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RECYCLING PROGRAM OPTIONS
CHESTERTOWN, MARYLAND



SEPTEMBER 2013

Prepared by David Sobers, Consultant

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TABLE OF CONTENTS

<u>Topic</u>	<u>Page</u>
1. Acknowledgments.....	3
2. Introduction and Summary.....	3
3. Report Limitations.....	4
4. Recommended Chestertown Recycling Goal.....	4
5. Maryland Recycling Law.....	5
6. Chestertown Solid Waste Management Program.....	6
7. Waste Management Options.....	10
a. Once a Week Refuse and Yard Waste Collection.....	10
b. Fewer Recycling Streams.....	12
c. Improved Recycling Containers.....	14
d. Contract Terms.....	16
e. Enforcement.....	17
f. Solid Waste Enterprise Fund.....	18
g. Public Outreach.....	18
h. Other Options.....	18
8. Attachments	
a. Chapter 85: Garbage and Trash Removal.....	20
b. Green Opportunities Chestertown Client List.....	22
c. Littering Article, Section 10-110.....	23

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1. ACKNOWLEDGMENTS

This report was prepared with the assistance of a number of individuals in particular the Chestertown Green Committee; Marty Holden, Kent County Solid Waste Division Chief; Richard Keller, Manager of Recycling, Maryland Environmental Service; Hilary Miller, Manager, Waste Diversion and Utilization Program, Maryland Department of the Environment; Ford Schumann and Jenn Demarest of Infinity Recycling; Arlene Seaman, Green Opportunities; and Margo Bailey, Mayor; Bill Ingersoll, Town Manager; Pat Diver, Financial Director; and Kees Demooy, Assistant Zoning and Housing Administrator of Chestertown.

The author, David Sobers, graduated from the University of Maryland and has worked as an environmental specialist for over forty years beginning as Montgomery County Maryland's first environmental planner through Director of Environmental Protection. In his 23 years with the County, he directed the County's first and succeeding solid waste plans, siting of the solid waste facilities, and various operational and enforcement responsibilities. Major solid waste facilities include three landfills, a transfer station, recycling facility, recycling collection district, waste-to-energy plant and rail haul system. He had similar County responsibilities in the water, wastewater, stormwater, energy and hazardous waste areas. Upon leaving the County, he became a senior consultant and Vice President for Solid Waste for a period of eight years with Woodward-Clyde Consultants (2800 personnel) and URS Corporation (50,000 personnel) that acquired Woodward-Clyde. He now works as an independent consultant and with various firms for clients including Kent County, various Maryland counties, Maryland, USAID, the World Bank and overseas clients in Africa, South Asia, Indonesia and the Philippines.

2. INTRODUCTION AND SUMMARY

Chestertown, Maryland is a community that is home to over five thousand residents, an historic college, and supportive commercial interests. Chestertown recognized the need for recycling as a part of its resource management responsibilities, began recycling in the 1980s, and instituted a formal program in 1996 when it amended its local code, namely Chapter 85, to provide for uniform refuse and recycling collection services for its residents and small businesses. The recycling service has grown over the years at a modest rate to an estimated 16% of the volume of refuse and recyclables collected. The quantity of recyclables from other sources, namely non residential accounts, is unknown. However, using Kent County's recycling estimates as a surrogate, the total recycling rate for the Town is likely to be closer to 30% when private initiatives and collected yard waste are included.

The Town is exploring ways to increase the volume of materials that go into the recycling stream and commissioned the Town's Green Committee and this study to look into the

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matter and propose methods by which the diversion to recycling can be made greater within reasonable economic allowances.

The key findings of this analysis are that the solid waste program can be enhanced significantly, especially recycling, by the following:

- Collect refuse and yard waste once a week rather than twice a week,
- Move from a five stream to single or dual stream recycling collection,
- Amend the recycling and refuse contracts to change the type of service or collection,
- Use improved recycling collection containers and vehicles,
- Enforce the current recycling ordinance,
- Provide waste collection as a fee based service rather than tax supported, and
- Greater public outreach.

There are a list of other considerations listed at the end of the report for the Town that are beyond the scope of this study that it may wish to consider in its future program development.

3. REPORT LIMITATIONS

This report is an overview of Chestertown's recycling program and does not represent original research. It uses published information and interviews with relevant authorities. The recommendations are based upon experience from other jurisdictions and the author who has worked in the field for over forty years. The data, graphics and other information in this report are from the Town, area contractors, US Environmental Protection Agency, State of Maryland, Kent County and several area jurisdictions. Attempts are made in the report to put the findings and recommendations in context and note where professional judgment has been applied.

4. RECOMMENDED CHESTERTOWN RECYCLING GOAL

State law (Section 387C, Article 43, of the Annotated Code of Maryland) requires the counties and the City of Baltimore to develop comprehensive solid waste management plans to manage solid waste over a ten year period. The plans must be approved by the Maryland Department of the Environment before they are final.

While Chestertown is not obligated to develop a formal solid waste management strategy, it has taken a number of independent steps to improve its solid waste program over the years. These steps have led to the solid waste program that the Town currently employs. In order to be clear on the intent of the Town as to its future program, the following recycling goal statement or a suitable substitute is recommended for endorsement by the Town government:

Improve Chestertown's solid waste management program by diverting the maximum quantity of materials from the disposal stream into the recycling stream in a manner that is both

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economically practical and convenient for public participation.

5. MARYLAND RECYCLING LAW

The Maryland Recycling Act (MRA) was enacted in 1988 and amended last year with new goals. The MRA requires all counties and Baltimore City to recycle a percentage of their municipal solid waste, depending on population. For counties with populations less than 150,000, the goal is to recycle¹ 20%, and for populations greater than 150,000, the goal is 35% of their solid waste by December 31, 2015. State government must implement a recycling plan to reach a 30% recycling rate by July 1, 2014. In addition, Maryland established a voluntary waste diversion goal of 60%, and a voluntary recycling rate of 55% by 2020. More recently, state officials have been speaking of a “zero waste goal” in which all, or nearly all, wastes are recycled.

Maryland reported a 48.9% waste diversion rate in 2011 that includes both source reduction (3.7%) and recycling (45.2%).² There is increasing movement in Maryland and nationwide to maximize the volume of materials that is recycled and minimize that which is landfilled. Maryland’s waste diversion rate has grown to over forty percent as shown in the following graphic.

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Source: MDE Web Site, Maryland State, County and City Recycling.

The majority (59%) of the materials recovered in the State of Maryland are organics which are paper and compostable products as depicted in the following pie chart.

¹ When the term recycle is used, it includes source reduction, reuse and recycling.

² Source: MDE, CY 2011.

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Source: MDE Web Site, Maryland State, County and City Recycling.

6. CHESTERTOWN SOLID WASTE MANAGEMENT PROGRAM

Chestertown is part of Kent County that is, in turn, part of the Midshore Solid Waste Region (Caroline, Kent, Talbot and Queen Anne's counties). The Region shares a common landfill presently located in Caroline County and a number of recycling services. Kent County will provide a landfill for the Region at some point during the next forty years for a twenty year service period. The Region reported a recycling rate of 50.83% in 2011, a good rate from either a state or national perspective. Kent County's recycling rate is 27.57% for 2012. The reason for the large difference between the Region and the County is that there are large food processors not in Kent County that recycle their wastes and raise the overall Midshore rate to the 50.83% level.

In 1996, Chestertown passed a Garbage and Trash Removal ordinance, Chapter 85, (Attachment 1) providing for the separate collection of garbage and recyclables at no charge to single family households. The ordinance specifically provides, "... non-recyclable waste materials that ... would be collected by the town ... would include, but not be limited to, food wastes, paper and plastic wrapping materials from small packages, paper towels, tissues, disposable diapers, cloth rags, and paint cans empty of paint. It would not include materials that are being recycled, such as glass bottles, newspaper, aluminum and steel cans, certain plastic containers, magazines, paper, and corrugated cardboard." While the Town does not enforce the recycling requirement, it instead relies on the cooperation of its residents to comply. Most residents are probably not aware that separation is mandatory.

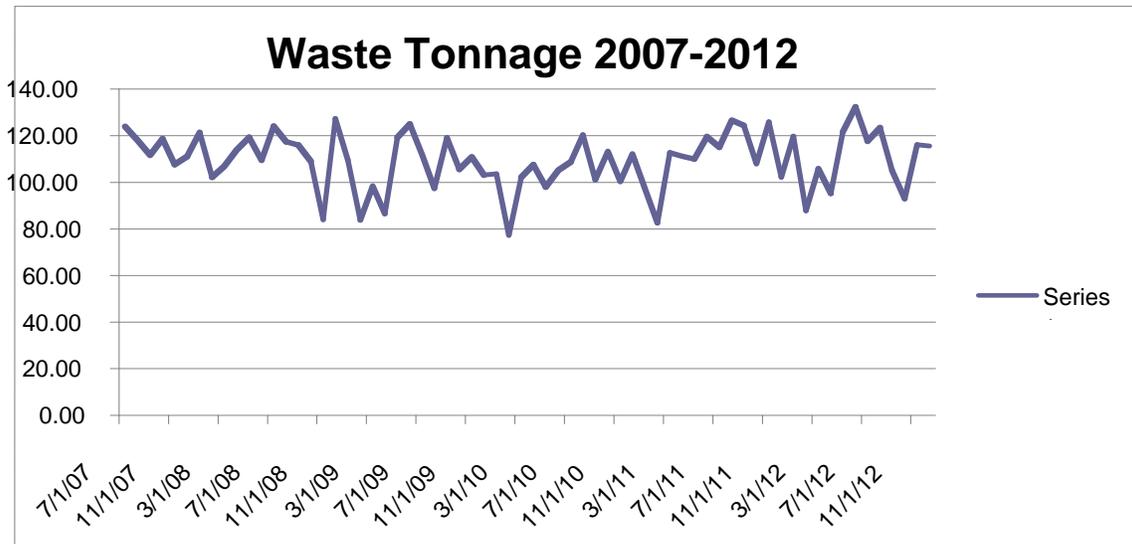
Chestertown occupies an area of about 2.8 square miles with a population of about 5,252 persons (2010 census), 1571 households, a growth rate of 10.7% since 2000, and a positive growth trend since 1980. While the population has increased, the waste tonnage has remained relatively constant. The somewhat level tonnage of wastes is likely attributable in part to the increase in recycling and the less robust economy.

In 2012, the Town collected over 1,597 tons per year of materials, 1,334 tons of refuse and 263 tons of recyclables, through the Town's waste and recycling collection contractors.

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This total does not account for the commercial and industrial wastes that are separately managed, the materials collected by the Maryland Environmental Services (MES) at the drop off center on Nicholson Road, nor the approximately 200 tons of yard wastes collected by the Town³.

Chestertown



The following is a list of the number of houses added to the Town's refuse collection contract over the past six years.

<u>Year</u>	<u>Houses Added</u>
2007	57
2008	27
2009	68
2010	18
2011	0
2012	3

The recycling quantities reported by Infinity Recycling for the past three years are listed below.

<u>Year</u>	<u>Quantity</u>
2010	102 tons
2011	247 tons
2012	263 tons

³ MES reports the following tonnages of yard waste processed (tub grinding) into mulch at the water tower site (Foxley Manor) in Chestertown.

<u>Year</u>	<u>Quantity</u>
2010	275 tons
2011	224 tons
2012	191 tons

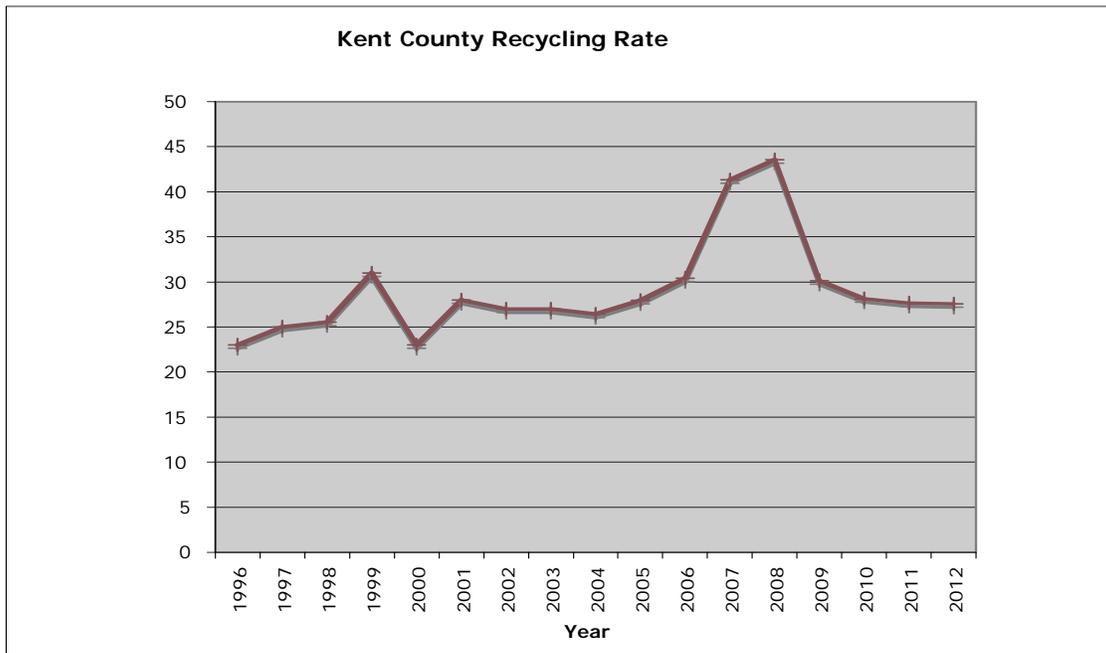
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Neither Chestertown nor Kent County have performed a waste audit in order to determine the materials content of the waste stream, so the estimated quantity of recyclables remaining in sorted and unsorted waste streams is unknown. However, certain assumptions can be made to estimate what the likely recycling volume increase to the Town could be if recycling was more aggressively pursued.

The 263 tons of recyclables collected in 2012 represents materials from about 57% of eligible residential and business units. If all units subscribed to the program, the volume could rise to 461 tons. Further, if the program were made simpler by requiring only separating materials into two recyclable streams versus five streams, and employing more user friendly recycling containers with wheels, the volume should rise to over 500 tons per year, or a 31% recycling rate. Adding the yard waste (200 tons) to that would raise the recycling value to 39% for the materials the Town manages. Recycling from commercial and institutional sources would raise the volume even higher.

The following graph depicts the percentage recycling rate for the County including Chestertown over the past 17 years. Kent County's recycling rate has been fairly level over the past two decades as the chart below depicts. According to the County, the higher recycling rates for 2007 and 2008 are likely due to better reporting during those years on the part of certain industries and a better economy.

Town residents that chose to use drop off centers for recycling have the Nicholson Road site, Worton Park/Route 297 site and more proximate Kingstown site near the bowling alley. The latter site is on private property and has been closed at the request of the owner. Queen Anne's County is currently searching for a new site.



Source: MRA Tonnage Reporting System, Kent County, MD.

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In 2012, of the 1,597 tons generated in the Town, 263 tons were collected and recycled by Infinity Recycling, the Town's principal recycling agent for a recycling rate of 16%. If yard waste is added to the recyclables collected, recycling rises to 25% of the total recyclables and waste stream. The balance of the materials, 1,334 tons of refuse, is collected by Wallace Henry and disposed of at the Midshore Landfill in Caroline County where the tipping fee was \$58 per ton (current tipping fee is \$60 per ton). The Chestertown cost per ton for waste disposal is \$141 per ton, \$83 for collection and \$58 for disposal. The Town's cost for Infinity's recycling services (collection, processing and marketing) is \$207 per ton. A good objective would be to lower the costs of recycling per ton so that it is more competitive with waste disposal, and perhaps the easiest and most desirable way to do that is to increase the volume collected per household.

Infinity collects the following materials with certain restrictions:

- Paper, newspaper, cardboard and books
- Glass bottles and jars of all colors
- Plastic bottles, #1 PET and #2 HDPE
- Metal containers of aluminum and tin, aluminum foil, non ferrous pots and pans, and aluminum lawn furniture
- Clothing and fabric

Another way in which to address the cost of the two services is by household. In 2012, Wallace Henry collected the refuse from Chestertown's 2,164 dwelling units for \$111,402, and the Town paid \$77,345 for disposal at the Midshore Landfill. The monthly cost per household for the collection and disposal was \$4.29 and \$2.98, respectively, totaling \$7.27 for both.

Infinity collects the recyclables from 1,225 households and small businesses for a 57% participation rate. Infinity collects recyclables from households that agree voluntarily to participate in the program for a fee of \$3.80/household/month payable by the Town. So if one looks at the monthly cost per household for disposal at \$7.27, and recycling at \$3.80, recycling compares favorably.

However, the volumes of materials are remarkably different, namely 1,334 tons of waste to 263 tons of recyclables. As discussed previously, there is advantage to increasing the volume of recyclables since per ton costs would decline, revenues increase (to the contractor), and the disposal costs decline as materials shift from the waste to the recycling stream.

Chestertown's cost for providing waste and recycling services compares favorably with other jurisdictions. Below are some of the monthly costs by jurisdiction by household from a brief survey. In general terms, the cost of recycling decreases as the volume of materials (i.e., revenues) increase, and the frequency of refuse collection declines (i.e., twice a week to once a week).

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<u>Jurisdiction</u>	<u>Recycling</u>	<u>Refuse</u>	<u>Total</u>	<u>Frequency</u>
Centreville	-	-	\$12.50	weekly
Frederick	\$3.50	-	-	biweekly
Kent	\$3.80	\$7.27	\$11.07	recycling weekly, refuse semi weekly
Montgomery	-	-	\$11.78*	weekly
Queenstown	\$4.25	\$11.50	\$15.75	weekly refuse, biweekly recycling

*Median collection price without disposal fee

7. WASTE MANAGEMENT OPTIONS

So the question for the Town is, what does this information mean to us, and what are our options to increase recycling while maintaining a proper level of refuse management and economic constraints? The following are seven possible considerations.

a. Once a Week Refuse and Yard Waste Collection

Refuse is presently collected twice a week by the Town's contractor, Wallace Henry (photo of collection truck below). This is a high level of service in light of the Town's collection of recyclables and the improving technologies and markets for recyclable materials. The Town may wish to consider a once a week collection of refuse that would offer the following benefits:

- Reduced truck traffic, truck wear, emissions, labor and accident potential, and
- Lower costs



Wallace Henry Collection Vehicle

Initially, the amount of waste remains the same, only the frequency of collection changes. For some residents, there would be an increased storage requirement for once a week collection that can be met through the use of a larger or additional containers. Residents would need to be more careful to avoid a missed collection and having to manage two weeks of waste. Other communities have faced this problem and found there is an

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adjustment period. Most people adapt easily, and have a neighbor assist in putting out the container in their absence. For over half the Town's residents, they are already accustomed to once a week recycling collection. Many homeowners will opt for wheeled containers to accommodate larger refuse loads. Others will increase their recycling practices as an offset. For people with verified physical limitations, the collector can offer the resident the option of retrieving the container from the house rather than curbside. Odors from longer storage of putrescibles are dealt with secure containers, bagging and deodorants such as baking soda and other commercial products.

The savings realized from once-a-week refuse collection are substantial. The US Environmental Protection Agency (USEPA) reports that once a week collection "cuts collection vehicle needs by 20 to 40 percent"⁴. The USEPA report goes on further to say, "In Montgomery County, Maryland...twice-per-week collection was almost 70 percent more costly than once-per-week collection." The cost of refuse collection should be reduced by 20% to 40%, yielding a savings to the Town of between \$22K and \$45K ($\$111,402 \times 0.2, 0.4$) that can be applied elsewhere in the program for items such as wheeled recycling containers and public outreach.

The intent of changing the program is to improve the overall level of service with little or no cost increase to the Town. In a modern, integrated solid waste management program, the goal is to optimize each component (reduce, reuse, collect, process, recover and dispose the balance) of the system while minimizing disposal and costs overall. This inverted pyramid depicts the decision making philosophy in graphic terms.



Yard waste is presently collected twice a week by Town personnel and at no additional cost to the residents using compacter trucks (see photo below). This is a generous waste collection program for these materials as many jurisdictions provide such services once a week or biweekly.

⁴ Collection Efficiency Strategies for Success, USEPA, EPA530-K-99-007, December 1999.

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Town Yard Waste Collection

Offering yard waste service once a week with additional, special collections in the fall, for Christmas trees, and following significant storm events would reduce the cost to the Town. The likely cost savings to the Town would be an estimated 30-40% of current expenses. Present costs for twice-a-week collection are not known. The volume and cost of mulching the material would not change, but the collection costs would decline. Further, the reduction would allow for use of the savings and labor elsewhere either in the recycling program or in the Town's broad public works mission.

Residents can also be encouraged to practice grass cycling where they allow the cuttings to remain on the turf thereby reducing the amount of yard waste collected. This practice reduces the fertilizer requirement as the grass naturally decomposes and produces a slow release nutrient source for the lawn.

b. Fewer Recycling Streams

Another way to make the recycling program more generator (household, small business) friendly is to reduce the amount of required sorting. Presently, the Town's program calls for separating materials generally into as many as five categories namely paper products, metal containers, plastic containers, glass containers and fabric and certain non ferrous products. Infinity collects the materials using a pickup truck and trailer with multiple containers for the various materials; see photo below.

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Infinity Collection Vehicle

What is simpler for the resident and more successful elsewhere is to require only single or dual material streams. Single stream is all recyclables together in a single container, and dual stream is one compartment or container for paper products and the other for other acceptable materials.

There are advocates on both sides of the single-versus-dual stream debate, but either method is more successful in generator acceptance and product yield than multiple streams recycling. The advocates for single stream recycling point to the simplicity and ease of compliance, while the dual stream proponents argue that the paper stream is higher in quality and more salable due to less contamination (broken glass and leaked fluids) and less rejected material to be landfilled or combusted. Creafill, Infinity's local paper products purchaser, prefers the product from a separated paper stream because of its higher quality and value.

Some of the residents interviewed for this report feel the present level of separation is troublesome and discourages participation. Others cited their experience in previous communities with single or dual stream recycling that was easier to separate and store.

The Town's contractor is planning to offer dual stream recycling (paper products in one container and all other materials in a second container) coincident with the opening of their new materials recovery facility (MRF); see photos below. Infinity Recycling is moving its sorting and marketing operations from its present location on Old McGinnis Farm Lane to Millington Road and Route 301. Infinity is hoping not only to expand its capacity, but also improve its recycling operations with upgraded automation and working conditions and the better access provided by Route 301. The new facility is slated to begin operations later this year.

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New Infinity Plant



Interior Operations Area

Infinity also has the opportunity to improve its collection vehicles to larger trucks with greater capacity, twin compartments, and even mechanical loading systems. The Town also has the choice of adopting a single stream program. Should the Town choose the latter, it could involve a competitive bidding process since there are a number of likely bidders for that service.

c. Improved Recycling Containers

As stated earlier, one of the ingredients to a successful recycling program is to make it as easy as practical for the participants to separate, store and deliver the materials to the curb. The present recycling system employs 16 gallon green bins provided by MES to the County, five gallon buckets and miscellaneous homeowner provided containers (plastic pails, boxes, paper bags, etc.). These containers are satisfactory for small households with low recyclables generation. However, for larger volumes, 35, 65 and 95 gallon wheeled containers are available in quantity for prices ranging from \$40 to over \$100 per unit. Divided containers are an additional 25-50% more expensive than single compartment units to accommodate a dual stream recycling system. Another advantage of the more recent containers is that they have lids to keep the materials dry and minimize blowing debris.

If wheeled recycling containers are employed and made available in several sizes, the process would become far more convenient for users especially for larger volume generators. The wheeled containers would also allow for automated collection devices on the trucks promoting both expediency and safety for the workers and generators alike. An example of an automated cart unloading is depicted below.

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Allied Waste Vehicle and Carts



Automated Loaders

To encourage the use of improved recycling containers, the Town can offset the cost of the containers in a number of ways. One is to provide information at the Town office or on the Town's web site on various containers and where to purchase them. The second is to work with Town retailers, such as Chestertown Lumber and JBK Hardware, to provide a select variety of container sizes that are easy to use and well constructed at cost or with minimal markup as a public service. A third option is to have the Town's recycling provider, Infinity, furnish the containers as a part of the service contract. Providing containers represents a cost that contractors in other areas incorporate into their fee structure. Another possibility is to approach other local municipalities that have procured containers and are often willing to share the volume price structure with fellow governments. Finally, the Town could seek grants to underwrite all or a portion of the costs.

Possible grantees include the MES that provides the Midshore counties a \$5 per ton return from the Midshore disposal tip fees to advance recycling programs in the member counties. The \$5 per ton for Chestertown's wastes amounted to \$6,670 for 2012, and would total nearly \$70,000 over a ten year period. Kent County currently uses a portion of this allocation to fund its yard waste grinding/mulching for the County and the Town; MES provides the mulching on a rotational basis with a transportable tub grinder. The fund also pays for tire recycling for the County and the Town, and chlorofluorocarbon gas recovery from refrigerators and air conditioners. Other possible grantees would include corporate sponsors with the understanding their logos would appear on the container. The State may have some funding available, but grant funds have been limited in recent years due to declining revenues.

Labels with program information and color coding can facilitate differentiating the refuse from recycling containers and list what materials are acceptable in each.

Below are the present recycling container and examples of twin compartment containers in both non-wheeled and larger, wheeled configurations.

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Present Container



Divided Containers



Wheeled Divided Container

The success of the recycling program depends upon the number of residents participating in the program and the degree to which they separate out the recyclable components. Presently, about 57% of the eligible residential and small business units participate in the program. The vendor has refrained from more aggressive solicitation of the remaining 43% of the units because of concern over budget allowances stemming from the decreased tax revenues.

d. Contract Terms

The Town has a number of choices on how it proceeds to improve its solid waste program from a contractual standpoint. Focusing on the recycling component, the Town can adopt a policy of:

- No change, continue current five stream program, add subscribers as the budget allows, or
- Single stream recycling where all recyclables are collected in a single container and sorted at a materials recovery facility (MRF), or
- Dual stream recycling with paper products in one container and all other recyclables in a second container or compartment also sorted at a MRF.

The current recycling contract with Infinity is an at will contract of indeterminate term and at the convenience of both parties. The contract has been successful to date, but can benefit from a number of improvements that the Town may determine are beneficial. One is to provide for a longer term so as to allow the contractor the confidence to invest in capital improvements in the collection and plant equipment. Another feature could be to incorporate a decreasing cost per dwelling unit as the number of households collected increases. The marginal cost for collecting one or more additional households on a given street is modest given the mobilization costs for the truck and personnel already present. Further, the additional recyclables collected represent new revenues in material sales. One other consideration is to put into the Town's contract a provision for revenue sharing in the material sales using a published market based index for the various products sold.

Another consideration for the Town is its recycling collection contractor. The Town could:

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- Continue with the current provider, Infinity Recycling, and modify its contract to reflect changes (e.g., dual stream, improved containers and collection vehicles, etc.).
- Use Town personnel and/or Wallace Henry, the refuse collector, to collect the recyclable materials and deliver them to the MRF. This could be facilitated by the Town moving to once a week refuse and yard waste collection.
- Put the contract out to bid for all prospective contractors to compete.

Another recycling company, Green Opportunities, is providing collection services in Chestertown. The plant is being relocated from Delaware to Goldsboro in Caroline County. The company provides containers to 24 businesses and institutions in the Chestertown area (Attachment 2), presently at no charge with the intent to charge a unannounced fee at some point in the future.



Green Opportunities Plant



Container

Green Opportunities' service is provided with the understanding that the quality of the material deposited in the containers be relatively free of contaminants and non-recyclables. It is a single stream company that allows all approved recyclables to be combined into a single container for convenience to the user. The company separates the materials at the Goldsboro plant and markets the materials through brokers.

e. Enforcement

While recycling has been mandatory since 1996, the Town has chosen not to enforce the requirement, and rather rely on voluntary compliance and the growing environmental spirit of the Town's residents. The Town could choose to promote the legal aspect of the recycling program and mandate all, rather than the current 57%, households plus small businesses participate. Presently, participants are those who voluntarily sign up for the program.

To make the existing mandatory aspect of the program effective, the Town could announce the mandatory provision in press releases and news media, establish a random inspection protocol to assure unreasonable amounts of recyclables are not in the waste stream, and impose penalties such as non collection of refuse or fines for non compliance. Taking this step would add about \$44K annually (959 households x \$3.80 x 12 months) plus periodic inspection and enforcement expenses to the program costs. Should the contractor agree

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to a volume discount for adding significantly more households, this would decrease the per household cost and reduce the \$44K estimate.

One other aspect to this option is dealing with littering. The State has a criminal code enforceable by local agents for illegal dumping in Section 10-110 (Attachment 3) that provides for fines ranging from \$1,500 to \$30,000 for littering in quantities ranging from less than 100 pounds to over 500 pounds and graduated imprisonment periods. The fines collected can accrue to the local jurisdiction.

f. Solid Waste Enterprise Fund

The Town presently funds the refuse and recycling programs out of the general fund that is supported by property taxes. The Town may wish to consider instituting a separate fund for its solid waste program as it has for water and sewer services.

The advantages of an enterprise fund are several. First, it identifies the total costs for providing the services and allows for performance measurement. Second, a fund helps in determining user fees recognizing assets, depreciation allowances and any subsidies. Third, retained earnings and surplus are retained in the fund and allow for use restrictions by the governmental body. Finally, should the Town levy a user charge for refuse collection and maintain recycling as a free service, this would add an incentive to generators to put as much material as practical into the recycling stream particularly if there was a tiered charge for solid waste by volume or weight, or if generators chose to self haul their refuse. Charging for solid waste collection would promote private collection of wastes if the charges or level of service were less than which the Town offered.

If the Town establishes a solid waste enterprise fund, it may wish to consider whether to reduce the tax rate proportionally as an offset to avoid any charge of hidden taxation or double charging. Should the Town consider this option further, it should look at the relationship of this enterprise fund with the Town's bond rating.

g. Public Outreach

The options discussed above will have some effect on the community and help determine the acceptance and future success of the program. In order to obtain the community's feelings and ultimate support, an outreach initiative is recommended. One suggestion is to ask the College to put together a video on the recycling program that could be accessible on the Town and College web sites and on YouTube. Another suggestion is to hold a public forum to hear the community's thoughts on the various program enhancements before decisions are rendered. Finally, the schools can be used as a vehicle to encourage good practices and represent one of the most effective methods for developing change.

h. Other Options

There are a host of other options that were not developed in this report that have merit and can be the subject of future program enhancements. The foregoing options can be best described as the "low hanging fruit" from the standpoint that they can be implemented to yield the greatest changes in materials volume recovered at the least cost and inconvenience to the generator. Some of the other improvements the Town may want to

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entertain in the future include:

- Perform waste audits to determine the volume and types of materials in the waste stream for recovery.
- Unit pricing waste disposal (pay as you throw) based on volume or weight to encourage less waste generation and greater recycling. This method requires the use of special bags priced by volume or weighing devices on the collection trucks, to record the amount of waste collected. The hope is to divert more of the waste stream into recycling and waste reduction with cost avoidance as an incentive. The less one places out for disposal, the less they pay.
- Bulky waste (carpet, mattress, appliance and furniture) collection and recycling.
- Household hazardous waste (fluorescent tubes, batteries, etc.) drop off site(s) in Town.
- Electronics waste drop off sites.
- Broader (#4 - #7) plastics materials collection.
- Beverage container deposit.
- Zero waste generation goal setting.
- An environmental business enterprise zone to encourage recycling based industries.
- Organics (yard waste, sludge, food, pet and diaper) waste composting.
- Performance based contracting for waste and recycling contractors rewarding greater recycling and less waste.
- Combating illegal dumping with expanded recycling.

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8. Attachments

CHAPTER 85: GARBAGE AND TRASH REMOVAL

Section

- [85-1](#) Definitions
- [85-2](#) Bulk trash collection
- [85-3](#) Garbage collection
- [85-4](#) Trash
- [85-5](#) Violations and penalties

§ 85-1 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

BULK TRASH. Recyclable or non-recyclable waste materials that the town will remove with or without a fee, depending on the item, but generated by the activities of a single-family household and not by a contractor, or by any commercial or industrial entity. **BULK TRASH** includes, but is not limited to, brush, limbs, yard waste, leaves, furniture, appliances, aggregates, metals, lumber, and wood.

GARBAGE. Controlled non-recyclable waste materials that would normally be discarded from within a single-family household and would be collected by the town under the conditions of this chapter. This would include, but not be limited to, food wastes, paper and plastic wrapping materials from small packages, paper towels, tissues, disposable diapers, cloth rags, and paint cans empty of paint. It would not include materials that are being recycled, such as glass bottles, newspaper, aluminum and steel cans, certain plastic containers, magazines, paper, and corrugated cardboard.

RECYCLABLES. Materials which the town or county recycles without charge for the single-family residential property owner. At the time of the passage of this chapter, these materials included glass bottles, newspaper, aluminum and steel cans,

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some plastic containers, magazines, paper and corrugated cardboard, brush, limbs, concrete (not containing metal reinforcement), and stone.

TRASH. Waste material or objects, including bulk trash and garbage, that has been discarded or apparently discarded by its owner and its existence on public and private property is subject to penalties prescribed in this and other town ordinances.

UNIT STOP. Garbage collection stop made at a single-family residence in the town. A **UNIT STOP** shall be weekly or twice weekly, depending on the policy of the town. The town may also designate specific **UNIT STOPS** in situations where it is deemed in the public interest to do so, and may also set a reasonable price for the service.

(Ord. 1-96, passed 2-22-1996)

§ 85-3 GARBAGE COLLECTION.

(A) The town will pick up garbage twice weekly at each approved unit stop. Garbage must be placed in the correct containers and shall not exceed the approved amount. The town reserves the right to pick up garbage once a week if necessary due to budgetary or staffing reasons, and also reserves the right to refuse the pickup of recyclables co-mingled with garbage. The maximum number of 20-gallon cans or trash bags will be two per garbage day. Garbage containers shall be placed at the curb or in their approved location no earlier than 6:00 p.m. on the evening before collection.

(B) No garbage other than that of the property owner in residence shall be accepted, and the willful placement of non-residents' garbage shall be treated as a municipal infraction as set forth in the enforcement section of this chapter. Other violations treated as municipal infractions related to garbage collection shall be:

(1) Placement of garbage containers or trash bags at the curb prior to 6:00 p.m. on the evening before collection;

(2) Leaving garbage containers or trash bags at the curb after 6:00 p.m. on the day of collection; and

(3) Placement of more than the allotted garbage cans or trash bags at the curb for trash pick-up.

(C) The town further reserves the right to pick up the excess cans or bags for the cost of \$2 per can or bag and assess the property owner the costs.

(Ord. 1-96, passed 2-22-1996)

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Article - Criminal Law

§10–110.

(a) (1) In this section the following words have the meanings indicated.

(2) “Bi–county unit” means:

- (i) the Maryland–National Capital Park and Planning Commission; or
- (ii) the Washington Suburban Sanitary Commission.

(3) “Litter” means all rubbish, waste matter, refuse, garbage, trash, debris, dead animals, or other discarded materials of every kind and description.

(4) “Public or private property” means:

- (i) the right–of–way of a road or highway;
- (ii) a body of water or watercourse or the shores or beaches of a body of water or watercourse;
- (iii) a park;
- (iv) a parking facility;
- (v) a playground;
- (vi) public service company property or transmission line right–of–way;
- (vii) a building;
- (viii) a refuge or conservation or recreation area;
- (ix) residential or farm property; or
- (x) timberlands or a forest.

(b) The General Assembly intends to:

- (1) prohibit uniformly throughout the State the improper disposal of litter on public or private property; and
- (2) curb the desecration of the beauty of the State and harm to the health, welfare, and safety of its citizens caused by the improper disposal of litter.

(c) A person may not:

- (1) dispose of litter on a highway or perform an act that violates the State Vehicle Laws regarding disposal of litter, glass, and other prohibited substances on highways; or
- (2) dispose or cause or allow the disposal of litter on public or private property unless:
 - (i) the property is designated by the State, a unit of the State, or a political subdivision of the State for the disposal of litter and the person is authorized by the proper public authority to use the property; or
 - (ii) the litter is placed into a litter receptacle or container installed on the property.

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(d) If two or more individuals are occupying a motor vehicle, boat, airplane, or other conveyance from which litter is disposed in violation of subsection (c) of this section, and it cannot be determined which occupant is the violator:

(1) if present, the owner of the conveyance is presumed to be responsible for the violation; or

(2) if the owner of the conveyance is not present, the operator is presumed to be responsible for the violation.

(e) Notwithstanding any other law, if the facts of a case in which a person is charged with violating this section are sufficient to prove that the person is responsible for the violation, the owner of the property on which the violation allegedly occurred need not be present at a court proceeding regarding the case.

(f) (1) A person who violates this section is subject to the penalties provided in this subsection.

(2) (i) A person who disposes of litter in violation of this section in an amount not exceeding 100 pounds or 27 cubic feet and not for commercial gain is guilty of a misdemeanor and on conviction is subject to imprisonment not exceeding 30 days or a fine not exceeding \$1,500 or both.

(ii) A person who disposes of litter in violation of this section in an amount exceeding 100 pounds or 27 cubic feet, but not exceeding 500 pounds or 216 cubic feet, and not for commercial gain is guilty of a misdemeanor and on conviction is subject to imprisonment not exceeding 1 year or a fine not exceeding \$12,500 or both.

(iii) A person who disposes of litter in violation of this section in an amount exceeding 500 pounds or 216 cubic feet or in any amount for commercial gain is guilty of a misdemeanor and on conviction is subject to imprisonment not exceeding 5 years or a fine not exceeding \$30,000 or both.

(3) In addition to the penalties provided under paragraph (2) of this subsection, a court may order the violator to:

(i) remove or render harmless the litter disposed of in violation of this section;

(ii) repair or restore any property damaged by, or pay damages for, the disposal of the litter in violation of this section;

(iii) perform public service relating to the removal of litter disposed of in violation of this section or to the restoration of an area polluted by litter disposed of in violation of this section; or

(iv) reimburse the State, county, municipal corporation, or bi-county unit for its costs incurred in removing the litter disposed of in violation of this section.

(4) In addition to, or instead of, the penalties provided in paragraphs (2) and (3) of this subsection, the court may suspend for up to 7 days the license of the person to operate the type of conveyance used in the violation who is presumed to be responsible for the violation under subsection (d) of this section.

(g) A law enforcement unit, officer, or official of the State or a political subdivision of the State, or an enforcement unit, officer, or official of a commission of the State, or a political subdivision of the State, shall enforce compliance with this section.

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(h) A unit that supervises State property shall:

(1) establish and maintain receptacles for the disposal of litter at appropriate locations where the public frequents the property;

(2) post signs directing persons to the receptacles and serving notice of the provisions of this section; and

(3) otherwise publicize the availability of litter receptacles and the requirements of this section.

(i) (1) Fines collected for violations of this section shall be disbursed:

(i) to the county or municipal corporation where the violation occurred; or

(ii) if the bi-county unit is the enforcement unit and the violations occurred on property over which the bi-county unit exercises jurisdiction, to the bi-county unit.

(2) Fines collected shall be used to pay for litter receptacles and posting signs as required by subsection (h) of this section and for other purposes relating to the removal or control of litter.

(j) (1) The legislative body of a municipal corporation may:

(i) prohibit littering; and

(ii) classify littering as a municipal infraction under Title 6 of the Local Government Article.

(2) The governing bodies of Prince George's County and Calvert County may each adopt an ordinance to prohibit littering under this section and, for violations of the ordinance, may impose criminal penalties and civil penalties that do not exceed the criminal penalties and civil penalties specified in subsection (f)(1) through (3) of this section.

(k) This section may be cited as the "Illegal Dumping and Litter Control Law".