

September 24, 2004



Mr. Troy Madres  
Borough Manager  
Borough of Rockledge  
1 Park Avenue  
Rockledge, PA 19046

**Subject: Analysis of Implementing a Pay-As-You-Throw**

Dear Troy:

This letter is to provide the Borough of Rockledge with the results of R.W. Beck's evaluation of converting the Borough's municipal refuse collection service to a volume-based fee system. The attached pages describe the methods R. W. Beck used to determine the cost of this Borough service and offers a program for implementing a Pay-As-You-Throw (PAYT) system for the Borough of Rockledge's residential refuse collection and disposal.

## **CURRENT RESIDENTIAL REFUSE AND RECYCLING COLLECTION**

### **RESIDENTIAL REFUSE COLLECTION**

Under the current refuse and recyclables collection program, the Borough of Rockledge contracts with a private service provider to collect, transport, and dispose of refuse materials collected from Borough residents. BFI is the selected contractor, providing weekly refuse pickup at curbside. Bulky waste<sup>1</sup> is collected either at curbside on regular pickup day or by appointment. Construction debris and hazardous household waste (HHW) are not collected by BFI; collection must be privately arranged by residents. Hazardous waste cleanups are also sponsored by County authorities at announced dates.

For residential customers, BFI bills the Borough \$71.43 per household or approximately \$80,216 (based on 1,123<sup>2</sup> households) per year for solid waste services, or \$5.95 per household per month.

Rockledge container customers are required to contain refuse in standard, water-tight garbage cans or plastic bags (containers) having a capacity of not more than forty (40) gallons each, and weighing no more than 50 pounds each. Currently, up to 10 containers or bundles may be placed curbside for weekly trash pickup.

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<sup>1</sup> Bulky waste includes, but is not limited to, appliances (with and without CFC's), furniture, and large auto parts.

<sup>2</sup> Per the current MSW contract with BFI

## **RESIDENTIAL REFUSE DISPOSAL**

Landfill tipping fees of \$87 per ton are paid directly by the Borough to the Waste System Authority of Eastern Montgomery County after BFI verifies bills and reported tonnage. During 2003, approximately 1,117 tons of Borough residential waste was disposed, making the total annual cost to the Borough \$97,179, or \$7.21 per household per month.

## **RESIDENTIAL RECYCLING**

Rockledge has had mandatory recycling since 1992 as required by Ordinance Number 491. Curbside recyclables collection is provided by the Township of Abington (The Township). The Township charges Rockledge \$400 per week to collect the recyclables, and \$21 per ton to process commingled containers. The Township does not charge Rockledge a processing fee for fibers. Specifics of the program are:

- Commingled collection of metals (aluminum, steel, and tin cans), plastic (#1 and #2) and glass (clear and colored containers), takes place every Tuesday. Blue plastic containers are designated for these items and materials are taken to Blue Mountain Recycling.
- Fiber recyclables, including newspapers, phone books, junk mail, hardcover books, office paper, flattened corrugated cardboard and magazines) are collected from green plastic containers (or bundled) every Monday and taken to Newman Paper Company.

Reported recycling tonnage for 2003 was 327.6 tons (254.5 tons of fiber and 73.1 tons of commingled containers) for a reported diversion rate of 22 percent. Thus, in 2003, the Borough paid approximately \$27,680 for curbside recycling, or \$2.05 per household per month.

## **YARD WASTE COLLECTION**

The Borough also provides vacuum leaf collection services, swept from curbs at least twice on each street from late October through the end of the year. Yard waste (leaves, branches, and tree limbs) is collected between April 15 and May 15 by the Streets Department in recyclable paper bags that can be purchased at the Borough office and hardware stores. Yard waste is taken to Abington Township where it is turned into compost for use by residents.

Providing residential yard waste collection and composting service costs the Borough \$5,000 per year, or \$0.37 per household per month.

## **TOTAL RESIDENTIAL SOLID WASTE MANAGEMENT COSTS**

Table 1 summarizes total and per-household solid waste management costs by service area on an annual and monthly basis.

**Table 1**  
**2003 Costs**

Residential Solid Waste Management Service Area	2003 Total Cost	2003 Cost per Household per Month	2003 Cost per Household per Year
Refuse Collection	\$80,216	\$5.95	\$71.40
Refuse Disposal	\$97,179	\$7.21	\$86.52
Recycling Collection and Processing	\$ 27,680	\$2.05	\$24.60
Yard Waste Collection and Composting	\$ 5,000	\$0.37	\$ 4.44
<b>TOTAL</b>	<b>\$210,075</b>	<b>\$15.58</b>	<b>\$186.96</b>

## ISSUES

The Borough has recently taken steps to increase their diversion rate by applying for a Section 902 Municipal recycling Program Grant to provide educational materials, newsletters, and new recycling containers. To further increase their diversion rate and manage their disposal costs, The Borough of Rockledge wants to investigate variable rate structure for refuse collection, or Pay-As-You Throw (PAYT) as it has become popularly known.

## PAY-AS-YOU-THROW (PAYT)

PAYT is also known as unit pricing or variable rate pricing. Under this type of a system, residents pay for municipal waste management services per unit of waste collected rather than through a fixed fee. PAYT takes into account variations in waste generation rates by charging households or residents based on the amount of refuse they place at the curb, thereby offering individuals an incentive to reduce the amount of waste they generate and dispose of.

## POTENTIAL BENEFITS OF PAYT

Well over 200 municipalities in Pennsylvania have implemented some form of a PAYT program.<sup>3</sup> In fact, Wilkes-Barre has operated a per-bag system for a number of years and reports a significant reduction in the cost of their waste management services. A City representative reported the reduction to be approximately 50 percent of what it was prior to the per-bag program.

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<sup>3</sup> See the EPA website <http://www.epa.gov/epaoswer/non-hw/payt/states/pa.htm> for community listings.

PAYT programs can also yield an increase in recycling. Perkasio Borough experienced a 59 percent reduction in the amount of solid waste collected for disposal after implementing a PAYT program, and their recycling rate is between 43 and 45 percent.

Additional benefits may include:

- Increased waste prevention;
- More equitable waste management fee structure; and
- Increased understanding of environmental issues in general.

PAYT programs encourage residents to generate less refuse by charging them for the amount they place out for disposal. They become more cognizant of their disposal habits and look for opportunities to generate less or recover a greater portion of the waste stream through alternative management practices such as recycling and composting. A key here is that as they become more conscientious, citizens become more understanding of environmental issues and the impact of their behavior on the environment. It also provides a mechanism by which the rate paid by an individual correlates with the level of use of the service. Households generating smaller amounts of refuse pay a lesser rate than those generating larger amounts.

## POTENTIAL BARRIERS TO PAYT

While there are clearly benefits associated with the PAYT programs, there are also potential barriers that must be overcome to successfully implement this system. These potential barriers include:

- A potential increase in illegal dumping;
- An increase in administrative costs;
- A perception of increased costs to residents for the same level of service; and,
- Challenges associated with building public consensus.

Guidance on overcoming these barriers is included in this report.

## TYPES OF PAYT SYSTEMS

Five major types of PAYT are available to communities, which include the following:

**Pre-Paid Bag:** In a pre-paid bag system, residents may only dispose of solid waste in special bags sold by the government agency that is responsible for solid waste management or a private waste hauler. The bags are distinctively marked, typically 20 to 30 gallons, and available at government offices, haulers, or local retailers. The fee per bag is used to cover some or all waste management costs. Some communities offer a variety of bag sizes and corresponding bag prices.

**Pre-Paid Tag or Sticker:** With a pre-paid tag or sticker program, only solid waste containers bearing the correct tag or sticker are collected. As with a pre-paid bag system, the tags or

stickers are sold by the government agency, haulers, and designated offices or local retailers. The fee per tag or sticker provides for collection and disposal of a specific size of container with a volume and/or weight limit. Some communities also use tag/stickers for bulky items, such as appliances and furniture, but these items require more stickers.

**Subscription/Containers:** In a subscription system, households sign up for collection and disposal of a specific number or size of containers for each billing period or setout. Households generating solid waste beyond their subscribed level of service must purchase additional tags, stickers or cans if they want additional materials to be collected.

Within subscription systems, two sub-systems exist for containers - one standard size container and a variable can system, where residents have an option of choosing from graduated can sizes. Typically, in variable can programs, the size of the container can range from 20 to 60 gallons. However, some communities provide containers as small as 10 gallons and as large as 120 gallons.

**Weight-Based System:** With a weight-based system, residents pay a fee per pound of solid waste collected. The solid waste is weighed using scales and possibly, electronic identification and billed to the household. This program can either require residents to use standard, government-supplied cans or allow them to continue using their own cans.

**Hybrid System:** A hybrid system combines a flat fee with some type of fee per unit. Under this system, residents are charged for a basic level of service and above this level the resident must pay for an additional container or purchase a tag, bag or sticker.

#### **Advantages and Disadvantages of Each Program Type**

No two communities are exactly alike, and therefore numerous variables will impact your decision in designing the best program for your community. However, within each of the five types of programs advantages and disadvantages exist. These are summarized in Tables 2 through 6.

**Table 2**  
**Advantages and Disadvantages of Pre-Paid Bag PAYT Programs**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Residents find bag systems easy to understand</li> <li>• Bag systems might offer a stronger waste reduction incentive than subscription systems because fees typically are based on smaller increments of waste</li> <li>• Accounting costs are lower than with subscription systems, since no billing system is needed</li> <li>• Bag systems have lower distribution, storage, and inventory costs than subscription systems when bags are sold at local retail establishments and municipal offices</li> <li>• Bag collection tends to be faster and more efficient than non-automated subscription collections</li> <li>• Bags can be used to indicate that the proper fees have been paid for bulky items or white goods, because communities often assess fees for pick up of these items. Communities can ask residents to attach a certain number of bags to the items according to the cost of disposal (for example, two bags for a couch and three-bags for a washing machine)</li> <li>• Opportunity to offset costs by selling advertising on "official" bags</li> </ul>	<ul style="list-style-type: none"> <li>• Greater revenue uncertainty than with subscription system, because the number of bags residents purchase can fluctuate significantly</li> <li>• If bags are sold in municipal offices, extra staff time will be required</li> <li>• Residents might view a requirement to buy and store bags as an inconvenience</li> <li>• Bags are more expensive to produce than tags or stickers</li> <li>• Bags often are incompatible with automated and semi-automated collection equipment</li> <li>• Animals can tear bags and scatter trash, or bags can tear during lifting</li> <li>• Unlike cans, bags are not reused, adding to the amount of solid waste entering the waste stream</li> <li>• Residents currently using containers may object to having to switch to bags</li> <li>• Weight of bags due to "stuffing" might be a problem unless weight restrictions are instituted and enforced</li> </ul>

**Table 3**  
**Advantages and Disadvantages of Tag and Sticker PAYT Programs**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Tag and stickers are easier and less expensive to implement than subscription systems</li> <li>• Residents often find tag or sticker systems easier to understand than subscription systems</li> <li>• These systems offer a stronger waste reduction incentive than subscription systems because fees are based on smaller increments of waste</li> <li>• Accounting costs are lower than with subscription systems, since no billing system is needed</li> <li>• Selling tags or stickers at local retail establishments and municipal offices offers lower distribution, storage, and inventory costs than subscription systems</li> <li>• The cost of producing tags or stickers for sale to residents is lower than for bags</li> <li>• Stickers can be used to indicate payment for bulky items or white goods, because communities often assess fees for pickup of these items</li> <li>• Residents can choose between bags or cans</li> </ul>	<ul style="list-style-type: none"> <li>• There is greater revenue uncertainty than with subscription systems, because the number of tags or stickers residents purchase can fluctuate significantly</li> <li>• To avoid confusion among residents, the municipality must establish and clearly communicate the size limits allowable for each sticker</li> <li>• If tags or stickers are sold in municipal offices, extra staff time will be required</li> <li>• Residents might view a requirement to buy and store stickers or tags as an inconvenience</li> <li>• Tags and stickers often do not adhere well in rainy or cold weather</li> <li>• Extra time might be needed at the curb for collectors to enforce size limits. In addition, there may be no incentive for strict enforcement if haulers are paid based on the amount of waste collected</li> <li>• Tags left on trash at curbside could be removed by vandals or by other residents hoping to avoid paying for waste services</li> <li>• Tags and stickers are not as noticeable as bags or other prepaid indicators and may slow down collections</li> </ul>

**Table 4**  
**Advantages and Disadvantages of Subscription/Container PAYT Programs**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Revenues are fairly stable and easier to forecast.</li> <li>• Unlike bags, containers work well with semi-automated or automated collection equipment</li> <li>• In a manual collection system, residents already own containers of roughly uniform volume, new containers might not be required</li> <li>• Containers may be labeled with addresses or unique indicators to assist in enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Subscription systems often have higher implementation costs, including the purchase and distribution of containers</li> <li>• Customers have a limited incentive to reduce waste. Because residents are usually charged on a subscription basis, there is no incentive not to fill containers already purchased. In addition, no savings are possible below the smallest size trash container</li> <li>• Relatively complex billing systems are needed to track resident's selected subscription level and bill accordingly</li> <li>• Complex storage, inventory, and distribution systems are required to provide new containers to households that change their subscription level</li> <li>• A method of collecting and charging for waste beyond subscription levels and for bulk waste collections needs to be established</li> <li>• At the outset, residents may find it difficult or confusing to select a subscription level</li> <li>• There may be disputes with residents on the number of containers set out</li> <li>• Manual collection with containers usually requires greater time and effort on route than collecting waste in bags</li> <li>• A cash flow problem may exist due to lag time between paying waste contractor and collecting fees for service based on use</li> </ul>

**Table 5  
Advantages and Disadvantages of Weight-Based PAYT Programs**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Weight-based systems measure more precise increments of waste generation than volume-based systems, which offer better recycling incentives</li> <li>• Encourages waste reduction at all waste-generation levels</li> <li>• Fair and easily understood. Favorable customer survey reaction</li> </ul>	<ul style="list-style-type: none"> <li>• At present, weight-based residential systems exist only in pilot program form in the U.S.</li> <li>• Requires more complicated billing system</li> <li>• Special trucks, labeling of cans require extra expense</li> <li>• Compatibility between onboard scales and computers and other operational systems can be challenging</li> </ul>

**Table 6  
Advantages and Disadvantages of Hybrid PAYT Programs**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Offers communities a transition from the traditional financing system to a variable rate option</li> <li>• Mitigates revenue risk by recovering some costs through traditional financing method</li> <li>• Allows time for customers and officials to develop system familiarity</li> <li>• Doesn't "lock-in" a community to a specific type of system</li> <li>• Can be implemented quickly, inexpensively, and easily, and can be later replaced or modified into a full subscription, bag, or tag system, under a hand dump, semi-automated, or fully automated system</li> <li>• Allows time for further planning</li> <li>• Allows time for data collection</li> <li>• No new billing system may be needed</li> </ul>	<ul style="list-style-type: none"> <li>• Customer incentives to reduce waste are truncated at the lowest service level</li> <li>• Full costs of household waste collected and disposal of may not be explicitly reflected to customers</li> <li>• Customers may not understand why they have to pay two fees for disposal of solid waste</li> </ul>

**RECOMMENDED PAYT SYSTEM**

Because all or part of the revenue required to operate the system is raised through a fee attached to a unit that varies with the level of usage, revenues are subject to fluctuations not common to the flat fee system. R. W. Beck recommends that Rockledge consider using a hybrid system.

There are two basic hybrid options used throughout the Commonwealth. These include:

- Residents or the municipality pay a standard base rate per household, and residents purchase bags or stickers, or use specific containers at a set rate per container. The cost

to residents still varies by the amount of waste they dispose, but the fixed costs are spread equally among households.

- Residents pay a base rate per household that includes a fixed number of bags, stickers or containers per set out or specified timeframe, then purchase additional bags or stickers, or use specific containers at a set rate per container. Depending on the number of containers allowed, many residents may be able to manage all their wastes without purchasing additional bags or stickers. Limiting the number of containers allowed during a given collection provides some incentive for residents to recycle, compost, or reduce waste generation as a means of avoiding additional cost for collection and disposal.

By providing the contractor with a funding mechanism that covers their fixed costs, they will assume less risk. This increase level of financial assurance often results in lower contract costs.

There are two additional hybrid variations on PAYT that other municipalities have employed: (1) some PAYT programs offer more than one container size option; and (2) some programs also offer price reductions to low and fixed income residents.

### Recommended Type of Container/ Stickers/ or Tags

Rockledge residents are currently permitted to use either 40-gallon rigid containers or plastic bags to contain refuse. Because these containers are not clearly identified as being from Rockledge residents, the current system would not deter non-residents from depositing their refuse in Rockledge.

To address this issue, R. W. Beck recommends that Rockledge mandate the use of carts, plastic bags or tags that clearly identify the refuse as being generated in Rockledge. While an increasing number of communities are beginning to use lidded, wheeled carts such as the ones shown in Figure 1, they require the use of fully- or semi-automated refuse collection vehicles. Local service providers may not have fleets that contain these vehicles.

In another option, both tags/stickers and bags specifically produced for Rockledge can also be used to clearly identify the waste as being generated by Rockledge residential units.



### *Hybrid Case Studies*

#### Elizabethtown Borough

Elizabethtown Borough in Lancaster County initially implemented a PAYT program in which revenues were solely dependent on the sale of bags. Elizabethtown experienced a

significant decline in the sale of bags and the program's costs began to outweigh its revenues. Raising the cost of bags would only compound the problem.

Consequently, Elizabethtown modified their program to a hybrid subscription/tag program. Under the new system, all homeowners are assessed \$114 per year and are permitted to set out one, 32-gallon bag or container per week. If homeowners set out more than this amount, they must purchase a \$2.00 tag for each additional bag or container. Homeowners are permitted to set out one bulky item per week, also requiring a \$2.00 tag. Tags can be purchased at Borough offices or designated retail outlets. Tires and white goods are collected curbside twice a year. Each tire requires on \$2.00 tag, but white goods require a special \$12.00 tag.

Bagged leaf collection occurs six times per year. Bagged leaves do not require a tag. However, homeowners must contain the leaves in Kraft paper bags which are distributed at a Borough park eight days a year.

### **South Middletown Township**

South Middleton Township in Cumberland County contracts with Waste Management, Incorporated to provide weekly collection of refuse, recyclables and one bulky item. All single-family homes and multi-family establishments with less than three units are either charged \$37.43 per quarter (or \$149.72 per year) and provided with a 90-gallon wheeled cart, or may purchase tags, which are to be placed on each bag of refuse, for \$2.57 each.<sup>4</sup> If residents opt for the 96-gallon container, they must purchase a tag for each additional bag of refuse that can not be contained in the cart. If residents exclusively use tags rather than the 96-gallon cart, each household must purchase a minimum of 18 tags per year. Tags may be purchased from the Township or Waste Management. Yard waste is currently collected loose via vacuum by Township crews. However, the Township yard waste will be collected in bags beginning fall 2004.

### ***Potential Impact on Rockledge***

Residential solid waste management services annually cost the Borough of Rockledge a total of approximately \$210,075 or \$186.96 per household, which is higher than the case study communities that have implemented a PAYT program. By implementing a PAYT program, the primary source of savings for the Borough would be reduced landfill fees, as residents have an incentive to provide greater refuse diversion. Savings would be somewhat offset by increased recycling fees.

To illustrate, Table 7 shows that 47.44 percent or 530 tons of the disposed waste stream is currently comprised of materials that are collected through the curbside recycling and yard waste collection programs. If the institution of a PAYT program annually diverts an additional 20 percent or an approximate 106 tons of these materials, the Borough's disposal costs could be reduced by \$9,222. In addition to the avoided disposal costs, Pennsylvania's 904 Performance Grant provides funding to municipalities based on the tonnage of recyclables that they report as being recovered. The amount per ton varies, but averages

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<sup>4</sup> The cost will increase to \$2.60 per tag in March, 2005.

around \$10. Thus, the Borough could generate an additional \$1,106 in revenue by increasing their diversion quantity, generating a total of \$10,328 in savings/revenues.

However, 6.26 percent or 70 tons of the materials are classified as commingled containers, and the Borough would need to pay \$21 per ton to process these materials or approximately \$1,470 per year. Thus, the net financial benefit to the Borough would be \$8,858.

**Table 7  
Waste Stream Composition**

Material	Percent of Waste <sup>1</sup>	Tons Disposed
Newspaper	4.10%	46
Corrugated Cardboard	7.52%	84
Office	4.73%	53
Magazine/ Glossy	2.50%	28
Polycoated/Aseptic Containers	0.50%	49
Mixed Paper	4.40%	49
Non-Recyclable Paper	10.42%	116
<b>All Paper</b>	<b>34.18%</b>	<b>425</b>
#1 PET Bottles	0.83%	9
#2 HDPE Bottles	0.58%	6
#3-#7 Bottles	0.15%	2
Expanded Polystyrene	0.80%	9
Film Plastic	3.99%	45
Other Rigid Plastic	3.50%	39
<b>All Plastics</b>	<b>9.85%</b>	<b>110</b>
Clear Glass	1.61%	18
Green Glass	0.74%	8
Amber Glass	1.16%	13
Non-recyclable Glass	0.63%	7
<b>All Glass</b>	<b>4.14%</b>	<b>46</b>
Steel Cans	0.76%	8

Material	Percent of Waste <sup>1</sup>	Tons Disposed
Aluminum Cans	0.58%	6
Other Ferrous	2.85%	32
Other Aluminum	0.41%	5
Other Non-Ferrous	0.53%	6
<b>All Metals</b>	<b>5.13%</b>	<b>57</b>
Yard Waste- Grass	1.23%	14
Yard Waste- Other	5.78%	65
Wood- Unpainted	5.53%	62
Wood- Painted	1.63%	18
Food Waste	10.55%	118
Textiles	3.51%	18
Diapers	2.05%	23
Fines	0.93%	10
Other Organics	1.90%	21
<b>All Organics</b>	<b>33.10%</b>	<b>349</b>
Electronics	2.44%	27
Carpet	1.84%	21
Drywall	0.92%	10
Other C&D	5.72%	64
HHW	0.23%	3
Other Inorganics	2.08%	23
Furniture	0.37%	4
<b>All Inorganics</b>	<b>13.61%</b>	<b>152</b>
<b>All Disposed Waste</b>	<b>100%</b>	<b>1,117</b>

<sup>1</sup> Composition derived from data provided in PA DEP Waste Characterization Study, 2002.

## IMPLEMENTING A PAYT PROGRAM

When developing a program that will result in a significant change it is important to have a solid plan of action. Presently, the Borough of Rockledge offers nearly unlimited refuse, yard waste, recyclables and bulky waste collection service to its residential customers at a cost to the Borough of \$186.96 per household per year. Suggesting a change to this system

could be met with strong public opposition -- residents may feel they are getting less service at a greater cost. Therefore, it will be imperative to involve the public in the process that ultimately structures the new system.

## **PLANNING THE PROGRAM**

Solid waste management can be a confusing business; therefore it is important to carefully consider new programs before implementing a change. It is important to involve the public in this process and solicit their input on structuring the program. The change will be implemented much more smoothly if there is public consensus in favor of the change. It is imperative to make sure the public knows what is going on, how the program will work and what the benefits are to them. Use the media wisely in disseminating information to the public as the process is taking form.

The first action should be the formation of a committee to oversee the planning and implementation of a program change. The committee's role would include:

- Setting goals;
- Defining the system;
- Developing a public information strategy; and
- Overseeing implementation.

## **DETERMINE CURRENT SET OUT RATES**

It is important for the Borough to determine the average number of containers that single-family households currently set out as well as the number of households that are using the vacuum leaf collection service. By determining the average set out rate, the Borough can decide the number of containers that will be permitted under the base fee. For example, in Kirkwood, Missouri, 60 percent of the residents set out an average of two or three 30-gallon bags per week. Thus, the City decided that residents could set out up to three bags per week for the base fee and additional bags would cost \$1.25 each. This approach meant that the majority of residents would not be affected by the PAYT program, but the larger solid waste generators would need to pay a higher fee. Conversely, communities that are aggressively trying to increase their recycling rate have established a set out limit that is below what the majority of residents set out. However, these communities experienced a more difficult time obtaining support for the program.

## **EDUCATING THE PUBLIC ON THE NEED FOR PAYT**

It is essential that the public understand the issues and reasons for considering a modification to the existing solid waste management system. Thus, it is important to convey the following messages:

- Rockledge is mandated by Pennsylvania law to provide curbside recycling. However, Pennsylvania law also enables Rockledge to receive funding based on the performance of the recycling program. Thus, developing a system, such as PAYT, that encourages people to recycle is financially beneficially to Rockledge.

- Residential refuse collection will be equitably priced (i.e., those requiring fewer container set outs will pay less for them, thereby encouraging diversion by recycling.)

It is suggested that, in addition to newspaper articles, public meetings be used to disseminate these messages, thereby allowing participants to make recommendations on how to resolve these issues.

### **EDUCATING THE PUBLIC ON THE PAYT PROGRAM**

If Rockledge implements a PAYT program, it is essential that a comprehensive education campaign be developed that includes the following informational materials:

- PAYT brochure;
- Wire-tie warning tags;
- FAQs on Borough website; and
- Recycling “How To” flyers.

In addition, Rockledge may want to establish an environmental task force during the first year whose members:

- Volunteer to answer phones; and,
- When a problem location is identified, knock on the door or phone the residence, talk to the people, explain the program, ask for their cooperation and accommodate with a collection if appropriate.

Additionally, if Rockledge selects a PAYT program that uses bags or cans, residents must be educated on not over-packing them. Examples of educational messages that address this are provided in Attachments A and B.

### **DEVELOP A PROACTIVE CAMPAIGN TO PREVENT ILLEGAL DUMPING**

In general, illegal dumping should not be a significant problem. In fact, a study of 14 cities<sup>5</sup> found 42 percent of communities with PAYT programs reporting no problems, 29 percent reporting minor problems, and another 29 percent reporting notable problems. The analysis of contributing factors found that three of four communities with problems were rural. Not all rural communities in the sample, however, had problems with illegal dumping. Openly illegal dumping may be somewhat notable when there is no base level of curbside refuse or recycling service. These communities report that some residents illegally dump refuse due to economic constraints. However, this is not the system that R. W. Beck is recommending for Rockledge.

Even though illegal dumping should not be a problem, a proactive campaign should be introduced concurrently with the implementation of the PAYT program. This initiative could include:

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<sup>5</sup> Daniel Blume, *Under What Conditions Should Cities Adopt Volume-based Pricing for Residential Solid Waste Collection?*

- “Report illegal dumping” decals such as the one shown in Attachment C;
- “3 Strikes And You’re Out” crew enforcement;
- Shared databases with Housing, Health, Street, Zoning, and Police Departments;
- Shared interdepartmental violation notifications that serve to identify chronic “illegal dumpers”;
- Monday morning “Garbage” conference calls; and
- The ability for Borough Staff to issue civil citations.

### **AMENDING ORDINANCE 491**

If Rockledge opts to implement a PAYT program, Ordinance 491 will need to be amended to limit the amount of refuse that residential units may set out for the base fee, and set-outs that exceed that limit will not be collected without the specified tag or sticker. Additionally, language which limits the weight of the container must be included.

### **SELECTING PREFERRED SYSTEM**

Regardless of the system selected, the collection of refuse in the Borough of Rockledge will not functionally change. Refuse trucks will still need to drive by each residence on a weekly basis. The amount of refuse collected from each household may decrease, but material will still need to be collected weekly. The real choice is which system is best for increasing waste reduction by recycling in Rockledge.

This is where the Borough will need to consider the goals of the change and evaluate the costs and benefits of the different options. Ultimately, the Borough wants a program that will be generally acceptable to the public at large.

### **RECOMMENDATIONS**

- To increase recycling, the Borough should strongly consider implementing a PAYT program. A PAYT system should provide an incentive for residents to be more conscientious about recycling and improve participation and compliance with the Borough’s recycling guidelines.
- Implementing a PAYT program could financially benefit the Borough by approximately \$8,000 to \$9,000 per year.
- Should the Borough choose to do this, citizens and service providers should be incorporated into the planning process because; (1) residents do not pay for solid waste collection services and implementation of PAYT will result in greater cost to some residents; and (2) some residents may view PAYT as an attempt to reduce services and increase costs; and,
- A hybrid system is the recommended for the Borough, where the Borough pays for a basic level of weekly service and a per-unit fee is paid for by the residential unit for set outs that exceed basic service levels.

A number of Pennsylvania municipalities have found PAYT to be a useful tool in reducing waste, controlling costs, and boosting recycling rates. PAYT will provide an incentive for Borough residents to reduce waste generation. The greatest hurdle, if the Borough were ever to decide to implement PAYT, will be avoiding the view that PAYT is an attempt to reduce services and increase costs. It is a decision that will require significant attention to citizen concerns and consideration of citizen input to ensure that it is accepted and embraced by Borough residents.

Sincerely,

Karen M. Luken  
Senior Director

# Attachments A & B



Watch Our Back...

Please

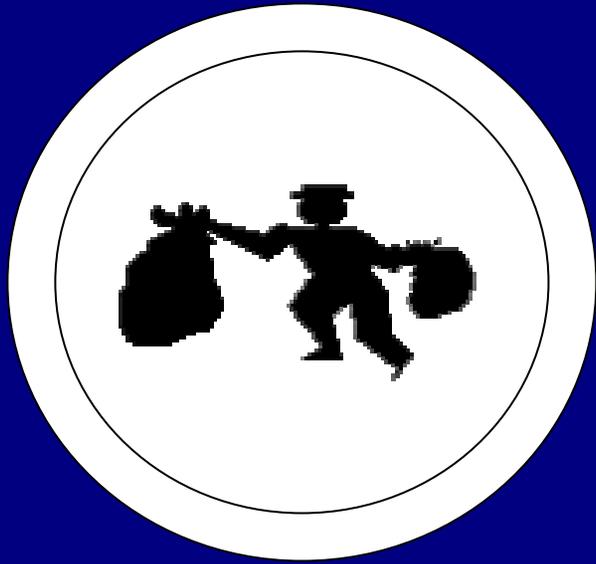
Don't Over Pack!

Put your  
garbage  
bag on a  
diet...



Recycle More!

# Attachment C



*If you see*  
***ILLEGAL***  
***DUMPING***

*Call 555-5555*

*Fines up to \$5,000*