

**Recycling Technical Assistance Project  
# 578**

**City of Washington, Washington County, PA**

**Residential Curbside Recycling; Drop-Off Recycling/Composting;  
Public Outreach**

**November, 2015**

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

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## 1.0 Problem Statement

The City of Washington (“the City”) is a municipality in south-central Washington County, Pennsylvania with a population of 13,803 (US Census, 2013 American Community Survey estimate). While the Census estimated 6,566 households in 2013, there remains uncertainty regarding the number of occupied households that receive weekly waste collection services from the contracted hauler.

The City requested technical assistance with four issues faced by their Waste and Recycling Department and program (henceforward “program”). These issues are:

- Evaluation of solid waste services bid process,
- Evaluation of Solid Waste Ordinance relative to the procurement process,
- Recommendations for outreach strategy in support of the new leaf/yard waste drop off,
- Recommendations for improved outreach for residential and commercial recycling.

The City informed PRC staff that there has been some concern among residents that annual per household fees for the program are too high. At the same time, the City would like to get maximum value out of the equipment and infrastructure the program has purchased and built with DEP funds awarded to it over the past four years. While reducing cost and increasing value (benefit and appreciation of it) are common perennial challenges, the convergent timing of a) drafting bid specifications for a new multi-year contract with a commercial waste/recycling hauler; and b) launching the City’s first leaf/yard waste drop-off site provides the City with a unique opportunity to address both these core issues simultaneously.

## 2.0 Work Completed

After an initial conference call with Lynn Galluze (Computer Systems Coordinator) and Joe Manning (Councilman and manager of the City’s Department of Accounts and Finance) to discuss key issues, staff requested, received and reviewed the following documents:

- recycled tons from residences and businesses from 2007-2014;
- current solid waste ordinance;
- most recent residential solid waste services contract (2013);
- multi-municipal agreement to form a Cooperative around leaf-yard waste collection and processing;
- current recycling calendar and other current recycling outreach (e.g. mailings, web-pages);
- plans for and photos of new drop-off site;
- operational budget of overall Solid Waste/Recycling program; and
- specific costs and revenue in particular areas (e.g. leaf collection and hauling).

Staff discussed issues and details with Ms. Galluze, via phone and email; visited the new drop-off site to meet in person with Ms. Galluze and with John Stout, Foreman of the Street Department; and followed up with further questions via phone and email. For comparisons and analysis, staff consulted the US Census, county recycling coordinators and staff at over two dozen municipalities; and reviewed bids, contracts, previous RTAs and municipal websites and printed material for public outreach and education.

## 3.0 Analysis

### 3.1 Improving Bid Process for Residential Curbside Waste and Recycling Collection

On December 31, 2012, the City signed a 3-year contract with a national hauler for weekly hauling of residential waste (no limit on the amount of waste hauled per household; no limit on truck size) and monthly collection of residential recyclables. In this current third year, the City pays the hauler \$691,419 per year for residential waste collections and \$123,205 per year for residential recycling collections.

The current contract ends Dec. 31 of this year. The City plans to put out bids for the new contract in early September, open them by early October, with nearly three months to review, select or open a revised bid.

Multi-year contracts with haulers typically specify an estimated number of serviced households, at least for the initial year, and use this and a per-household rate that may go up each year, for pricing. Some contracts, like the City's current one, are *lump-sum contracts*, (i.e. the total annual price is set based on this initial estimate of active households). In *service-based contracts* the hauler is required to make regular updates on the number of active households to the municipality (monthly, quarterly or semi-annually), with the total fee varying accordingly.

The program faces two overlapping chronic challenges, shared by many in lump sum contracts that take on billing households directly. First, they need to continually revise their number of *active* accounts (i.e. households occupied, generating waste, requiring service). Each year, the program bills all owners of households it considers active. Over the year, they receive responses from owners claiming properties are unoccupied. Those verified as such are *deleted* from the active list; those remaining unverified are put in a *held* category. Occupancy rates shift frequently, primarily among the large number of rental properties. Second, they need to identify delinquent households, give lists to a law firm for collection, and increase per-household pricing to cover the cost of delinquent fees by the number of households actually paying.

Table 1 summarizes the billing inventory for the program over the past seven years. While held or deleted accounts has diminished and stabilized around 3 to 4%, delinquency continues to bump between 12 and 15%, double the rate of other municipalities we contacted.

Two specifications in the bid that resulted in the current contract are likely to have raised the cost. First, the bid specifies that collections be on a Monday. This has been the traditional day of waste and recycling hauling and residents requested that it be a requirement. However, if pricing is a serious concern and the day specification both raises the bid and limits the number of haulers that can accept it, residents may want to reconsider the value of this condition. Secondly, the "unlimited" amount of waste hauled per household option raises the cost. Again, the City and residents may want to reconsider the value of the "unlimited" option, especially if the "limited" option includes a reasonable number of days per year for scheduled curbside bulk removal (e.g. two or three). Flexibility on both of these specifications is likely to increase the number of haulers that submit bids and subsequently lower the cost of services. The high number of rental properties in the City and the sometimes high rate and unpredictability of turnovers have created a strong expectation among residents for unlimited waste service. A bid with two or more options for waste volume per week would allow the City to present a clear trade-off on this issue to residents, including owners of rental properties.

There is evidence that recycling rates increase with frequency of curbside collection. Biweekly collection of recyclables is the norm in our region, while higher performing municipalities enjoy weekly collections. Table 2 summarizes the strength of recycling in the City relative to ten nearby municipalities. The City does not fare as poorly as might be expected, given their monthly collections. Still, three municipalities have roughly double the City's rate (two of them with biweekly collections), and one township with nearly triple the rate enjoys weekly collections. Staff reviewed the City's current Solid Waste Ordinance and did not identify sections which would negatively impact the bidding process and subsequent contract.

While improving the bid process was the City's primary request in terms of cost reduction, it should be noted that related internal City operations represent roughly 25% of the program's costs. These additional costs include administrative support of the program (billing, accounting, verifying unoccupied households, tracking delinquent accounts) and other solid waste related services conducted by City personnel (waste collection in public streets and parks, collecting curbside residential leaves/yard waste).

### 3.2 Leaf/Yard-Waste Collection and New Drop-Off Site Operations

Since 1998, the City has been collecting residential leaves and yard waste in Streets Department trucks and hauling the waste to a nearby third-party compost site. In recent years, the City has been collecting twice each week over the months of October and November, utilizing two different types of trucks: one with a vacuum hose for loose leaves; the others without, for collection of bagged leaves and yard-waste.

Table 3 summarizes the operational costs of this service over the two most recent years. Between the two years, there was a significant increase in material collected and a slight reduction in the cost of collection and hauling per cubic yard. Further, the City has had to pay the third party a tipping fee for delivering and expects to receive some rebate income from the same material. Table 4 summarizes the fees, rebates and net cost, for the past five years. Per cubic yard tip fees have varied over 4.7x over these years and per cubic yard rebates have varied over 8x.

The City does not have a record of a formal contract or agreement with the third party at any time over the past 17 years. Instead, the City receives a form letter from the vendor each year, generally in late September, in which the vendor specifies “the minimum guaranteed/lump sum contract” for tipping fees. These annual letters include no mention of a per cubic yard pricing of rebates, nor do they explain the calculations behind “the minimum guaranteed/lump sum contract” for tipping fees.

In 1996, the City joined four other nearby municipalities (North Strabane, South Strabane, McDonald and East Washington) to form an Inter-municipal Composting Cooperative. The founding Agreement outlines the sharing of capital and operational costs and potential revenue among the member municipalities in combining operations, specifically “investigating the development and implementation of permanent and/or mobile drop-off centers” and “implementing and constructing a collection, processing and composting site”. It distinguishes host from non-host municipalities and operating from matching-funds capital expenses. It is a thoughtful and thorough document.

However, it appears that the only actions related to the Cooperative that have occurred in the nearly 19 years since its founding have been taken by the City of Washington: the submission of grant proposals for a drop-off site; the subsequent award of these grants; the purchase of equipment; and past and ongoing preparation of the site. Otherwise, the City is not aware of any actions taken by the Cooperative, nor any meetings, in the intervening years.

The City plans to begin operation of the new Drop-Off site over the next two months, i.e. in time for the first autumn leaves. The City faces two sets of questions regarding this operation. The first concerns its operations in relation to the City’s own leaf/yard-waste. The second concerns the possibility of its accepting material from other municipalities in the Cooperative.

In terms of services for its own material, one key question is “what is the net benefit or cost of chipping this material before hauling it to a third party?” Chipping will increase the density of each load, and thereby increase its weight and reduce the frequency of trips. However, these savings in hauling expenses should be compared to the increased costs in labor, diesel and maintenance operational, as well as in matching and replacement capital expenses. According to the Cornell Waste Management Institute (Fact Sheet #2, 1990), a cubic yard of un-shredded leaves and yard waste weighs about 100 pounds and a cubic yard of shredded material weighs an average of 525 pounds. Chipping or shredding should then reduce the frequency of trips to a third party and thereby the costs of hauling it there (in labor and diesel) by over 80%. However, as the haul contributes a relatively small portion of the operational costs of leaf collection relative to curbside collection (Table 5), even an 80% reduction may not save the City much more than \$1,000 each year. This modest savings should be kept in mind when scheduling Streets Department staff to chip and otherwise manage material on the new site.

Another question for City-use only operations for the new drop-off site is the hours it is open. At present, the City plans for the site to be open Monday through Friday, 9 am to 3 pm. If the City wants to maximize the amount of material that residents and businesses bring to the new site, it might consider some regular weekday evening and/or Saturday morning hours. With time and a half overtime for a single employee, this would cost about \$150 for each 3-hour overtime shift.

The upcoming launch of the Drop-Off site may be a time to revisit the long-dormant Cooperative. Working with fellow municipalities can dramatically increase the amount of material the City can process and eventually use and distribute. The value of this increased volume depends on uses and distribution, points discussed in Recommendations. The inter-municipal agreement allows for the receiving site to charge a tip fee to fellow municipalities, which can cover much if not all of the operational costs of the site. Serving as a hub for this inter-municipal cooperative undertaking can contribute to shared pride.

In discussions, the City expressed a preference to limit this initial year's operation to material brought by the City's own Street Department and by City residents and businesses. If/when the City decides to invite other municipalities, key questions include: Which days and hours can a member municipality deliver material? Should there be any minimum or maximum amounts brought by each municipality over a year? What is the tip fee rate (per cubic yard) charged to other municipalities?

The City also expressed interest in converting the new site to a composting operation. Based on average net costs in Table 4 and estimated costs in Table 5, this would save the City roughly \$4,800 each year (\$3,700 in avoided net fees paid to the third party plus an estimated \$1,100 in avoided hauling). However, this savings must be weighed in relation to the costs of further site preparation and additional processing. There is always the risk with new large pieces of equipment that they are used more frequently than necessary, simply because they are enjoyable to operate. The City can use this initial year to carefully monitor the costs of operation and assess the potential costs and benefits of both options for the future. It can also approach the third party composter in hopes of securing more favorable terms.

Residents can and should evaluate the cost of the overall program in relation to its benefits. While there are environmental benefits of recycling the traditional set of materials (plastic, paper, metal, glass), these benefits are primarily quite distant and somewhat abstract (e.g. air pollution reduction and energy savings, perhaps thousands of miles away). In contrast, diversion and collection of leaf/yard waste to composting can provide benefits that are much more local. The new drop-off site—with its possibilities of storage and processing and increased options for use and distribution—is a unique opportunity to *maximize the local benefits* of this diversion and collection and *maximize the public appreciation of these benefits*.

### 3.3 Outreach for Drop-Off Site and Recycling Program.

There are three outreach strategies that contribute to a successful recycling program. A successful program achieves high rates of diversion and participation (with its environmental benefits) and fosters and sustains widespread satisfaction and shared pride.

Direct Mailings. Direct Mailings to all households are the most expensive mode. However, there remains no better way to get key information in the hands of a great many residents in the comfort of their homes, over the course of the same few days, especially in areas with older residents who are less habitual users of email. The City already does one mailing a year, including the recycling calendar and one-page residential flyer, along with the annual waste/recycling bill. This is the most common annual direct mailing among municipalities, usually sent between mid-December and early January. The City may consider mailings at two other times of the year, depending on focus of communication and budget: one in early April with a focus on spring cleaning (options for household chemicals, yard-waste and bulky

hard-to-recycle items) and one in late September with a focus on leaf/yard waste (backyard composting, shred/mulching for lawns, curbside collections and drop-off site).

Website. The City's current home page has recycling (word and logo) in a prominent place, near the center and the top. One click brings the user to a page with three clear options: the current recycling calendar, information for residents, and information for businesses. Each of these end-pages is itself a one-page, single-sided flyer, which are included in the annual mailings to residents and businesses. Each provide appropriate information (what to recycle; contact numbers for e-waste, information on yard-waste, information on why to recycle). The flyers are colorful and attractive.

Special Events. The launch of the new Drop-Off Site presents a great opportunity for outreach, both to encourage its regular use among residents and businesses and to increase public awareness of and appreciation for the City's overall solid waste/recycling program. Staff suggested a Kick-Off event to launch the site in September 2015, which would likely be a couple of weeks before the first heavy leaf fall. The newly constructed pad is large (100 x 100 feet) and presently empty of material. Staff discussed some possibilities with the City: schedule a few hours on a weekend; publicize it well a week or two before (website, press releases, signs in stores); provide refreshments, educational materials, speakers, even a live local band. After consideration, the City felt that scheduling the event for September would not allow adequate time for most effective publicity and most effective education, and that a Spring Kick-Off event made more sense. A second pad is planned for construction to take the place of the salt shed, which will be moved a few hundred feet to a more convenient location (and reduced waste). Clients thought that this move and the second pad might be in place by then, providing more room for the event.

## 4.0 Recommendations.

### 4.1 Recommendations for Bid Process

Staff recommends that the upcoming bid for residential waste and recycling hauling include requests for the pricing of these different options:

- *No specified day of the week required vs. Monday hauling required.*
- *Unlimited waste/household vs Limited.*
- *Pricing of on-demand bulk waste services* (i.e. for clearing out rental properties). Appendix 1 gives an example of bid wording in a model prepared for Tobyhanna Township.
- *Household billing by hauler vs. household billing by City.*

Providing the "any day" and "limited" options are expected to open the bid to more than a single hauler.

Staff recommends *considering requiring service-based billing* in the bid, or including it as an option. If the program continues to allocate staff time to billing and inventory updating, a service-based contract provides a mechanism by which regular adjustments in active household numbers can help insure that the City is not paying more than it should and providing a check on hauler inflation of this number. Appendix 2 is an excerpt from a recent bid from the City of Harrisburg that requires service-based billing, with active household numbers regularly updated by the City itself.

### 4.2 Recommendations for Drop-Off Site Operations

Staff recommends that the City:

- Plan to keep the drop-off site open one day per week, alternating a Saturday morning for 2 hours (9 am to 11 am) and a weekday evening for 2 hours (5pm to 7pm), if the City wants to maximize the amount of material that residents and businesses bring to the site.
- Solicit bids for the processing and marketing of City collected leaf/yard waste. This solicitation should include alternates for the following:



- Materials to include both pre-processed (chipped) and/or loose leaves and yard waste
- Pricing for City purchase of finished compost and mulch products
- Revenue share/rebate for materials delivered pre-processed by the City
- Utilize at least some portion of chipped material (even if not fully composted) to improve City properties (e.g. wood chips to improve trails in Washington Park).
- Create a data gathering mechanism prior to the launch of the Drop-Off Site, to secure the following data points:
  - Site utilization by number of trips/deliveries (residential vs commercial)
  - Approximate volume per trip
  - Processing costs per hour and per yard
  - Staff and labor costs for the site by function (receiving, processing, hauling etc.)
  - Hauling costs per trip to third party site
  - Total tip fees charged, and/or rebates paid, by third party
- Regularly review the above data to assess program performance to support:
  - Service expansion to include members of the dormant Cooperative
  - Process expansion to include on site composting
  - Market development to promote use of chipped materials by residents

#### 4.3 Recommendations for Outreach for Drop-Off Site and overall Program

Staff recommends that the City plan for and launch a well-attended Kick-Off event in Spring 2016. The event should maximize educational value and sense of community pride as well as attendance.

Specific recommendations include:

- Photograph areas in Washington Park that are lovely now and others that could be improved by regular applications of wood-chip mulch or compost.
- Photograph or pull photos from the Internet that show healthy, attractive lawns, home flower and/or vegetable gardens and backyard trees and shrubs.
- Invite local and regional environmental and educational organizations to set up tables and provide speakers for the event. The focus should be on the environmental and social benefits of recycling traditional materials, leaf/yard waste, e-waste, batteries, appliances, tires, etc., as well as the environmental benefits of the proper disposal of household chemicals.
- Design and produce a few (e.g. 5) full-color posters mounted on rigid plastic (for regular use over several years, able to withstand exposure to rain) that highlight potential local uses of mulch and compost, including those in the Park; in backyard gardens, lawns, trees, shrubs; and in any nearby area of degraded land. Mount these on sturdy easels around the site for the Kick-Off event.
- Budget three direct mailings to households each year: the traditional December mailing (with bill), a spring mailing (with focus on bulk removal, household chemicals, and leaf-yard waste), and an autumn mailing (with focus on leaf-yard waste). Design an attractive and informative single-sheet flyer for each. Appendix 3 offers several examples from other municipalities.
- Place these attractive, informative seasonal flyers in a prominent place on the City's website.

## Tables

Table 1: Solid Waste Account Inventory, recent years

	2008	2009	2010	2011	2012	2013	2014
<b>Accounts Billed</b>	5072	4995	5828	4903	4837	4845	4709
<b>Held or Deleted Accounts</b>	698	304	1038	381	210	206	138
<b>Active Accounts</b>	4374	4691	4790	4522	4627	4639	4571
<b>% Held or Deleted</b>	14%	6%	18%	8%	4%	4%	3%
<b>Delinquent Accounts</b>	343	601	688	547	652	689	567
<b>Total Paid Accounts</b>	4031	4090	4102	3975	3975	3950	4004
<b>% Delinquent</b>	8%	13%	14%	12%	14%	15%	12%

**NOTES:**

Billed Accounts are those receiving annual bills from the City for Solid Waste/Recycling services.

Held Accounts are properties which billed owners claim as vacant.

Deleted Accounts are those verified as vacant.

Active Accounts are Billed Accounts minus Held and Deleted Accounts.

Delinquent Accounts are unpaid Active Accounts.

Table 2: Residential Recycling Pounds/person/year, 2013

	lbs recyc/ pop	relative to Wash City	Recycling Rate	relative to Wash City	Collections/ 4 weeks
<b>Peters Township</b>	211.9	326%	16%	283%	4
<b>North Strabane Township</b>	110.4	170%	13%	227%	2
<b>Canonsburg Borough</b>	98.2	151%	11%	184%	2
<b>Chartiers Township</b>	86.5	133%	10%	183%	1
<b>Cecil Township</b>	79.1	122%	8%	144%	?
<b>Washington City</b>	64.9	100%	6%	100%	1
<b>South Strabane Township</b>	52.8	81%	4%	68%	1
<b>Union Township</b>	43.5	67%	5%	85%	?
<b>Carroll Township</b>	42.5	65%	4%	62%	2
<b>Canton Township</b>	42.3	65%	11%	198%	?
<b>California Borough</b>	30.6	47%	4%	69%	2

Table 3: Recent Annual Operational Costs of Residential Leaf/yard-waste Hauling

	2013	2014
<b>Labor</b>	\$4,912	\$7,274
<b>Diesel</b>	\$364	\$528
<b>Labor+Diesel</b>	\$5,276	\$7,802
<b>cubic yds</b>	226	343
<b>L+D/yd<sup>3</sup></b>	\$23.35	\$22.75

Table 4: Recent Annual Net Costs of Residential Leaf/Yard Waste Tipping to Third Party

	2010	2011	2012	2013	2014	Total since 2010
<b>Yds<sup>3</sup></b>	277	274.3	309	226	342	1,428
<b>Fees</b>	\$8,000	\$6,470	\$3,220	\$1,380	\$7,120	\$26,190
<b>Rebates</b>	\$0	\$1,988	\$2,702	\$0	\$2,982	\$7,672
<b>Net Cost</b>	\$8,000	\$4,482	\$518	\$1,380	\$4,138	\$18,518
<b>Fee/yd<sup>3</sup></b>	\$28.88	\$23.59	\$10.42	\$6.11	\$20.82	\$18.34 avg
<b>Rebate/ yd<sup>3</sup></b>	\$0.00	\$7.25	\$8.74	\$0.00	\$8.72	\$5.37 avg
<b>Net Cost/ yd<sup>3</sup></b>	\$28.88	\$16.34	\$1.68	\$6.11	\$12.10	\$12.97 avg

Table 5: Operational Costs of Residential Leaf Collection and Hauling (2014 totals)

	Residential Collection	Hauling
<b>Labor</b>	\$6,365	\$909
<b>Diesel</b>	\$352	\$176
<b>Labor+Diesel</b>	\$6,717	\$1,085

NOTE: The above estimation assumes that hauling takes one-seventh of the time (labor) of residential collection (1 hour vs 7 hours, according to City accounts); and one half of the diesel (although the mileage is close to identical, hauling is a straight shot while collection is constant starting and stopping over short distances).

## Appendices.

### Appendix 1: Bulk Item Collection

From “Model Request for Proposal for Curbside Collection of Residential Waste and Collection of Recyclable Materials for the Township of Tobyhanna”. Prepared by Alternative Resources, Inc.

e) Bulk Refuse such as screens, rugs, tree trimmings (cut into 3-foot lengths and tied in bundles weighing no more than fifty (50) pounds) and other Bulk Refuse will be collected on regular collection days throughout the year at a limit of one item per household, one time per \_\_\_\_\_. In addition, construction debris limited to one container or bundle of lumber or plaster cut into three-foot lengths and weighing less than fifty (50) pounds will also be collected on regular collection days.

f) The Contractor shall provide Bulky Item collection service to residential dwelling units on an individual basis. Bulky Items include such items as; refrigerators, stoves, washing machines, furniture, tires, mattresses, rugs, etc. The Contractor shall provide Bulky Items collection within seven (7) days of notice from the resident of the resident's desire to have any Bulky Item collected and within one (1) day of placement for collection. Bulk collection may be made by open trucks with no limitation on size or requirements of container so long as not in the form of debris and as long as limited to household items. The Contractor shall include a price list for collection of Bulky Items as part of their bid. The cost list shall include increases in cost, if any, over the course of the contract period.

## Appendix 2: Service-Based Pricing

From “Request for Proposal #11-2012 for Solid Waste and Recycling Collection and Disposal Services”.  
City of Harrisburg, Mayor Linda D. Thompson, Submittal Deadline June 14, 2013

### Section 10 - Contract Pricing & Payment Structure

#### 10.1 Payments

Payments shall be made monthly to the Contractor in an amount determined through the formulas detailed below. The Contractor shall prepare and file an invoice for each monthly payment. Monthly payments shall be paid within thirty (30) days of the City's receipt of a proper invoice. Payment of invoices will not be made until the required reports and weight receipts, as provided in Section 9.16, are received. As full compensation for the complete performance of this Contract the Contractor shall be paid the amounts determined in accordance with the following:

#### 1. Terms

ASF = Annual Service Fee    BF = Base Figure    COF = Change Order Fee    CPI = Consumer Price Index  
MI = Monthly Installment

UF1 = Unit Fee 1 from January 1, 2014 through December 31, 2014

UF2 = Unit Fee 2 from January 1, 2015 through December 31, 2015

UF3 = Unit Fee 3 from January 1, 2015 through December 31, 2015

UF4 = Unit Fee 4 from January 1, 2016 through December 31, 2016

UF5 = Unit Fee 5 from January 1, 2017 through December 31, 2017

#### 2. Payments

Year 1:  $UF1 \times BF = ASF$      $ASF = MI$      $MI + COF$  (if any) = Payment to Contractor

Year 2:  $UF2 = UF1 + (UF1 \times CPI)$      $UF2 \times BF = ASF$      $ASF = MI$      $MI + COF$  (if any) = Payment to Contractor

Year 3:

$UF3 = UF2 + (UF2 \times CPI)$      $UF3 \times BF = ASF$      $ASF = MI$      $MI + COF$  (if any) = Payment to Contractor

Year 4:

$UF4 = UF3 + (UF3 \times CPI)$      $UF4 \times BF = ASF$      $ASF = MI$      $MI + COF$  (if any) = Payment to Contractor

Year 5:

$UF5 = UF4 + (UF4 \times CPI)$      $UF5 \times BF = ASF$      $ASF = MI$      $MI + COF$  (if any) = Payment to Contractor

#### 3. Fees and Base Figure

a. The Base Figure for the Contract shall be approx. 15,330 Single Family and Multi-Family Residential Collection Sites and/or approximately 1,400 Commercial sites, depending on contract option.

b. The Base Figure shall be adjusted on a quarterly basis each year of contract term and any renewal period.

c. The Base Figure will be determined in the sole but good faith discretion of the City on the basis of available records and, to the extent practicable, an actual count of Customers.

d. The indices used for Consumer Price Index (CPI) will be based on the most currently available statistics. The Unit Fee for Year 2, Year 3, Year 4, and Year 5, and any extension years shall not be lower than the Unit Fee bid by the Contractor (Unit Fee for Year 1) regardless of index values.

Appendix 3: Sample Residential and Commercial Outreach Materials



# Castle Shannon

## Borough

[www.borough.castle-shannon.pa.us](http://www.borough.castle-shannon.pa.us)

# RECYCLING UPDATE

As a community mandated to recycle, Castle Shannon recycled only 7.8% of its waste in 2004 compared to a statewide recycling rate of over 25%. The Borough needs your help to increase the amount of material collected at the curb.

Curbside **Recycling** Collection happens every other Thursday.

Curbside **Refuse** Collection is every Thursday.

## Holidays Affecting Recycling and Refuse Collection

When the following holidays fall on a Monday, Tuesday, Wednesday, or Thursday, collection is delayed until Friday: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

## Materials Recycled

**Glass:** *clear, brown and green*

- Rinse. Discard lids and metal rings.



**Aluminum, steel and bi-metallic cans**

- Rinse (flatten if desired).
- Lids can be included.



**Plastics:** #1 & #2

- Rinse. Discard lids.



- Look for the number inside the recycling symbol on the bottom or side of the container.

All recyclables must be placed at the curb in the blue recycling container provided by the Borough. If you are using a second container for your recyclables you will need to place a sticker from the Borough on the container. This sticker is used to notify the recycling hauler that you have more than one recycling bin. To request a sticker, contact the Borough office at 412.885.9200.

## Leaf Collection

Collection starts during the fall months. Leaf waste should be placed at the curb in biodegradable paper bags. Biodegradable bags can be purchased from Busy Beaver, Home Craft, and True Value. Look for information to be mailed out this fall regarding collection dates and details.

**Remember**—Leaves cannot be discarded as trash.

## Want To Do Something Useful With Your Yard Waste?

Attend a Backyard Composting Workshop offered by the Pennsylvania Resources Council to learn how to turn your kitchen scraps and yard debris into rich, home-made compost for your gardens and lawn. You receive a composting bin with class attendance!! For more information or to find a class near you, contact Corinne Ogradnik at 412.431.4449 ext. 325.

## Paper Recycling Drop-Off Locations

*(look for the green and yellow Abitibi Paper Retriever Containers)*

Sisters of St. Francis  
3603 McRoberts Road, Pittsburgh, PA 15234

Seton Lasalle High School  
1000 McNeilly Road, Pittsburgh, PA 15226

*Both Locations Accept: Computer paper, mixed paper, newspaper, junk mail, and white office paper. No phone books or cardboard, please. Visit [www.paperretriever.com](http://www.paperretriever.com) for more Abitibi drop-off locations.*

## What Do I Do With...

### Household Hazardous Waste

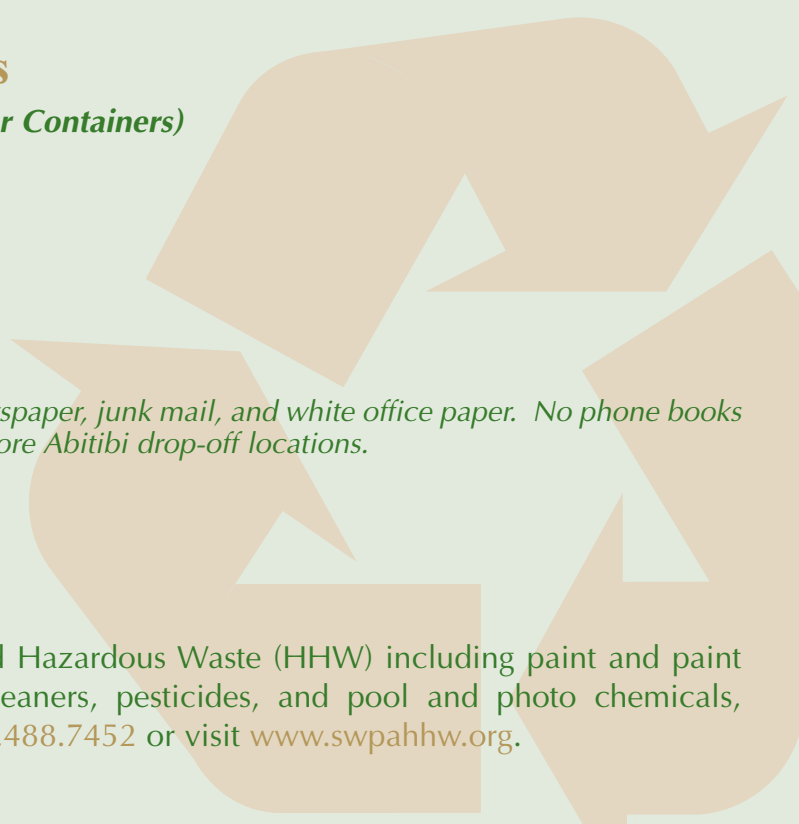
For information on the proper disposal of Household Hazardous Waste (HHW) including paint and paint products, automotive fluids, solvents, household cleaners, pesticides, and pool and photo chemicals, contact the Southwestern PA HHW Task Force at 412.488.7452 or visit [www.swpahhw.org](http://www.swpahhw.org).

### Building Materials

Donate useable building materials such as lumber, kitchen cabinets, and windows to Construction Junction, western PA's first non-profit retail store for used and surplus building materials. Call 412.243.5025 or visit [www.constructionjunction.org](http://www.constructionjunction.org) for more information.

### "Hard to Recycle" Items

Check out the "Recycle it Here Throughout the Year" events where you can safely dispose of or recycle items such as tires, large appliances, computer equipment, and latex paint. For dates, fee structure and locations, call the Pennsylvania Resources Council at 412.488.7490 or visit [www.prc.org](http://www.prc.org).



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*This flyer was made possible by a grant from the Pennsylvania Department of Environmental Protection (412.442.4000) and the Allegheny County Health Department (412.578.8390).*





# City of McKeesport




City of McKeesport 502 Fifth Avenue McKeesport, PA 15132  
 412.675.5020 www.mckeesport.org

## RESIDENTIAL RECYCLING GUIDELINES

Recyclables are collected twice a month on the same day as your refuse collection. Pick-up will be delayed one day on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas.

Check the calendar on the back of this flyer for the recycling dates that correspond to your street. Materials collected include: **Clear glass, paper products (see below), aluminum, steel and tin food and beverage cans.**

**Use one bin for clear glass and paper products - use the other for all metal cans.** Recycling bins are provided by and remain the property of the City of McKeesport. Bins must be returned to the City if you move. If you need recycling bins, call **412.675.5020 ext. 631.**

Type of Material	What Can Be Recycled	What Cannot Be Recycled	How To Prepare Material
Glass 	CLEAR glass beverage bottles and food jars.	Green and brown glass, window glass, light bulbs, pyrex or ceramics.	Rinse bottles and jars. Labels may remain on. Discard all lids and rings. Place in the same recycling bin as paper products.
Paper Products 	Paper (white, colored, computer), junk mail (including envelopes with windows and brown envelopes), newspapers, phone books, paper grocery bags, magazines, catalogs, pamphlets, greeting cards, posters, corrugated cardboard, file folders, hard and soft cover books.	3-ring binders, paper products contaminated with food waste, plastics, carbon paper, blueprints, wallpaper, wood scraps, tissues, napkins and paper towels.	Place paper materials in the recycling bin with glass materials only. DO NOT place paper materials in the same bin as the aluminum, steel and tin. Break down corrugated cardboard and flatten. DO NOT put paper in plastic bags.
Aluminum, Steel and Tin 	Aluminum, steel and tin food and beverage cans.	Aluminum siding, toys and lawn furniture.	Rinse. Ends of containers may be included. Place all metal cans in a recycling bin separate from the paper and clear glass.

# LEAF AND BRANCH COLLECTION

Leaves are collected during the fall months.

Residents should sweep leaves to the curb for pick-up. DO NOT sweep leaves into the street.

Call the City of McKeesport Department of Public Works at **412.675.5020 ext. 631** for collection dates.

Branches are collected at the curb and mulched year round. Residents should call the City of McKeesport Department of Public Works at **412.675.5020 ext. 631** to schedule a pick-up.

## WHAT DO I DO WITH...

### Household Hazardous Waste

For information on the proper disposal of Household Hazardous Waste (HHW) including paint and paint products, automotive fluids, solvents, household cleaners, pesticides, and pool and photo chemicals, contact the Southwestern PA HHW Task Force at **412.488.7452** or visit [www.swpahhw.org](http://www.swpahhw.org).

### "Hard to Recycle" Items

Check out the "Recycle it Here Throughout the Year" events where you can safely dispose of or recycle items such as tires, large appliances, computer equipment, and latex paint. For dates, fee structure and locations, call the Pennsylvania Resources Council at **412.488.7490** or visit [www.prc.org](http://www.prc.org).

## 2006 MCKEESPORT RECYCLING CALENDAR

july						
s	m	t	w	t	f	s
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

august						
s	m	t	w	t	f	s
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

september						
s	m	t	w	t	f	s
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

To access recycling information on the City's website, [www.mckeesport.org](http://www.mckeesport.org), click on **City Information** then **Departments**. On that page click on **Public Works** then **Recycling Schedule**.

october						
s	m	t	w	t	f	s
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

november						
s	m	t	w	t	f	s
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

december						
s	m	t	w	t	f	s
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Outlined boxes denote holidays (no pick-up).

Visit [www.mckeesport.org](http://www.mckeesport.org) or call **412.675.5020 ext. 631** to determine if you live on a green or yellow street.

This flyer was made possible by a grant from the Pennsylvania Department of Environmental Protection (**412.442.4000**) and the Allegheny County Health Department (**412.578.8390**).



# Recycling Guidelines For Moon Township Businesses

**Moon Township Municipal Authority  
1700 Beaver Grade Road  
Moon Township, PA 15108**

**412-264-4300      [www.moontma.com](http://www.moontma.com)**

**Moon Township Ordinance No. 338 requires businesses to recycle the following materials:**

Aluminum Containers • Office Paper • Corrugated Cardboard  
Leaf Waste (*Includes leaves, shrubbery, and tree trimmings. Does not include grass clippings*)

You are encouraged but not required to recycle other materials such as glass and plastic containers. Contact the Moon Township Municipal Authority at 412.264.4300 for additional information on the recycling ordinance.

## WHY RECYCLE?

### Conserve Resources:

Every ton of paper recycled conserves 17 trees, 7000 gallons of water, and enough electricity to heat the average home for 6 months.

Junk mail creates four million tons of preventable waste each year and fills three percent of America's landfills, costing taxpayers \$320 million in disposal fees annually.

Recycling one ton of cardboard saves over 9 cubic yards of landfill space.

If these materials are recycled they save ENERGY and LANDFILL space - which also saves MONEY!

### Increase the Bottom Line:

Reducing the amount of material in your solid waste dumpster by separating out recyclables can reduce the frequency of hauler pick-ups, potentially cutting disposal costs.

Moreover, recycling may result in the need for smaller or fewer solid waste dumpsters leading to additional cost savings.

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## Business Recycling Information

Please return with your utility payment. The Moon Township Municipal Authority thanks you for your cooperation.

Name of Business or Establishment \_\_\_\_\_

Contact Person \_\_\_\_\_ Phone # \_\_\_\_\_

Waste Hauler \_\_\_\_\_ Recycling Hauler \_\_\_\_\_

Document Destruction Provider \_\_\_\_\_

### Materials Currently Recycled:

Cardboard       Aluminum       Glass       Steel/Tin       Do Not Generate Recyclables

Office Paper       Plastics       Newspaper/Magazines       Not Currently Recycling

Other \_\_\_\_\_

## Need To Get Your Recycling Program Started?

Contact one of these recycling haulers that service Moon Township.  
Call for information on the types of materials collected and associated fees.  
The types of materials collected may vary.

**Allied Waste/BFI** **412.429.2600**  
*Collects: Cardboard, paper, plastics, glass, and metal cans*

**Recyclin' It** **412.242.4030**  
*Collects: Cardboard, paper, plastics, glass, and metal cans*

**Cintas** **412.798.7720**  
*Confidential document destruction*

**Shred It** **412.798.3800**  
*Confidential document destruction*

**Iron Mountain** **724.742.1360**  
*Confidential document destruction*

**Vogel Disposal Services** **724.625.1511**  
*Collects: Cardboard, paper, and newspaper*

**Paper Exchange** **412.325.7075**  
*Confidential document destruction*

**Waste Management** **800.458.4090**  
*Collects: Cardboard, paper, newspaper, plastics, glass, and metal cans*

**Pittsburgh Recycling Services** **412.420.6000**  
*Collects: Cardboard, paper, newspaper, plastics, glass and metal cans*

*Listing of these businesses does not indicate endorsement.*

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## Additional Recycling Resources

**Reclamere** **814.684.5505**  
905 Pennsylvania Avenue  
Tyrone, PA 16686  
[www.reclamere.com](http://www.reclamere.com)  
Specializes in data destruction services and computer recycling.

**ATM Laser Products** **412.279.7977**  
4118 Campbells Run Road  
Pittsburgh, PA 15205  
[www.atmlaser.com](http://www.atmlaser.com)  
Specializes in the sale and service of remanufactured toner cartridges.

*This flyer was made possible by a grant from the Pennsylvania Department of Environmental Protection (412.442.4000) and the Allegheny County Health Department (412.578.8390).*

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*Please complete your business' recycling information on the other side of this form.  
Then tear off this section and include it with your utility bill payment.*



*If you have any questions please contact the Moon Township Municipal Authority at 412.264.4300.*

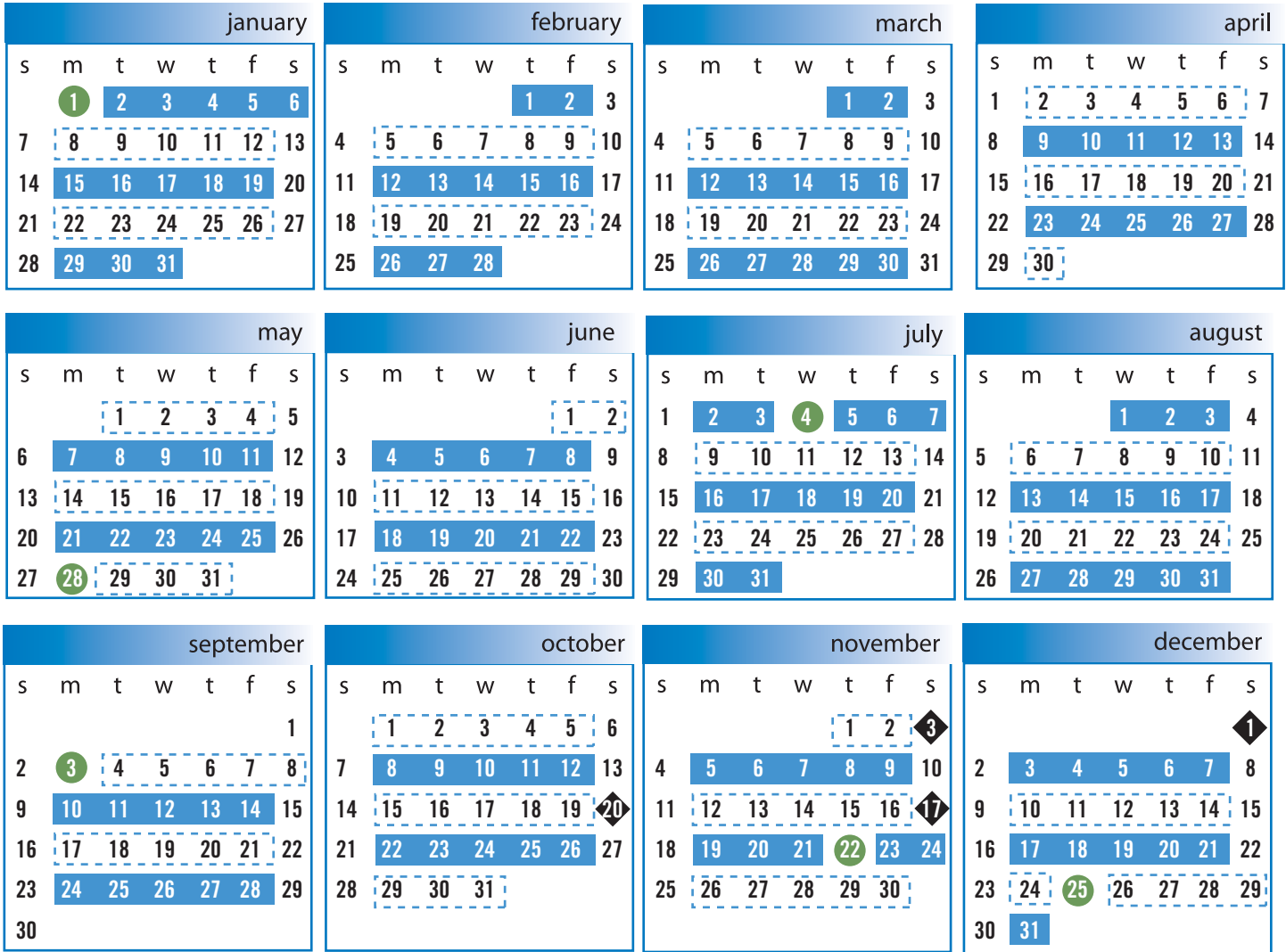


# Recycling Guidelines For Moon Township

Moon Township Municipal Authority  
 1700 Beaver Grade Road  
 Moon Township, PA 15108

412-264-4300 [www.moontma.com](http://www.moontma.com)

## 2007 Recycling Calendar



Solid Waste & Recycling Pick-Up
  Solid Waste Pick-Up ONLY
  Holidays
  Leaf Collection Dates

### General Recycling Information:

Recycling is collected every other week on the same day as your refuse collection. If you need a bin, contact the Moon Township Municipal Authority at 412.264.4300.

### Materials Recycled:

**Glass Bottles and Containers** Includes clear and colored glass — Rinse bottles and containers — Discard all lids

**Aluminum and Bi-Metal Cans** Rinse containers — Flatten if desired

**Plastics (#1 and #2 only)** Look for the number inside the recycling symbol on the bottom of the container.

*Place glass, aluminum, bi-metal, and plastic containers in recycling bin.*

**Newspaper** Includes both newsprint and inserts — Bundle with string, place in paper bag, or in a separate container

DO NOT place newspaper in plastic bags. *Place newspaper beside recycling bin.*

## Leaf Collection:

Leaves are to be placed in **biodegradable paper bags** for separate curbside collection by Moon Township.

Check calendar for leaf collection dates.

Leaf drop-off site available at Downs Fire Station on Beaver Grade Road from October 13 through December 8 on Saturdays and Sundays from 9 AM to 4 PM.

Biodegradable bags can be found at local discount or home supply stores.

**Remember** - leaves placed in plastic garbage bags will not be taken with your refuse or recycling collection.

## How To Properly Dispose Of Materials Not Collected By Solid Waste Hauler

### Material

Used motor oil, antifreeze & auto batteries

Auto parts

Tires

### Disposal Method

Contact local auto service centers and parts stores for disposal.

Contact auto salvage yards or scrap metal dealers.

Contact tire dealer for disposal.

## How To Properly Dispose Of Materials Requiring Special Handling

### Material

Latex paint

Carpet

Refrigerators

Refrigerators & air conditioners

Construction debris; Logs & large branches

### Disposal Method

Dry up with kitty litter and dispose of with solid waste.

Secure in bundles less than 4 feet in length. Bundles must weigh less than 40lbs.

Door must be removed prior to pickup.

Freon must be removed by a licensed technician and a required sticker placed on unit.

Call Waste Management at [1.800.866.4460](tel:1.800.866.4460) to arrange for a pickup. An extra charge will apply.

## Additional Recycling and Disposal Information:

### Paper Recycling Drop-off Locations

Visit [www.paperretriever.com](http://www.paperretriever.com) to find Abitibi paper drop off locations near you.

Abitibi accepts: computer paper, mixed paper, newspaper, magazines, catalogs, and junk mail. No phone books or cardboard, please.

### Household Hazardous Waste

For information on the proper disposal of Household Hazardous Waste (HHW) including paint and paint products, automotive fluids, solvents, household cleaners, pesticides, and pool and photo chemicals, contact the Southwestern PA HHW Task Force at [412.488.7452](tel:412.488.7452) or visit [www.swpahhw.org](http://www.swpahhw.org).

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Call [412.243.5025](tel:412.243.5025) or visit [www.constructionjunction.org](http://www.constructionjunction.org).

### "Hard to Recycle" Collections

Check out the "Recycle it Here Throughout the Year" events where you can safely dispose of or recycle items like tires, large appliances, computer equipment and latex paint. For fee structure, dates, and locations, call the Pennsylvania Resources Council at [412.488.7490](tel:412.488.7490) or visit [www.prc.org](http://www.prc.org).

Visit [www.earth911.org](http://www.earth911.org) for a listing of where to recycle items not listed here.

*This flyer was made possible by a grant from the Pennsylvania Department of Environmental Protection (412.442.4000) and the Allegheny County Health Department (412.578.8390).*

**ADVANCE NOTICE.** Moon Township Recycling Day has been scheduled for Saturday, June 2, 2007 at Moon Park for appliances, electronics, construction material, and tires. This event is for Moon Township residents only. A nominal fee will apply. Call the Township of Moon at 412-262-1700 for more information.