration -Draft**.
 - Increase the amount of level and functional surface area on site by removing the two earthen mounds locate at the entrance to the old reservoir containment.
 - When re-grading this area, slope the ground surface away from the reservoir concrete pad to minimize water ponding. Grade to 2% slope as a general rule.
 - Utilize some or all of the on site soil piles and excavated soil to construct a 18" high seeded/vegetated berm in/or around the site perimeter (where gradient flows offsite) to contain stormwater and leachate runoff. Cover the berm with six inches of topsoil and seed the berm with native grasses suitable in wet and dry conditions that do not require mowing;
 - Reuse concrete slabs from the reservoir to construct pushwalls to facilitate material pickup with a loader;
 - Remove the two concrete slabs on the southeast side of the containment, reusing a portion of these for pushwalls on another part of the site to facilitate material pickup with a loader (e.g. behind curing or finished material staging areas).

- Clean out the reservoir containment down to the concrete pad so that the pad surface is relatively bare. Having the pad exposed may help material management and equipment use and may expedite evaporation of standing water.
- Remove all pipes, earth and miscellaneous items not integral to composting off site.

Future Compost Site Configuration - Draft (Gannett Fleming)



- Compost site **material management recommendations:**
 - Compost site operators should reference the **Field Guide** provided in **Appendix B** for assistance with material management methods.
 - Change from the current method of forming a single heaping pile of leaves to windrow composting. Place leaves in long, parallel rows or “windrows” sized 6’- 8’ high and 12’- 14’ wide to optimize the natural composting process, which can accelerate the time required to reach a finished compost product.
 - Retain a pile of wood chips/shreds on site for application to areas of water ponding as needed.
 - If leaf windrows are too wet and/or compacted in a manner that is limiting airflow, mix in woodchips and shreds with leaves to increase air flow. This

- can be done by spreading 2-4 inches of chips or shreds along the top of the windrow prior to mixing with a loader. Uncomposted wood chips and shreds will be removed when the finished compost is screened.
- Monitor and **control the volume of incoming organic material** to avoid burdening the compost operation with excess material. For example, it may not be feasible at this time to accept leaves from East Pennsboro curbside collections if such a program is implemented by Township.
 - Manage the total quantity of material accumulating on site:
 - **Take some/all large stumps to another processor** (as is currently done using an outdoor kiln for commercial heating).
 - **Restrict public drop-off of yard wastes and/or pick up of finished mulch or wood chips to four (4) or fewer times per year**, preferably two (2) events in the spring and two (2) in the fall.
 - To reduce material storage needs, **identify several outlets for finished products**, including mulch/woodchips and compost. Consider selling bulk loads to local landscapers. Increase the use of compost and mulch on municipal projects and learn how to utilize these products beneficially.
 - **Use “satellite sites” for material distribution.** Local parks, grocery store parking lots, or other locations are recommended for use in staging materials for take away by the public. This is particularly important since this compost site is not adequately suited to handle public traffic.
 - On an ongoing basis, the Borough and West Pennsboro Township should look for land suitable for a larger compost site. Alternative compost sites should be pre-screened for assurance that the site will meet the minimum siting criteria within the PADEP Guidelines for Yard Waste Composting Facilities (January, 2009). A new, larger site could be shared among additional municipal partners to further reduce costs and increase benefits to participants.
 - Meet with the adjacent property owner to discuss a variety of options that might be available (e.g. lease, assume taxes, right-to-buy first retainer, purchase, etc.) to allow the Borough to utilize the property in the future if compost site expansion is required.

6.2 Newville-West Pennsboro Joint Compost Agreement

The Borough requested guidance from Gannett Fleming to develop an inter-municipal compost agreement between the Borough and West Pennsboro Township. Through this Agreement, both municipalities will benefit by sharing compost site operating

responsibilities and costs, which includes the periodic rental of compost processing equipment from the Cumberland County Solid Waste Authority (CCSWA). The draft inter-municipal Compost Agreement and corresponding Rules and Regulations document provided in **Appendix B**.

6.2.1 CCSWA Compost Rental Fees (2011)

Organics transportation and processing, and the associated labor, comprise the lion’s share of organics management costs. Because the Borough does not own yard waste processing equipment except for front-end loaders and a chipper, the heavy processing equipment is rented as needed from the Cumberland County Solid Waste Authority (CCSWA). Proposed yard waste equipment rates established by the CCSWA for 2011 are shown below.

CCSWA Compost Equipment Rentals (2011)	
RETECH 626 TROMMEL Screen:	\$1,250/year
SCAT 482 B Windrow Turner:	\$1,175/year
Millcreek Top Dresser:	\$100/year
Horizontal Grinder (Morbark 3800/ Vermeer HG 525):	\$4,000/year

Note: Cost is not for a full year, but for a scheduled period of use as available.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Multi-Municipal Residential Waste Collection Contract

By participating in the multi-municipal contract for curbside waste and recycling services, the Borough will see a dramatic improvement in the overall performance of its waste management system. The Borough’s transition to a contractual waste management and recycling program offers meaningful and long-term community benefits and captures a rare opportunity to deliver enhanced levels of service to the community without raising taxes or other fees. Some of the notable program achievements will include the following:

- **Saving most households over \$100 per year (over 25%) for trash service.**
- **Weekly bulky item service** (chairs, couches, etc.). As compared to separate bulky item pickup fees that ranges from \$25 to \$50 or more per item.

- **Convenient curbside recycling service and increased recycling** It is anticipated the **Borough recycling rate will increase by over 15%** in the first year and gradually improve the following two years.
- **Accountability and fair and equitable service.** Under the current program, some households do not subscribe for waste services, or share service with a neighbor. Households without service may illegally dump waste or otherwise not manage their waste in an environmentally responsible manner. Households that share service unfairly cut the profits of the private haulers. Under the contract, each household will be billed an equitable fee for comprehensive services.

Composting

Organics composting is an important component of an integrated waste management program for Newville Borough. At the same time, the goal for organics diversion should not be to collect all, or even a majority of organics that are generated. To the extent feasible, organics can be safely and effectively managed by homeowners through backyard composting and grasscycling. However, when collection of organics is required (e.g. leaves, downed trees, etc.), the material should be composted so valuable compost will be available for use on municipal projects, or returned to the community for landscaping, as a soil amendment, or for similar applications. Through shared use of a compost site with West Pennsboro Township, the Borough is improving its ability to cost effectively manage organics. Notably, the existing compost site is smaller than desirable, which restricts material capacity and dictates the preferred approaches for material handling, processing and distribution.

7.2 Recommendations

GF recommends the Borough:

- Participate in the multi-municipal bid for residential curbside waste and recyclables collection services (*contract is now in place*).
- Update its solid waste ordinance to be consistent with the contracted residential curbside waste management program.
- Work closely with the contracted waste hauler to assure the hauler participates in residential education and program enforcement in a mutually beneficial manner for the Borough.
- Update the Borough's educational resources and website. The website should include a separate tab for "**Waste and Recycling**" with updated information about the waste and recycling program including:
 - Waste and recyclables curbside collection schedule.

- Waste and recyclables rules, acceptable materials and handling procedures, including limitations on the quantity and types of items that may be set out at the curbside. Landlord/owner requirements should be described.
- Implement the compost facility recommendations provided in **Section 6.1.2**, as summarized to include the following:
 - Execute the inter-municipal compost agreement between the Borough and West Pennsboro;
 - Complete earthwork to improve site access safety and site utilization;
 - Initiate “windrow composting”, where leaves are formed into long parallel rows, not large heaping piles;
 - Limit public access to the compost site, preferably to four (4) or fewer events each year in the spring and fall for visitors to load up finished mulch and compost. Have traffic police in place; and
 - Utilize “satellite sites” like a local park or grocery store parking lot as needed as offsite locations for public distribution of compost and wood chips/shreds as a measure to manage the quantity of material kept on site.

APPENDICES

APPENDIX A
Draft Inter-Municipal Compost Agreement

**INTERMUNICIPAL AGREEMENT BETWEEN THE BOROUGH OF
NEWVILLE AND WEST PENNSBORO TOWNSHIP
FOR THE OPERATION OF A JOINT COMPOSTING FACILITY**

THIS AGREEMENT (“Agreement”) is made and entered this _____ day of _____, 2011, by and between the BOROUGH OF NEWVILLE (“Borough”), a Pennsylvania borough with principal offices at 4 West Street, Newville, Pennsylvania 17241, and West Pennsboro Township (“Township”), a Pennsylvania township with offices at 12150 Newville Road, Carlisle, PA 17015.

WHEREAS, the parties have agreed to operate a joint composting facility located at 122 Centerville Road, Newville, PA 17241 herein referred to as “Compost Site” for the benefit of the residents of both municipalities, which is to be located upon land owned by the Borough; and

WHEREAS, the Borough has agreed to allow the use of the site for such purpose under the terms and conditions of this Agreement; and

WHEREAS, the parties have agreed to share the annual operating, maintenance and equipment rental costs of the Compost Site and the cost of “Access Drive” improvements as herein agreed; and

WHEREAS, the parties have agreed to jointly establish Rules and Regulations for the operation of the Compost Site; and

WHEREAS, pursuant to the Pennsylvania Intergovernmental Cooperation Act (“Act”), 53 Pa.C.S. § 2301, *et seq.* the parties are authorized to jointly cooperate in the performance of governmental functions; and

NOW THEREFORE, the parties, intending to be legally bound and in consideration of the mutual covenants herein contained, agree as follows:

1. The above recitals are incorporated by reference.
2. **The Borough leases to the parties jointly for the duration of this agreement the land designated as the compost site for a total consideration of \$1.00.**
3. The parties agree to cause their respective comprehensive general liability insurance policies to be amended to provide coverage, at limits as the parties shall mutually agree, for the Compost Site, to name each other as additional insureds thereunder and

to maintain such insurance in effect during the term of this Agreement and any renewal thereof.

4. The parties agree to share the operation, maintenance and equipment expenses of the Compost Site. The Compost Site shall be operated by employees of the Borough and Township. The man-hours required to operate the Compost Site shall be shared equally by the Borough and Township, or otherwise offset through the equal distribution of costs. Cost sharing shall include:

- Cost of Borough and/or Township labor resources applied directly to the Compost Site operation.
- Cost of Borough and/or Township equipment maintenance and/or fuel for activities performed for the purpose of maintaining and operating the Compost Site.
- Rental of compost or other mechanical equipment essential to the Compost Site operation, including equipment available through the Cumberland County Solid Waste Authority.
- Upon mutual agreement in writing, the purchase of supplies, materials and additional equipment, as well as expenses for third party contractors or professional consultants.

The operational cost share distribution is as follows:

Borough Share: **50%**

Township Share: **50%**

5. The parties agree that no operation or maintenance expense shall be incurred in excess of \$200.00, except upon the mutual agreement of both parties.

6. The parties agree to share the cost of Access Drive improvement as follows:

Borough Cash Contribution: \$ Full Cost

Borough In-Kind Contribution: \$ (labor) + land

Township Cash Contribution: \$ 0.00

Township In-Kind Contribution: \$ Labor + available equipment

Total Access Drive Cost: \$

7. The parties agree that any grant monies received for the compost site, from whatever source, shall be applied to the compost site and shall be used for no other purpose whatsoever. The parties shall comply with all grant conditions and requirements.
8. All staff necessary to operate the Compost Site shall be employees of the Borough or Township. Each municipality shall pay their respective employees, make appropriate payroll deductions and provide employee benefits, according to the usual and customary wage rate established by Borough or Township for such employees and according to the benefits established for their other non-uniformed employees.
9. Prior to the commencement of the joint operation of the Compost Site, the parties shall jointly establish rules and regulations for both municipal and public use. The rules of operation may be amended by the parties from time to time as they shall mutually agree.
10. The compost site shall be open to residents of both parties equally and uniformly.
11. The term of this Agreement shall be 10 years commencing upon the date of enactment of the last ordinance required by the Act. Thereafter, the Agreement may be extended or amended as the parties shall mutually agree.
12. The parties agree that the Borough and Township shall maintain all financial records relating to operation of the compost site, which records shall be subject to annual audit, and the other party shall have the right to inspect the records during regular business hours at such times as it deems appropriate or necessary.
13. In conjunction with the preparation of the annual budgets of the Borough and Township, the parties agree to coordinate in the preparation of an annual budget for the operation of the Compost Site, which budget shall be subject to the approval of the Township and Borough. Any unbudgeted expenditures under \$500.00 shall be approved by the mutual consent of the managers of the Borough and Township. Any unbudgeted expenditures in excess of \$500.00 shall require the approval of the governing bodies of the Borough and Township.

14. Municipalities other than the Borough and Township may participate in the use of the compost site upon written approval of the Borough and Township.
15. This Agreement is executed in and shall be construed in accordance with the laws of the Commonwealth of Pennsylvania, and shall be binding upon and inure to the benefit of the parties hereto, their heirs, successors and assigns.
16. This Agreement represents the entire agreement between the parties and may not be amended except by agreement in writing duly signed by both parties.
17. If any paragraph of this Agreement or any part of any paragraph herein shall be held unlawful, invalid or unenforceable, that part shall be deemed deleted and without prejudice to the lawfulness, validity and enforceability of the remaining paragraphs and parts hereof.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed the date of the enactment of the respective intergovernmental cooperation ordinances.

ATTEST:

BOROUGH OF NEWVILLE

Borough Secretary

By: _____
Borough Council President

ATTEST:

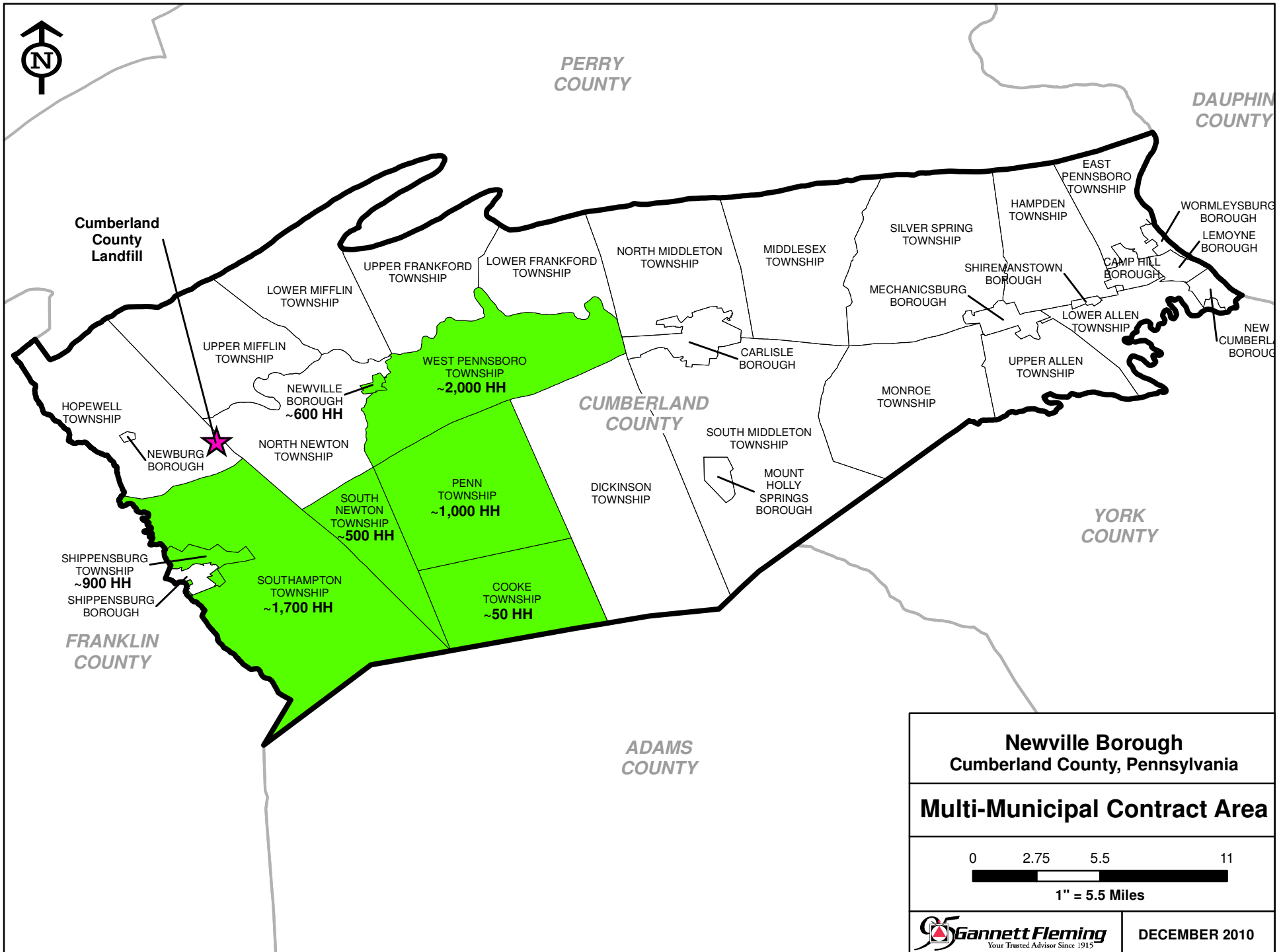
WEST PENNSBORO TOWNSHIP

Township Secretary

By: _____
Chairman, Board of Supervisors

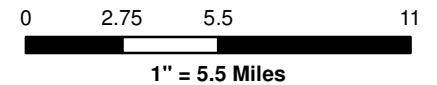
APPENDIX B
Compost Field Guide
(Not in on-line Report)

FIGURE 1
Multi-Municipal Service Area Map



**Newville Borough
Cumberland County, Pennsylvania**

Multi-Municipal Contract Area



DECEMBER 2010