SWANA RECYCLING TECHNICAL ASSISTANCE REPORT

RECOMMENDED IMPROVEMENTS TO THE RECYCLING ORDINANCES AND THE BID PACKAGE FOR RECYCLABLES COLLECTION

FINAL REPORT

Prepared for The Borough of Ambler Montgomery County, Pennsylvania

Prepared by GANNETT FLEMING, INC.

APRIL 2005

SWANA RECYCLING TECHNICAL ASSISTANCE REPORT

RECOMMENDED IMPROVEMENTS TO THE RECYCLING ORDINANCES AND THE BID PACKAGE FOR RECYCLABLES COLLECTION

FINAL REPORT - April 2005

Table of Contents

Page No.

1.0	INTRODUCTION	1
1.1	SCOPE OF WORK	1
2.0	BACKGROUND	2
3.0	EXISTING RESIDENTIAL WASTE AND RECYCLABLES COLLECTION	2
3.1	MUNICIPAL CONTRACT	2
3.2	MUNICIPAL SOLID WASTE AND RECYCLABLE MATERIALS GENERATION	
3.3	RECYCLING PROGRAM	4
3.4	COSTS FOR MUNICIPAL WASTE COLLECTION AND RECYCLING SERVICES	6
4.0	IMPLICATIONS FOR INCREASING COLLECTION OF RECYCLABLES	7
4.1	ADDITION OF CORRUGATED CARDBOARD TO CURBSIDE RECYCLABLES COLLECTION	7
4.2	INCREASED FREQUENCY OF CURBSIDE COLLECTION OF YARD WASTES	
4.3	YARD WASTE RECYCLING ALTERNATIVES	9
4.4	OTHER RECYCLING ALTERNATIVES	10
5.0	EVALUATION OF COLLECTION SERVICES SPECIFICATIONS	11
6.0	EVALUATION OF THE RECYCLING ORDINANCE	
7.0	CONCLUSION AND RECOMMENDATIONS	16

Tables

- Table 1
 Residential Municipal Solid Waste and Recyclable Materials Generation Data
- Table 2Recyclables Material Collection Data
- Table 3Costs for Collection & Disposal/Processing of Municipal Waste and Recyclable Materials
via Municipal Contract

<u>Appendix</u>

Appendix A Increasing Participation of Commercial Recycling

SWANA RECYCLING TECHNICAL ASSISTANCE REPORT *FINAL REPORT* RECOMMENDED IMPROVEMENTS TO THE RECYCLING ORDINANCES AND THE BID PACKAGE FOR RECYCLABLES COLLECTION

1.0 INTRODUCTION

Through the partnership with the Solid Waste Authority of North America (SWANA) and the Pennsylvania Department of Environmental Protection (PADEP), Ambler Borough, Montgomery County, PA was awarded \$7,500 in technical assistance to be provided by Gannett Fleming, Inc.

The Borough desires to increase recycling by adding corrugated cardboard to its existing recycling program. The Borough is requesting general guidance assistance from Gannett Fleming (GF) on securing services for curbside collection of corrugated cardboard. Additionally, the Borough is requesting assistance with developing a bid package for a waste hauler collection services for municipal wastes and recyclables, and updating recycling ordinances to include best available practices.

1.1 Scope of Work

GF worked with Ambler Borough to develop the following tasks for the recycling improvements project.

- Task #1GF will review the Borough's existing waste hauler bid specifications, and
inasmuch as possible obtain information on municipal wastes and recyclables
generation rates. GF will use this information to evaluate current collection
practices within the Borough, and to provide suggestions on improving
recycling through curbside collection. GF will present recommendations to the
Borough, and work with the Borough to develop waste hauler bid
specifications for improving curbside collection of recyclables.
- <u>Task #2</u> GF will review the Borough's existing recycling ordinances and provide suggestions for improving/updating the ordinances such that they are consistent with best available practices.

Task #3GF will prepare and provide the Borough with a summary report of findings
and recommendations. This task includes a review of the report by the
Pennsylvania Department of Environmental Protection (PADEP) and response
to PADEP comments. Additionally, an electronic file of the final report will
be submitted to PADEP along with a MS Word summary (as required) of the
project conclusions and findings. Both an electronic and hardcopy version of
the report will be provided to the Borough.

2.0 BACKGROUND

Ambler Borough is home to approximately 6,200 residents and is located in eastern Montgomery County in Pennsylvania. Ambler Borough occupies an area of approximately one square mile and is approximately 75% residential. Ambler Borough is mandated under Act 101 to provide a recycling program for its residents. Currently, the Borough provides municipally contracted waste and recyclable materials collection services for all residents and apartments with less than five units. Multi-unit dwellings (i.e., over four dwellings per unit) and commercial, institutional and industrial establishments are required to privately subscribe for waste collection and recycling collection services.

3.0 EXISTING RESIDENTIAL WASTE AND RECYCLABLES COLLECTION

3.1 Municipal Contract

Through a contract with J. P. Mascaro & Sons haulers, the Borough provides municipally contracted municipal waste and recyclable materials collection services to its residents on a weekly basis. This program serves residents from single-family and multi-unit dwellings not exceeding four family units. Residents are responsible for placing their trash and recyclables in separate appropriate containers at the curb for collection.

The Borough allows one bulk pick-up per week as part of the normal curbside collection. Bulky items include sofas, mattresses, box springs and similar items. Carpeting is accepted if cut and tied in three-foot lengths. No building materials, automotive parts or batteries are collected.

White goods (water heaters, stoves, refrigerators, air conditioners, dehumidifiers and similar items) must be scheduled separately for pick-up by calling 1-800-432-1616 or 610-272-2765. Freon must be removed and tagged as such.

Municipal waste generated within the Borough and collected through the municipal contract is required to be taken to a disposal site designated by the Waste System Authority of Eastern Montgomery County (Waste System Authority). Through a contract with the Waste System Authority, the Borough is required to utilize the Montenay Resource Recovery Facility in Plymouth Township until the year 2014. The existing contract between the Borough and J. P. Mascaro & Sons is set to expire on December 31, 2005.

3.2 Municipal Solid Waste and Recyclable Materials Generation

The municipal contract currently serves an estimated three-quarters of the Borough's residents, or approximately 4,730 persons (based on 2,150 households with a family unit of 2.2 persons per household). In 2004, approximately 2,780 tons of waste was collected through the municipal contract. In addition, approximately 395 tons of materials were collected for recycling through the municipal contract. Based on these figures, the per capita waste generation rate in the Borough is estimated to be 0.67 tons/person/yr. (Refer to Table 1, 2004 Municipal Solid Waste and Recyclable Materials Generation Data.) This per capita generation rate of Borough residents is less than the state-wide average of 0.87 tons per person per year (roughly 4.8 lbs/person/day), used by the DEP.

Using the per capita waste generation rate in the Borough, the remaining population (i.e., those not served by the municipal contract) recycles nearly 50 tons of materials (refer to Table 1) and disposes of nearly 940 tons/year. Therefore, the total residential waste generation in the Borough in 2004 is estimated to be 4,160 tons/yr.

In 2004, approximately 395 tons of materials were collected for recycling through the municipal contract. Currently the recycling rate is 12% for residents within the Borough who are served by the municipal contract. In addition to the quantity of materials recycled through the municipal contract, the quantity of recyclable materials collected from other residential sources within the Borough (in 2003) was 47 tons. This represents a 5% recycling rate from the residents with private contract services. Therefore, a better estimate of the recycling rate for all residents within the Borough is found by adding both municipal and private contract data; the overall residential recycling rate for the Borough in 2004 was approximately 11%.

Table 1 Borough of Ambler

Residential Municipal Solid Waste and Recyclable Materials Generation Data

	Municipal Contract	Private Contracts (Residential Sector only)	Totals (rounded)
Estimated Population Served	4,730 (a)	1,470 (b)	6,200
MSW Collected for Disposal, tons	2,780	940 (c)	3,720
Reported Material Collected for Recycling, tons	395	47 (d)	440
Total Generation (MSW & Recycling), tons	3,175	987 (e)	4,160
Per capita generation rate, tons/person/yr	0.67 (f)		
Recycling Rate (rounded)	12 %	5 %	11 %

Notes:

- (a) Based on municipal contract of 2,150 households and using 2.2 persons/household.
- (b) Based on total Borough population estimation of 6,200 persons in 2004, less those served by the municipal contract.
- (c) Calculated as Total Generation Material Collected for Recycling.
- (*d*) Based on 2003 Hough Associates report for recyclable materials collected from the residential sector; determined by subtracting Mascaro Bridgeport (i.e., municipal contract) from the residential totals. Note this is data incomplete: it does not include or account for unreported quantities.
- (e) Calculated based on the per capita generation rate for the municipal contract (assume same per capita generation rate for the entire Borough).
- (f) Calculated as Total Generation / population. Use same per capita generation rate for residents with private contracts.
- *Sources:* 2004 Annual Totals for Ambler Borough by J.P. Mascaro & Sons = municipal contract; 2003 Hough Associates report = private contracts.

3.3 Recycling Program

The Borough currently requires its residents to recycle clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, boxboard¹ and plastics. In addition, businesses operating in the Borough must also recycle corrugated cardboard². The recyclables are either collected as part of the municipal contract as

Footnotes: 1 Boxboard = cereal, shoe, tissue, detergent, cracker, cookie, baking product and frozen food boxes and similar containers, and toilet paper and paper towel rolls and other similar items that are not treated with laminates or wax coatings.

² Corrugated cardboard = corrugated containers (commonly referred to as "OCC"), made with structural paper material with an inner core shaped in rigid parallel ridges and furrows, that are not contaminated by hazardous or toxic materials and not treated with laminates or wax coatings. To be collected for recycling, OCC must be flattened and cut or folded into 2 ft. by 2 ft. pieces and tied together with string, twine or tape.

described above, or collected through private contracts between haulers and businesses and multi-family dwellings of five or more units. Based on available data, it appears the reporting practices are lacking for businesses and multi-family dwellings of five or more units.

As part of the municipal contract, curbside leaf and yard waste pick-up is currently offered to residents for five weeks during the fall and three weeks in the spring. In addition, Christmas trees are picked up in January of each year. With the exception of yard wastes, which are taken to Souderton Transfer Station, materials collected for recycling via the municipal contract are taken to the Great Valley Recycling Center.

As previously indicated, the total residential recycling rate for the Borough in 2004 was approximately 11%. The types of recyclable materials collected in 2004 through the municipal contract, and in 2003 through private contracts, are identified on Table 2.

Table 2Borough of AmblerRecyclable Materials Collection Data

	Municipal	Private Contra		
Recyclable Material	Contract (2004), tons	Residential Sector, tons	Commercial Sector, tons	Totals (rounded) tons
Newsprint	211.58	24		235
High Grade Paper			10.5	10
Corrugated Cardboard			210.8	211
Mixed Paper (b)			129.9	130
Aluminum Cans			0.8	1
Clear Glass			0.8	1
Other Plastics			2.6	3
Commingled Containers (c)	156.67	23	1.5	181
Yard Waste	26.62			27
Totals (rounded)	395	47	357	799

Notes:

(a) Private Contract data is based Hough Associates report, 2003; Residential Sector adjusted to exclude quantities collected through the municipal contract (Mascaro – Bridgeport).

(b) Includes newsprint, high grade paper and other paper not previously accounted for separately.

(c) Includes aluminum and bi-metallic cans, clear and colored glass, and plastics not previously accounted for separately.

Sources: 2004 Annual Totals for Ambler Borough by J.P. Mascaro & Sons = municipal contract; 2003 Hough Associates report = private contracts.

In addition to the municipal and private contracts for recyclables collection, Borough residents may take recyclable materials, including glass, plastics, bimetal cans, aluminum and newspaper, to the drop-off center at the County waste-to-energy facility in Plymouth. The Borough also notifies residents and businesses of Montgomery County's annual household hazardous waste (HHW) collection events. There are usually four HHW collection events per year, and the locations vary from year to year in an effort to provide convenience to all County residents.

3.4 Costs for Municipal Waste Collection and Recycling Services

The cost for the municipally contracted municipal waste and recyclables collection services described above, including collection of yard wastes, is \$83 per ton. Through the municipal contract, the Borough's cost for collection of wastes and recyclables was \$231,102 in 2004. Based on 2,150 households served this equates to nearly \$110 per household per year for collection services only; costs for disposal are additional.

Through a contract with the Waste System Authority of Eastern Montgomery County (Waste System Authority), the Borough is required to utilize the Montenay Resource Recovery Facility in Plymouth Township until the year 2014. The Waste System Authority sets the tipping fee at the facility; the fee is currently \$77 per ton. Borough residents are billed for waste collection disposal services at the current rate of \$66 per quarter per household. This equates to \$264 per year per household and includes costs for the curbside collection of recyclables. Table 3 shows the estimated breakdown of collection and disposal costs.

Table 3

Borough of Ambler

Costs for Collection & Disposal/Processing of Municipal Waste and Recyclable Materials via Municipal Contract

Services	Costs
collection costs	\$110 / household / year
processing / disposal costs (a)	\$154 / household / year
Total Annual Billings	\$264 / household / year

Note: (a) Calculated as Total Annual Billings – collection costs.

4.0 IMPLICATIONS FOR INCREASING COLLECTION OF RECYCLABLES

The Ambler Borough Environmental Advisory Council (EAC) has developed a plan for increasing recycling in the Borough including objectives for creating better recycling practices and encouraging residents and businesses to reduce, reuse and recycle. Among the objectives, the EAC has expressed the desire to add corrugated cardboard to the Borough's municipal curbside recycling program. The EAC is also interested in increasing opportunities for residents to recycle yard wastes.

4.1 Addition of Corrugated Cardboard to Curbside Recyclables Collection

Corrugated cardboard, generally referred to by the industry as Old Corrugated Cardboard (OCC), is made from two thick strips of flat cardboard on the top and bottom, and has a wavy, "fluted" middle layer. Boxes for packaging and shipping items (i.e., moving boxes, mailing boxes, bulk packaging and large appliances boxes) are usually made from OCC. OCC does not include boxboard, which is flat, pressed, stiff paper used in boxes for cereal, crackers, bake mixes, etc. Boxboard does not have flutes, is of lower quality paper, and is often coated; boxboard should not be included with OCC collection. OCC is often a targeted recyclable because it is a high-volume and high-weight recyclable material, and diverting OCC from disposal/ incineration results in an avoided cost of disposal incurred from tipping fees. Further, OCC, when compared to many other recyclables receives a high revenue. Current OCC markets yield \$20 to \$40 per ton for loose cardboard and up to \$80 per ton for baled OCC (price depending on quality, distant to market, etc.). The latest (4-9-05) official market prices for OCC in the New York Market was \$80 – \$85 per ton; the range of prices in this market over the past year has fluctuated from \$75 – \$100 per ton, with an average of approximately \$83 per ton over the past year.

Gannett Fleming evaluated several preliminary sites to determine suitable locations to place roll-off containers for cardboard collection. However, due to security, liability and other landowner concerns, the EAC has decided against providing and maintaining drop-off sites for cardboard collection.

The option of adding corrugated cardboard to the existing weekly curbside recyclables collection provided by the municipal contract was also evaluated. As stated previously in this report, J. P. Mascaro & Sons already provides curbside trash and recycling collection services in the Borough. Since J. P. Mascaro does collect corrugated cardboard for recycling from

nearby municipalities, J. P. Mascaro was contacted to determine what additional costs would be incurred by adding this material to the existing services provided to Ambler Borough.

J. P. Mascaro does collect corrugated cardboard, when properly prepared, from residents in Ambler through the existing weekly curbside collection program. (Apparently the existing contract language is unclear; recommendations for improvements to the bid specifications are provided in Section 5 of this report.) However, the corrugated cardboard is only recycled if it is cut down or folded into 2 feet by 2 feet pieces, tied together with string, twine or tape, and free of contaminates such as plastic or metal strapping, plastic bags, Styrofoam, floor sweepings, dirt, etc. Haulers may not collect larger pieces of OCC or OCC that is not tied into bundles.

Based on discussion with the Borough, it appears that OCC recovery and participation in Ambler Borough is lower than desirable because residents are either unaware of the program, are unaware of the proper OCC handling requirements, or are reluctant to participate. Participation can be improved and increased through additional recycling education.

To have the greatest impact on Ambler Borough's total quantity of recycled OCC collected annually, the Borough can target increased cardboard recycling from generators in the commercial sector (retail stores, grocers, etc.). Business may already have contracts in place for the removal/ recycling of OCC. Often, however, businesses have no recycling program in place. Just as with residential recycling, businesses must be educated on an ongoing basis about their Act 101 requirements for OCC and kept informed on available OCC recycling options. Recycling participation from multi-family complexes, commercial/ industrial sites and institutional establishments often increases when drop-off bins are available on-site.

4.2 Increased Frequency of Curbside Collection of Yard Wastes

J.P. Mascaro has not yet responded to the request for a cost estimate for increased frequency of curbside collection of yard wastes for recycling in Ambler Borough. When the cost for expanded yard waste collection is provided by J.P. Mascaro, the Borough should review the estimated cost with the existing cost of the yard waste program to further evaluate how to proceed.

Because GF did not have estimated costs for increased frequency of yard waste collection by J.P. Mascaro, GF evaluated yard waste costs from several similar programs in

suburban areas. The evaluation indicates costs for such services range from \$8.00 to \$28.00 per household per year depending on the collection frequency (once to twice a month) and the proximity of the final destination site.

For the purposes of this feasibility study, cost estimates are based on two criteria:

- 1. The final destination site for the yard wastes collected for recycling is within 40 miles of Ambler Borough.
- 2. The period for additional collection services is from June through October, and will supplement the existing collection program.

Given the above criteria, cost estimates for increased frequency of curbside collection of yard wastes for recycling is as follows:

- Once a month: \$14.00 per household per year
- Twice a month: \$24.00 per household per year

Please note the above cost estimates are high estimates; actual costs may be less based on competitive bidding.

4.3 Yard Waste Recycling Alternatives

The following programs are for grass-recycling practices.

Mulching Lawnmower Rebates

Some municipalities have been successful in minimizing the need for yard waste collections during the summer months through encouraging grass-recycling. Minimizing the number of curbside collections for yard waste during the summer months, can reduce the total cost for these services, which are typically part of an annual or multi-year collection contract. The Borough can encourage residents to recycle grass back into their lawns through educational materials as well as through offering mulching lawnmower rebates.

An effective grass-recycling program may reduce the need of increasing the frequency of collection of yard wastes during the mowing months (April - September). The Borough could initiate a mulching lawnmower rebate program where rebates are given to residents who attend a recycling & composting workshop developed and presented by the EAC. To receive the rebate, residents must attend the workshop, purchase a mulching mower with no-bagging option, and send in a completed rebate form and copy of the receipt to the EAC (or other designee). Rebates are typically limited to one per address. As an incentive, the amount of the rebate may be increased if the mower is electric in efforts to decrease local air pollutants. The Borough should determine if funds are available for rebates. (The recycling/ recycling education portion of the rebate program may potentially be reimbursed by the State through the Section 902 Grant program. It is noted that currently this grant program has limited funding.)

Composting Workshops

The Borough should continue to participate in yard waste recycling education programs, such as the Pennsylvania Resource Council (PRC) backyard composting program. PRC is a leader in litter reduction, recycling and composting education. PRC offers a two-hour composting program that addresses setting-up a compost pile, maintaining compost and how to use the finished product. The PRC charges \$25 per person (\$35/couple) and each paid class participant receives a compost bin (a portion of the composting program fees may possibly be reimbursed through the State's Section 902 Grant program).

4.4 Other Recycling Alternatives

The Borough can consider a recycling-incentive program such as RecycleBank. RecycleBank is a for-profit company that has a joint venture with the Columbia University Center for the Economy, Environment and Society, and offers a cost effective and environmentally conscious solution to the rising cost of waste collection practices. RecycleBank's vision includes 1) incentive based recycling, 2) research and reporting capabilities, and 3) community outreach and education.

The incentive based recycling program would likely increase residential and business recycling in the Borough, because each participant in the program receives coupons based on the quantity they recycle. In summary, you get paid to recycle! In order to participate in the program, you must have a RecycleBank container with a barcode identifying the owner. The quantity of recyclables placed in the RecycleBank container will be tracked by the hauler, and translated into a dollar amount that can be redeemed as coupons, up to \$25 RecycleBank Dollars per month, to shop at participating stores. There are currently over 50 businesses participating in the program; some local participants include Shop-Rite, Rite-Aid, Coca Cola, Starbucks and others.

A major concern of the RecycleBank program involves the retrofit of collection vehicles to handle the RecycleBank containers and scanning equipment. The Borough needs to determine if local haulers would be willing to retrofit their equipment, and at what cost. In addition, placement of non-recyclable items in the RecycleBank containers negatively affects the accounting system and can jeopardize the program for the community.

5.0 EVALUATION OF COLLECTION SERVICES SPECIFICATIONS

Gannett Fleming reviewed the Specifications (pages 1-12) included with the December 2002 bid package for the contract entitled: Furnishing of Services to Collect and Dispose of Garbage, Rubbish, Trash, Ashes and Other Refuse and Recyclables Generated in the Borough of Ambler. The Instructions to Bidders, Purchase Order Terms and Conditions and other sections of the bid package were not reviewed.

The following comments are offered for the Borough's consideration.

<u>Specifications</u> - The following designations refer to those presented in the Borough's December 2002 bid package for waste and recyclables collection services as noted above.

Item 1.A.1.(b.) - Clarify the listing of recyclables to be collected as follows:

Recommend revising "aluminum and steel cans" to "aluminum, steel and bimetallic cans."

Recommend revising "clear and colored glass" to "clear, green and amber glass containers."

Recommend changing "plastic bottles" to "plastic containers."

Recommend revising "cardboard" to "boxboard" and adding a definition of boxboard as: cereal, shoe, tissue, detergent, cracker, cookie, baking product and frozen food boxes and similar containers, and toilet paper and paper towel rolls and other similar items that are not treated with laminates or wax coatings.

Recommend adding "corrugated cardboard" and adding a definition such as: "corrugated containers (commonly referred to as "OCC"), made with structural paper material with an inner core shaped in rigid parallel ridges and furrows, that are not contaminated by hazardous or toxic materials and not treated with laminates or wax coatings."

Recommend changing the word "market" to "market/recycle" in referring to the handling of recyclable materials collected in the program.

<u>Item 1.A.1.(c.)</u> - The listing of bulky items not allowed is given, but a more clear listing of bulky items that will be accepted for pick-up should be included in this section.

<u>Item 1.A.2.</u>) - Recommend revising this item to comply with Act 101, Section 1501(c)(1)(ii), by adding the following: "Persons are required to separate leaf waste from other municipal waste generated at their homes, apartments and other residential establishments until collection unless those persons have otherwise provided for the composting of leaf waste. The governing body of a municipality shall allow an owner, landlord or agent of an owner or landlord of multifamily rental housing properties with four or more units to comply with its responsibilities under this section by establishing a collection system for recyclable materials at each property. The collection system must include suitable containers for collecting and sorting materials, easily accessible locations for the containers and written instructions to the occupants concerning the use and availability of the collection system. Owners, landlords and agents of owners or landlords who comply with this act shall not be liable for the noncompliance of occupants of their buildings."

Item 1.B.1.) - Recommend revising the second sentence to include yard wastes (in addition to leaves) to be recycled at a composting facility.

<u>Item 2.</u> - Revise term Recyclable Material accordingly per above recommendations on Item 1 revisions for recyclables.

Item 3.A. – Revise last paragraph to include boxboard and corrugated cardboard.

Item 6.B. – Recommend revising this section to clarify what items are and are not acceptable for bulky item pickup, is accordance with changes made to Item 1.A.1.(c.)

Other Concerns

The Borough has provided educational materials regarding recycling to its residents and business establishments. Recycling information is sometimes included in the *Hometown News*, the Borough's bi-monthly newsletter. Recycling bins along with brochures on acceptable recycling practices were distributed to nearly 2,000 homes. Recycling education is critical to program success, but has a cost. It is therefore recommended recycling education costs be included in the Borough's annual budget, if not already being done.

The Borough should continue providing educational material to its residents encouraging them to recycle, and reminding them of the proper methods for identifying,

separating and preparing recyclables for pickup. For instance, newspaper, boxboard, and corrugated cardboard (OCC) if included, should be bound or bagged separately and segregated from other materials put out for collection. As indicated previously in this report, OCC to be collected for recycling should be dry and free from contaminates. OCC must be flattened and folded or cut into 2 feet by 2 feet pieces, and the pieces should be tied together with string, twine or tape. Haulers may not collect larger pieces of OCC or OCC that is not tied into bundles.

6.0 EVALUATION OF THE RECYCLING ORDINANCE

Gannett Fleming reviewed the document titled "Chapter 20 - Solid Waste, Part 1 - Establishment, Maintenance, Creation and Financing of Refuse Collection Systems and Refuse Disposal Methods and Sites; Collection and Disposal of Recyclables." This document serves as Ambler Borough's Recycling Ordinance 857, as amended.

The following comments are offered for the Borough's consideration.

A. §20-101. - Revise definitions as follows:

To PREMISES add: "...refuse is generated and/or stored."

To REFUSE add: "...but not including body-infectious wastes from hospitals, doctor offices, dental offices, veterinarian facilities, laboratories or other sources."

A. §20-104. 3.A. - It appears that the requirement in this statement is not fully stated; this sentence needs to be corrected by the Borough.

A. §20-108. 1. - Revise as follows:

"Materials or substances that pose a fire hazard or are classified as hazardous waste, such as...."

A. §20-108. 5. - Revise as follows:

"Broken Equipment, broken or discarded furniture or household equipment items or metal products such as water heaters, barrels, fencing, oil tanks and other such items not otherwise...." A. §20-109. 1. - Revise as follows:

"Garbage shall be ...with tin cans, ashes, bottles, glass, non-recyclable plastic and metal, non-recyclable glass and packaging, crockery metal and similar materials shall be...."

A. §20-111. 1. - Revise as follows:

"Householders shall place receptacles containing garbage and combustible rubbish refuse acceptable for collection at the curb...."

- A. §20-112. The wording of the last sentence of this paragraph needs to be corrected by the Borough, as applicable.
- A. §20-113. Revise first sentence as follows:
 "...of any kind or nature in **open fires or** outside incinerators...."

A. §20-115. - Revise to eliminate references to Pottstown Landfill, which has been ordered to close by PADEP. The Pottstown Landfill is expected to close in 2005. The paragraph should be modified to generically require "disposal of refuse collected from the Borough of Ambler at a disposal site designated by the Waste System Authority of Eastern Montgomery County."

B. §20-121. 1. - Revise as follows:

"The reduction... and conservation of recyclable materials resources through recycling is an important ... of Borough waste disposal quantities and costs, and its impact on the environment."

B. §20-121. 2. - Revise as follows:

"The collection of any of the following: three of clear glass...newsprint, corrugated paper boxboard, corrugated cardboard, and plastics and leaf and yard wastes as may be designated byand high grade office paper, aluminum, corrugated paper boxboard, corrugated cardboard, and leaf and yard waste from commercial..."

B. §20-122. A. - The Borough should clarify its intent with the words "supplying energy" in this section.

B. §20-122. B. - Revise as follows:

"... and welfare from the potential short and long term...."

B. §20-122. E. - For information only, the current state-wide goal is for 35% recycling by 2005; this goal was re-established by Pennsylvania in 1998, following the state's success in achieving the original 25% recycling goal.

B. §20-123. - Revise definitions as follows:

Delete Corrugated Paper and replace with definitions for corrugated cardboard and boxboard as defined previously in this report (refer to Section 5.0, Evaluation of Collection Services Specifications).

Revise Postconsumer Material to delete corrugated paper and add corrugated cardboard and boxboard.

The Borough must verify whether the "Recycling Containers" definition is still valid.

B. §20-126. 1. - Perhaps this section should include guidance for keeping newspaper, boxboard and corrugated cardboard dry and separate from other recyclable materials; or, refer to possible Borough education that will instruct residents on proper procedures for identifying, separating, and preparing recyclable items for pickup.

B. §20-126. 3. - Revise first sentence as follows:

"...aluminum, corrugated **cardboard**, paper **boxboard** and leaf **and yard** waste...."

Further suggestions for updating the recycling ordinance may be considered. This will be a concern if the Recycle Bank Program is implemented.

7.0 CONCLUSION AND RECOMMENDATIONS

The majority of residents of the Borough benefit from the weekly curbside collection of waste and recyclables through the municipal contracted single-hauler program, which also provides for seasonal collection services for yard wastes and bulky item pickup. We recommend the Borough continue the practice of bidding for refuse and recyclables collection services, to provide economical services meeting the needs and specifications of the Borough. Considerations for upgrading the Borough's waste management program and expanding recycling services include:

- Consider requiring the municipal contract collector of yard waste to recycle those yard wastes, in addition to leaves, at a composting facility.
- Consider revising the specifications to clearly identify corrugated cardboard as one of the Borough's mandated recycling items.
- Modify the Borough's Recycling Ordinance as recommended above.
- Modify the Borough's bid specifications for refuse and recyclables collection as noted above.
- Continue to prepare educational materials and to encourage residents and businesses to participate in the Borough's recycling program, and provide instructions on the proper identification, separation, and preparation of recyclables for pick-up – especially to more clearly specify the proper preparation of corrugated cardboard for recycling pick-up. This can include educating businesses and residents regarding ongoing responsibilities related to waste collection and recycling in DEP mandated communities. Offset eligible recycling costs through Section 902 grants, which are currently of limited availability. Consider creating a line item for recycling costs/ expenses in the Borough annual budget in order to improve tracking of these costs and to ensure the recycling education program is ongoing year to year.
- Use flyers, billing inserts, etc. as needed for educational efforts.
- Continue to investigate yard waste reduction and recycling programs. The Borough could apply (through the County) for a 901 Planning Grant funding for 80% of the approved costs for conducting related surveys, investigations, studies and research.

- Continue to investigate methods, and perhaps develop policies, for improving recycling from businesses and multi-family dwellings of five or more units (i.e., private contract collection services), as well as for improving reporting by haulers serving them. Appendix A includes a list of items the Borough could consider regarding increasing participation of commercial recycling.
- Evaluate the feasibility of an incentive-based recycling program, such as RecycleBank.

Appendix A

Increasing Participation of Commercial Recycling

AMBLER BOROUGH - INCREASING PARTICIPATION OF COMMERCIAL RECYCLING

Considerations for Improving Commercial/ Institutional Recycling participation in Ambler Borough include a number of things that have been done or are being done by a number of municipalities throughout Pennsylvania. This information is also based on Gannett Fleming's observations of recycling programs and based on an understanding of what makes a successful commercial recycling program. It is first noted that increasing participation among commercial establishments in the municipality begins with a designated/ dedicated person (or persons) backed with municipal support along with a commitment to an ongoing and challenging task. Successful commercial recycling programs are almost always a result of the people involved. Once this commitment is made, then noticeable improvements can be realized.

After a recycling person(s) has been identified and a recycling commitment is made, there are a number of more specific things the Borough may do to improve commercial recycling efforts. Some of these things include:

- The Borough can create a comprehensive list of commercial establishments and institutions (concentrating on larger businesses first) that it can use for the purpose of recycling data collection. It is suggested a database (like MS Access) be used to track the information. Gannett Fleming can create a user-friendly customized recycling database for this purpose. Data from commercial recycling efforts can be turned into grant money through use of Section 904 Performance Grants offered by the state (based on volume/ weight of material collected for a given year). The time commitment and associated costs for working with commercial establishments and improving commercial recycling may be at least partially offset through Section 904 grant awards.
- The Borough may issue a survey to businesses to collect information from facilities to determine the status of recycling in commercial establishments.
- The Borough can provide an annual recycling reporting form to commercial businesses so they can report their recyclables quantities. Contact PADEP for an updated commercial reporting form, which can be customize as/ if needed. The Borough should do its best to enforce submission of annual reports by commercial establishments and institutions. A database can save time and be an excellent record keeping tool for this task.
- Find out what haulers and recycling vendors/ markets are available to collect recyclables from commercial establishments and then provide this information to the businesses with brief directions on how to do it and why it is important. In mandated recycling communities "it's the LAW".

- A GREAT place to get data is directly from the haulers (and recycling brokers). Work with these entities to get recycling data. Some municipalities have revised their Ordinance(s) to require these entities submit a customer list along with recycling data.
- Educate. A comprehensive education program for commercial establishments and institutions is a must. Again PEOPLE are the key. Make sure the Borough works with the identified recycling person at the company, if that business has such a person and encourage businesses to designate a staff person as the recycling coordinator if it is not clear who has this role (often a secretary is fine).
- A good practice to start tracking/ improving the commercial recycling program is to target large businesses that likely generate substantial quantities of cardboard. Cardboard is the largest component of the commercial sector recycling stream and it is often a marketable and feasible material to remove from the waste stream. Focusing efforts on collecting data from business that are recycling commercial cardboard can be a tangible goal and will help the Borough better understand the commercial recycling sector. Encourage large businesses not recycling cardboard to do so. Having data on cardboard collected form the commercial sector may potentially have the greatest impact on Section 904 grant awards, since this material accounts for such a substantial portion of the commercial recycling stream volume/ weight.