

CHESTNUTHILL TOWNSHIP
DROP-OFF RECYCLING
FACILITY/PROGRAM ASSESSMENT

Environmental Resources Associates

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STROUDSBURG, PENNSYLVANIA 18360

CONSULTANTS IN ENVIRONMENTAL RESOURCE MANAGEMENT

ERA



Background

As of the 2000 census, Chestnuthill Township's (Township) population increased from an estimated 8,798 (1990 census) to 14,480 persons. As a community required to recycle under Act 101, the Township instituted a mandatory residential curbside recycling collection program. Residential curbside collection of newsprint and commingled recyclables (glass containers, aluminum cans, steel cans and HDPE/PET plastics) is provided by the private sector.

Recycling is not a new endeavor for the Township, in that it has operated a recycling drop-off facility since 1982. The drop-off recycling facility has been operated in conjunction with a pay-as-you-throw transfer station for residential municipal waste. The continued operation of these facilities assist the Township in achieving their waste reduction and recycling goals by providing residents with the ability of recycling a wider variety of materials and a financial incentive to do so.

The Township has requested technical assistance to assess the current operations of its drop-off recycling program and identify alternatives/options for improving operations, processing and marketing of recyclables.

Current Situation

The Township's municipal waste transfer station is collocated with the recycling drop-off facility. The Township municipal waste transfer station is a drop-off, based on a permit system. Annually, the Township sells permit stickers to its residents for \$15.00. The permit entitles the resident to use the waste transfer facility on a pay-as-you-throw (PAYT) basis. Residents are charged \$2.00 per thirty-gallon bag of municipal waste delivered to the transfer station.

Recyclables are dropped off free of charge. The residents sort and separate their recyclables in designated containers at the recycling facility. Clear glass, brown glass and green glass are placed in separate collection bins, as are aluminum and steel cans, plastic containers (HDPE&PET), newspapers, magazines /mixed paper and corrugated cardboard. The recyclable materials are processed at the recycling facility to meet market specifications.

Chestnuthill Township's integrated recycling/municipal waste drop-off program has become extremely popular. Nearly forty percent of the Township residents have purchased waste disposal permits.

Contractors have operated the Township's municipal waste transfer station and recycling drop-off facilities for the past four years (2000 – 2003). During this four-year period contracted operators have modified collection and marketing practices (commingled vs. segregated). Fluctuations in the amounts of various recyclables collected during this period are presumed to have resulted from changes in collection practices.

A summary of the tons of materials recycled annually during the years 2000 through 2003 is exhibited in Table1.

TABLE 1

ANNUAL AMMOUNTS OF RECYCLABLES COLLECTED

COMMODITY	2000	2001	2002	2003
Newsprint (ONP)	154.48	128.80	132.20	150.10
Office Paper	.21	.30	-	-
Corrugated (OCC)	63.38	61.30	93.90	59.00
Phone Books	-	-	-	4.40
Magazines	51.50	42.90	34.10	95.70
Aluminum Cans	3.83	3.80	3.00	4.71
Steel Cans	23.70	19.20	-	22.80
Clear Glass	49.76	40.30	-	-
Green Glass	9.60	7.80	-	-
Brown Glass	11.73	9.50	-	-
Mixed Glass	-	-	-	90.00
Plastics	31.80	27.60	-	24.20
Commingled Material	-	-	145.90	29.20
TOTAL	400.0	341.50	409.10	480.10

**NOTE- In addition to the above noted Act 101 recyclables the recycling drop-off facility also accepts; clothing, used motor oil, antifreeze, automobile batteries and scrap metal. These materials are marketed by the Township and are not included as part of this analysis.*

Overview

The current operator of the Township’s drop-off recycling facility is the Monroe County Municipal Waste Management Authority (MCMWMA). The MCMWMA operates several drop-off recycling depots and a recyclables consolidation facility in Monroe County. The MCMWMA entered into a contract with the Township (April 2003) to operate the drop-off recycling facility. The MCMWMA provides personnel to oversee operations and process recyclables. The MCMWMA uses a sub-contractor, Burnley Employment and Rehabilitation Services (BEARS), to operate the drop-off recycling facility.

Marketing of Act 101 recyclables is also the responsibility of the MCMWMA. The proceeds gained from the marketing of recyclables are maintained by the MCMWMA. Verification of tons of recyclables marketed is provided by the MCMWMA to the Township for inclusion in the Township’s Act 101 Municipal Recycling Performance Grant Application.

The recycling facility operations contract with the MCMWMA will end on August 3, 2004. The MCMWMA does not wish to continue operating the recycling facility however; it has presented the Township with an offer to provide marketing services for recyclables generated at the facility.

The Township has requested technical assistance for the evaluation of the current operation of the recycling facility including the processing and marketing of recyclable materials. The assessment will include observations of routine operations, evaluation of processing practices and equipment. A review of program economics will also be conducted. Particular emphasis is to be placed on evaluation of marketing options. The primary options to be considered for marketing of recyclables will be entering into a marketing agreement with the MCMWMA and/or use of markets located within or servicing the region.

Based on information gained through the above noted efforts, conclusions and recommendations will be presented to the Township for continued operation of the recycling facility including the processing and marketing of recyclable materials.

The Township has also requested that options be identified for increasing the participation of small business in its drop-off recycling.

Observation of Current Operations

The Township's drop-off recycling facility is open to the public on Monday, Wednesday and Saturday between the hours of 7:00 AM and 3:00 PM. Township residents deliver their household waste and deposit it into a roll-off container. Recyclables are sorted by residents and placed in specifically marked collection containers i.e.; clear glass, brown glass, newspaper, mixed paper/magazines, etc. A three member recycling crew operates the recycling drop-off facility. The recycling operations crew (crew) is responsible for monitoring the participating residents, to insure quality control and prevent contamination of the segregated recyclables.

Limited processing and baling of materials occurs during times the recycling facility is open to the public. Processing of recyclables is accomplished when the crew determines that sufficient quantities of recyclables are accumulated to warrant the effort. Processed recyclables are stored until marketable amounts are accumulated. Processing of materials at the facility consists of baling (corrugated, and aluminum cans) and crushing glass.

Operations, collection and processing of materials, were observed on four separate occasions.

Collection

During each visitation to the recycling facility, it was maintained in a clean and orderly fashion.

During the periods when the recycling facility was open to the public, the operating crew members were observed to be diligent in monitoring the separation and proper placement of recyclables by participating residents. The crew members were very courteous and professional in their approach to

residents who had not properly prepared their recyclables, placed them in the wrong container or delivered unacceptable materials. Crew members politely noted any errors or problems to the residents and took the time to explain why items must be segregated, why a material was not acceptable or how a specific type of recyclable should be prepared. This type of an approach to monitoring enhances the education process, encourages continued participation and improves the quality of the recyclables collected. Crew members also assisted elderly individuals, participants with small children and residents with substantial amounts of recyclables.

Monitoring and assisting residents became difficult during peak delivery periods (mid-morning/early afternoon). This situation was compounded by delays resulting from residents unfamiliar with sorting requirements and/or attempting to deliver unacceptable materials. A number of residents in this category were driving vehicles with New York or New Jersey license plates and are presumed to be new residents. This situation is understandable considering that the rapid growth being experienced by the Township is primarily from areas within and around New York City.

Processing

Processing of recyclables primarily consists of baling of materials and crushing of glass. Two down-stroke balers that are capable of producing bales in the 500-pound range accomplish baling. The balers are approximately twelve years old, require ever-increasing amounts of maintenance, and repair. Only one of the balers has been continually operable since June of 2003. The use of only one baler significantly impedes processing efficiency.

The recycling crew operates the baler efficiently and inspects each stream of recyclables for contaminants prior to baling. Contaminants such as pizza boxes, plastic shrink-wrap and strapping and Styro-foam sheets needed to be culled from the corrugated prior to baling. It was observed that removal of contaminants from the corrugated, required a significant amount of time and effort. Baling of aluminum cans was accomplished efficiently; contamination of this material was minimal.

Crew members inspected the bales of recyclables and moved them to their respective storage areas in a timely manner.

Due to depressed market prices for glass containers, the MCMWMA leased a specialized glass crusher capable of producing construction grade aggregate. The specially designed crusher generates a good quality aggregate product. The Township uses the glass aggregate for various construction projects.

Processing of glass was observed to be somewhat challenging. Glass bottles were loaded into a hopper that is designed to meter the bottles onto a conveyor that feeds the bottles into the top of the crusher.

Problems noted included the following.

- ↪ The feed conveyor was not wide enough to transport large bottles, notably 1.75-liter glass beverage containers. These bottles often jammed and/or damaged the conveyor.

- ↗ Gallon sized glass containers presented a similar problem, as noted above, and got jammed at the crushers feed intake.
- ↗ Many of the glass containers required the removal of contaminants, metal caps or corks.

To resolve the above noted problems crew members broke large bottles manually, to enable them to be conveyed and fed into the crusher. Breaking the bottles prevented damage to the conveyor and/or jamming of the crushers feed intake. Limited sorting was also accomplished by crew members, removing caps and corks from containers. Removing caps and corks prevented jamming of the crusher and contamination of the product. The additional efforts required, to break bottles and remove contaminants reduced processing efficiency and throughput.

MATERIALS MARKETED

The tons of recyclables marketed during a twelve-month period, April 1, 2003 to March 31, 2004 are presented in Table 2.

TABLE 2: MATERIALS MARKETED

APRIL 2003 THRU MARCH 2004

COMMODITY	APRIL/DECEMBER	JANUARY/MARCH	TOTAL
Newsprint	144.93	56.88	201.81
Corrugated	32.01	15.60	47.61
Phone Books	4.44	.96	5.40
Magazines/Mixed Paper	95.66	31.86	127.52
Aluminum Cans	3.24	-	3.24
Steel Cans	22.84	7.80	30.64
Clear Glass *	52.40	17.40	59.80
Green Glass *	10.12	3.30	13.42
Brown Glass *	12.30	4.10	16.40
Plastics	23.40	10.86	34.26
TOTAL	401.34	148.78	550.12

** Percentages of glass based on historical data.*

Based on observations made during site visits and review of operations records the recycling facility is being operated in an efficient (considering problematic processing equipment) and professional manner. Efficient operations and the courteous assistance provided to program participants by the operations crew members have undoubtedly aided in increased participation in recycling. Increased participation is credited with the notable rise in the amount of recyclable materials collected during the

above noted twelve month period, over amounts collected in recent years. The data presented in Table 2 is considered as indicative of the types and amounts of recyclables that can be anticipated to be collected in 2005, with similar operation of the recycling facility.

PROGRAM ECONOMICS

Available economic data for the study period (April 2003 to March 2004) is presented in Table 3 and Figure 1.

Table 3 presents a summary of the average market prices received for recyclables, by the MCMWMA, during the designated twelve-month period. Figure 1 provides available operations costs and income data.

TABLE 3

Average Market Prices – April, 2003 / March, 2004

<u>Commodity</u>	<u>April-December 2003</u>	<u>January-March 2004</u>
Paper:		
Corrugated (OCC)	\$35.75/ per ton	\$47.68/ per ton
Newspaper (ONP)	\$46.33/ per ton	\$51.45/ per ton
Magazines/Mix. Paper	\$42.89/ per ton	\$40.00/ per ton
Phone Books	none marketed	\$52.25/ per ton
Metal:		
Aluminum Cans	none marketed	\$0.52/ per lb
Aluminum/Steel Cans	\$0.02/ per lb.	\$0.00/ per lb
Steel Cans	none marketed	\$0.00/ per lb
Plastics:		
Plastic (HDPE/PET mixed)	\$0.02/ per lb.	\$0.00/ per lb

NOTE: MARKET PRICES BASED ON DATA PROVIDED BY MCMWMA.

FIGURE 1

Recycling Facility Operating Costs/Income-2003-2004

2003

<u>Month</u>	<u>Labor (1)</u>	<u>Glass Crusher</u> <u>(Lease Fee)</u>	<u>PPL/Electric</u>
APR	\$3,327.00	\$250.00	\$112.80
MAY	\$3,034.50	\$706.07	\$ 13.08
JUN	\$3,373.50	\$706.07	\$ 4.01
JUL	\$3,288.75	\$706.07	\$ 19.25
AUG	\$5,130.75	\$706.07	\$ 0.00
SEP	\$2,971.50	\$706.07	\$ 0.00
OCT	\$2,332.50	\$706.07	\$ 53.48
NOV	\$2,955.00	\$706.07	\$ 57.66
DEC	\$3,087.75	\$706.07	\$ 72.82
Total	\$29,501.25	\$5,192.49	\$333.10

2004

JAN	\$4,672.50	\$706.07	\$172.47
FEB	\$3,707.25	\$706.07	\$220.11
MAR	\$5,124.00	\$706.07	\$220.11
Total	\$13,503.75	\$4,236.42	\$1,224.12

2003-2004

Total	\$43,005.00	\$9,428.91	\$1,557.22
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TOTAL OPERATING COSTS (2) \$53,991.13

TOTAL INCOME (3) \$22,657.39

NET INCOME/LOSS (-\$31,315.74)

Notes:

(1). MCMWMA costs for sub-contracted labor to operate recycling facility.

(2). Exclusive of marketing and administrative (cost were not available from MCMWMA).

(3). Based on MCMWMA market sales data (average market prices).

MARKETING OPTIONS

The primary options being considered for marketing of recyclables collected at the Township's drop-off recycling facility include, entering into an intergovernmental marketing service agreement with the MCMWMA and/or use of markets located within or servicing the Pocono Region.

MCMWMA

The MCMWMA has offered to assist the Township by providing marketing services for recyclables collected from its drop-off facility. The MCMWMA will pickup, transport and deliver the Township's recyclables to its consolidation facility at its own expense. The recyclables will be sold along with the MCMWMA materials, under its contract agreements with end markets. The MCMWMA has offered to rebate a portion of the market price it receives for the Township's recyclables under the following considerations.

The compensation for the materials commonly known as OCC #8 News and Junk Mail/Magazines, in the Industry, will be at least 45% of the sale price for the material, but not less than \$15.00 per ton as determined by the various Authority contracts, and will be paid within 10 days of the Authority receipt of the funds from its vendors. Purchase weight slips will be provided to the Township.

The compensation for the materials will be determined at 45% of the price per pound dictated by the Official Board Markets (OBM) on the day the bales are sold. The same pricing will be true of the bi-metal and steel cans except where there is a negative value per pound, in which case the Township will pay the surcharge and the actual transportation costs clocked (not to exceed \$2.00 per mile).

The marketing services offered by the MCMWMA are non-binding, the Township may choose to market all of its recyclables through the MCMWMA or only market select types of recyclables. The MCMWMA will also allow the Township to use other market outlets, at any time, if the Township is able to sell its recyclable materials at a higher price than that offered by the MCMWMA.

Figure 2 outlines the current market prices and anticipated rebates quoted by the MCMWMA.

FIGURE 2

MCMWMA Quote

<u>Commodity</u>	<u>Market Price</u> (1)	<u>Rebate</u> (2)
Paper:		
Corrugated (OCC) Baled	\$75/ per ton	\$33.75/ per ton
Newspaper (ONP) Loose	\$62/ per ton	\$27.90/ per ton
Magazines Loose	\$60/ per ton	\$27.00/ per ton
Metal:		
Aluminum Cans Baled	\$0.55/ per lb.	\$0.2475/ per lb
Steel Cans Loose	\$0.04/ per lb.	\$0.018/ per lb.
Plastics:		
Plastic (HDPE/PET) Loose	\$0.02/ per lb	\$0.009/ per lb.

NOTES:

(1) BASED ON CURRENT MARKET PRICE, QUOTED BY MCMWMA, (AUGUST, 2004).

(2) PERCENTAGE OF MARKET PRICE TO BE PAID REBATED TO TOWNSHIP.

ADDITIONAL MARKETS

The following is a listing of identified markets that are located within or service the Pocono Region. All prices quoted for recyclable materials are as per specifications and delivered to the market.

COUGLES RECYCLING INC. Hamburg PA.

Price / Rebates:

Glass:

Brown\$2.00/per ton
Clear\$20.00/per ton
Green\$(-1.00)/per ton charge

Cardboard:

OCC: (remakes).....\$20.00/per ton*
(under proper weight, not tied off correctly, needs to be remade)*
OCC: (bales)\$75.00/per ton
(600 + pound bales, properly tied, and contamination free)

Paper:

Magazine: (bales).....\$85.00/per ton
Mixed Paper (bales).....\$50.00/per ton
ONP: #6 (bales).....\$35.00/per ton
ONP: #8 (bales).....\$70.00/per ton

Plastics:

PET: (bales).....\$0.12/per pound
PET: (remakes).....\$0.09/per pound*
HDPE: Colored (bales)..... \$0.07/per pound
HDPE: Colored (remakes).....\$0.04/per pound*
HDPE: Natural (bales).....\$0.17/per pound
HDPE: Natural (remakes).....\$0.14/per pound

** Price reduction due to contamination or lack of proper bale density, any large amount of contamination would be graded as commingled.*

As with all prices, rebates are calculated using a sliding scale basing on the New York Official Board Markets. All of the above prices are for the current month (August, 2004) but would be subject to change according to fluctuations in recycling market prices.

Charges quoted for optional services, rental of storage containers/trailers and collection of marketable recyclables.

Thirty-yard open top container (roll-off) rental...\$ 92.50/per month/per container
Trailer rental..... \$110.00/per month*
*(Unless trailer is moved every ten days)
Pull fee.....\$225.00/per pull

NOTE: NO PRICES WERE QUOTED FOR ALUMINUM OR STEEL CANS.

TODD HELLER INC.
Northampton PA.

Price:

Glass:

Brown \$15.00/per ton
Clear\$25.00/per ton
Green..... \$0.00/per ton

Cardboard:

OCC: (loose).....\$20.00/per ton

Paper:

ONP: (loose).....\$20.00/per ton

Plastics:

PET: (bale @ 1,000 pound)\$0.11/per pound
PET: (remakes)\$0.09/per pound*
HDPE: Colored (bales @ 1,300 pounds)...\$0.09/per pound
HDPE: Colored (remakes).....\$0.06/per pound*
HDPE: Natural (bales @ 1,300 pounds)....\$0.16/per pound
HDPE: Natural (remakes).....\$0.13/per pound

Aluminum:

ALUMINUM CANS: (bales@ 850 pounds).....\$0.40/per pound

ALUMINUM CANS: (remakes).....\$0.37/per pound

Steel:

STEEL CANS: (bales @ 1,800 pounds).....\$40.00/per ton

STEEL CANS: (remakes).....\$20.00/per ton

** Price reduction due to contamination or lack of proper bale density.*

NOTE: NO PRICE WAS QUOTED FOR COMMINGLED RECYCLABLES.

SAINT JUDE POLYMER

Frackville PA.

Plastics:

HDPE / PET (commingled #1. and #2.) Baled.....\$0.12/per pound

Will provide collection service, depending on the quantity of material generated (no price quoted).

ROCK-TENN COMPANY

Delaware Water Gap PA.

Paper:

OCC: (mill direct)*\$40.00/per ton

600 + pound bales, properly tied, and contamination free

NOTE: Rock-Tenn Company has provided a stable local market for OCC to Monroe County municipalities for many years.

JFR SALVAGE

Wind Gap PA.

Aluminum:

ALUMINUM CANS: (baled or loose).....\$0.45/per pound

NOTE:

Prices quoted above are based on current market value (August, 2004). All prices quoted subject to change according to fluctuations in recycling market prices.

MARKET COMPARISON

Presented below is a comparison of quoted market prices adjusted to reflect costs associated with the transport of various types of recyclables to the market outlet. Markets, for which transport costs were not available or the mode of transport was undetermined based on the Township's current processing and/or transportation limitations are not included. Adjusted market prices are compared to the MCMWMA rebate prices, which are currently quoted as inclusive of transport of recyclables to market.

<u>COMMODITY</u>		<u>COUGLES</u>	<u>MCMWMA</u>
Paper:			
OCC ...	\$75.00 PER TON X 6 TON PER TRUCK \$450.00 -\$225.00 \$225.00	PER TON TON PER TRUCK PER PULL @ 6 TON	
		\$37.50	\$33.75
ONP ...	\$70.00 PER TON X 5.5 TON PER TRUCK \$385.00 -\$225.00 \$160.00	PER TON TON PER TRUCK PER PULL @ 5.5 TON	
		\$29.09	\$27.90
MAG...	\$85.00 PER TON X 6 TON PER TRUCK \$510.00 -\$225.00 \$285.00	PER TON TON PER TRUCK PER PULL @ 6 TON	
		\$47.50	NO QUOTE
MIX...	\$50.00 PER TON X 6 TON PER TRUCK \$300.00 -\$225.00 \$75.00	PER TON TON PER TRUCK PER PULL @ 6 TON	
		\$12.50	\$27.00

Plastics:

PET... \$0.12 PER POUND
 X 5.5 TONS PER TRUCK
 \$1320.00
 -\$ 225.00 PER PULL
 \$1,095.00 @ 11,000 POUNDS \$0.09950 \$0.009

Glass:

CLEAR... \$20.00 PER TON
 X 6 TONS PER ROLL-OFF
 \$120.00
 -\$317.50 RENT ROLL-OFF PER MONTH & ONE PULL (3)
 (-\$197.50) @ 6 TON

 -**\$3,810.00 PER YEAR RENT OF ROLL-OFF & FOUR PULLS (3)**
 \$1,440.00 @ \$20.00 PER TON X 72 TONS (1)
 (-\$2,370.00) @ 72 TONS PER YEAR (-\$32.92) No Quote (2)

BROWN.... \$2.00 PER TON
 X 6 TONS PER ROLL-OFF
 \$12.00

 -**\$2010.00 PER YEAR RENT OF ROLL-OFF & FOUR PULLS (3)**
 \$48.00 @ \$2.00 PER TON X 24 TONS (1)
 (-\$1962.00) @ 24 TONS PER YEAR (-\$81.75) No Quote (2)

GREEN... (-\$1.00) PER TON
 X 6 TONS PER ROLL-OFF
 (-\$6.00)

 -**\$1,560.00 PER YEAR RENT OF ROLL-OFF & TWO PULLS (3)**
 + (-\$12.00) @ (-\$1.00) PER TON X 12 TONS (1)
 (-\$1,572.00) PER YEAR @ 24 TONS (-\$65.50) No Quote (2)

NOTES:

(1). *BASED ON COLLECTION ESTIMATES FOR 2005.*

(2). *The MCMWMA IS NOT CURRENTLY INTERESTED IN MARKETING THE TOWNSHIP'S GLASS.*

(3). *TRANSPORTATION COSTS (PER PULL COSTS) AND ROLL-OFF RENTAL FEE QUOTED BY COUGLES.*

COMMODITY

HELLER

MCMWMA

Paper:

OCC ... \$20.00 PER TON
 X 15 TONS PER TRUCK
 \$300.00
 -\$235.00 PER PULL*
\$65.00 @ 15 TON

\$4.33

\$33.75

ONP ... \$20.00 PER TON
 X 15 TONS PER TRUCK
 \$300.00
 -\$235.00 PER PULL
\$ 65.00 @ 15 TON

\$4.33

\$27.90

MIX.....

No, Quote

\$27.00

Plastics:

PET... \$0.09 PER POUND
 X 5.5 TONS PER TRUCK
 \$990.00
 -\$235.00 PER PULL
\$755.00 @ 11,000 POUNDS

\$0.0686

\$0.009

Glass:

CLEAR... \$25.00 PER TON
 X 6 TONS PER ROLL-OFF
 \$150.00 PER ROLL-OFF PER MONTH X TWELVE MONTHS
 -\$235.00 ONE PULL PER MONTH
(-\$85.00) @ 6 TON

(-\$14.17)

No Quote (2)

(-\$85.00) PER MONTH X TWELVE MONTHS = (- \$1020.00) /YEAR (1)

BROWN... \$15.00 PER TON
 X 6 TONS PER ROLL-OFF
 \$90.00
 - \$235.00 PER PULL
(-\$140.00) @ 6 TON

(-\$23.33)

No Quote (2)

(-\$940.00) FOUR PULLS /PER YEAR = (-\$580.00) /YEAR (1)

GREEN.....	\$0.00	PER TON		
	<u>X 6</u>	TONS PER ROLL-OFF	(-\$39.17)	No Quote (2)
	\$0.00			
	<u>-\$235.00</u>	PER PULL		
	(-\$235.00)			

(-\$470.00) TWO PULLS /PER YEAR = (-\$470.00) /YEAR (1)

AL. CANS...	\$0.37	PER POUND	\$0.37	\$0.009
	<u>X 6</u>	TON PER TRUCK		
	\$4,400.00			
	<u>-\$235.00</u>	PER PULL		
	\$4205.00	@ 12,000 POUNDS		

STEEL...	\$20.0	PER TON	(-\$0.006)	\$0.018
	<u>X 7</u>	TON PER TRUCK		
	\$140.00			
	<u>-\$235.00</u>	PER PULL		

(-\$95.00) THREE PULLS /PER YEAR = (-\$285.00) /YEAR (1)

NOTES:

(1). **BASED ON COLLECTION ESTIMATES FOR 2005.**

(2). **The MCMWMA IS NOT CURRENTLY INTERESTED IN MARKETING THE TOWNSHIP'S GLASS.**

(3). **TRANSPORTATION COSTS (PER PULL COSTS) QUOTED TO THE TOWNSHIP BY ERT WASTE SERVICES (ERT). ERT IS TOWNSHIP'S WASTE TRANSFER STATION OPERATIONS CONTRACTOR. ERT DID NOT QUOTE ANY ADDITIONAL FEE OR COST FOR PROVIDING ROLL-OFF CONTAINERS.**

Drop-off Recycling for Small Businesses

The Township has experienced many changes over the past several years as a result of steady growth in population and corresponding growth in numbers and types of commercial enterprises.

The Township's commercial sector consists primarily of a variety of small businesses (e.g. offices, grocery stores, a variety of specialty shops, restaurants, convince stores, repair shops, etc.). The Township desires to augment its commercial recycling program by providing additional opportunities for small business to recycle and improve participation by small business in its drop-off recycling program.

Getting the message to the intended participants (small businesses) is critical. As with any mandated community operating and/or administrating recycling programs, whether they are residential or commercial, a comprehensive and sustained educational effort is paramount to program initiation and long-term success. The key words are comprehensive and sustained.

Comprehensive Education

Each particular recycling program must get the message to its intended participants, the small businesses. To get the message to the small businesses, one must first identify them. A listing of commercial establishments is a good first step. The MCMWMA has expended a great deal of time and effort identifying and compiling a list of all commercial entities within the Township. The MCMWMA has also met with representatives of these commercial entities to gather information regarding their operations, and to encourage their participation in the Township's recycling program. It is suggested that the Township meet with MCMWMA personnel and work cooperatively in identifying the small business's on the MCMWMA current list commercial entities. Tax roles, business-to-business and yellow page directories may be useful in identifying newly established small businesses.

Next, a specific message targeting the intended audience needs to be developed. The message must be concise, direct and easily understood, addressing all aspects of the small business drop-off recycling program. Explaining why the program is being initiated and its importance detailing the requirements and benefits of participation.

The message must be crafted in a manner that generates interest and develops enthusiasm among the small businesses. Not everyone will be enthused by the many benefits derived from recycling. This is one reason "why" each small business must also understand it is the law. Once "why" is established, the who, what, where, when and how to of the program must also be clearly and succinctly conveyed.

Sustained Education

An effort must be made by the Township to continually inform and educate its small businesses regarding the benefits of recycling. The recycling message must be reinforced on a regular basis, to maintain interest and enthusiasm. Additionally, the fact that law requires recycling, and that there are penalties for not participating, will usually get the attention of even the reluctant.

The Township should be enthusiastic in preparation of public announcements, extolling the many benefits of commercial recycling and identify the benefits to the small businesses and the community as a whole.

Start out with education/outreach material that creates a positive "get involved" attitude by portraying individual participation by each small business as the key to a successful commercial drop-off recycling program. The education/outreach material should briefly and concisely provide the drop-off recycling program's goals, objectives and requirements.

It is suggested that a letter or brochure be sent, or better yet, hand delivered to each small business. A copy of appropriate sections of the Township's Recycling Ordinance should also be included. The

Township may want to include a “We Recycle” sticker for small businesses who are participating in the current drop-off recycling program.

The following is a list of items suggested to be included in the brochure:

- ↪ An introduction explaining the benefits of the drop-off recycling program.
- ↪ The goals of the program.
- ↪ Recycling is positive for small business, the economy and the environment.
- ↪ Why each individual small business is important to the success of the program.
- ↪ List of designated materials to be recycled.
- ↪ Recommendations for establishing a small businesses recycling program (How To Tips).
- ↪ Questions commonly asked and answers.
- ↪ The name and telephone number of “who to contact” if questions or problems arise.

To insure that each small business is notified, volunteers are an economical and effective way to get the word out. Suggested groups the Township should solicit to help are local business associations, Chamber of Commerce, the Jaycees (an energetic group) the Rotary or Kiwanis Club. These groups know your small business and are oriented to public service. This is a good project for the organization(s) and the hand delivery of the information will certainly have a positive impact on the recipients. This type of distribution shows community support for the program along with municipal commitment. Township officials and employees can effectively assist in this effort.

Press/media releases are important and should be distributed two to three weeks prior to the distribution of the information. Press releases should be presented in a positive and attention getting way to gain the interest of the public (customers) and the targeted audience (small businesses). List participating businesses in a program promotion, e.g. news release from a public meeting or distribute posters listing small business recycling program participants.

It is also recommended that a notification letter be sent to each registered or licensed waste/recyclable collector servicing the commercial sector. The letter should detail their responsibilities under the ordinance, i.e.: to provide collection services for recyclables, provide the Township with a listing of commercial sector clients and to report the types and amounts of materials recycled by each.

Conclusions and Recommendations

Conclusions

- ↗ The Township's drop-off recycling facility is operated in an efficient and professional manner.
- ↗ Improvements to the drop-off recycling building and additional equipment are required to increase efficiency of operations, materials handling and processing of recyclables.
- ↗ A variety of options exists for the marketing of materials collected at the drop-off facility.

Recommendations

It is recommended that the Township:

- ↗ Consider entering into an agreement with BEARS for the continued operation of the drop-off recycling facility. This recommendation is based on BEARS performance and experience in successfully operating the drop-off recycling facility, and competitive costs (average labor cost \$10.00 per hour).
- ↗ Upgrade the existing facility to afford additional storage space for unprocessed and processed materials, particularly baled recyclables and glass. Additional storage area is essential to accommodate the existing flow of recyclables and the continued growth of the recycling program.
- ↗ Increase instructional signage in the recycling facility drop-off areas. Provide simple and concise instructions designed to assist participants with proper sorting of materials and preparation recyclables.
- ↗ Purchase two new balers capable of producing bales that will meet market specifications. Two
- ↗ Consider entering into a marketing service agreement with the MCMWMA. The MCMWMA offering provides a stable market outlet for the majority of the recyclables collected at the drop-off recycling facility. The agreement also allows for maximum flexibility with regard to use of alternative marketing options, such as spot marketing of recyclables during favorable economic conditions.
- ↗ Implement a drop-off recycling program for small business.
- ↗ Institute a comprehensive recycling education/outreach campaign targeting small businesses.

- ↗ Work cooperatively with the MCMWMA in developing and implementing a small business drop-off recycling program.
- ↗ Consider sponsoring a recycling workshop or seminar for small business. This could be one of the Township's initial education efforts.
- ↗ Designate one day a week for small business only to deliver their recyclables to the drop-off recycling facility.
- ↗ Apply for Section 902 grant funding to assist in covering the cost associated with required improvements to the drop-off recycling facility and expansion of the recycling program.