Environmental Advisory Council Recommendations on Addressing Solid Waste in Carroll County 25 October 2007

Shifting the Paradigm: From Problem to Opportunity...Recovering Lost Revenue

Recommendation #1: That the Board of Commissioners change the current paradigm guiding the handling of solid waste in Carroll County from *Solid Waste Management* to *Resource Management* and that this paradigm shift include the following key principles:

First, that we view solid waste as an opportunity to be seized rather than a problem to be solved. To do this we must change our view of solid waste from a "cost center" to a "revenue center." The new emphasis should be on Resource Recovery. *Waste is a renewable resource*. (Appendix A)

Second, we suggest an inversion of the current pyramid which emphasizes burying or burning as the major strategy for waste reduction to a strategy that emphasizes front end waste reduction, reuse and recycling. Burying and burning should become the alternative of *last resort*.

Third, that the Department of Public Works be supported with the necessary resources to develop programs and policies to support this paradigm shift with the intention of shifting such costs to the Enterprise Fund as it generates new and expanded revenues from this approach.

Fourth, that the County undertake a fundamental shift in its thinking about responsibility for its solid waste generation so that we view ourselves as responsible for the waste we generate by transforming that waste into commodities for market, reducing the waste we generate or otherwise disposing of it within the borders of our own county/state. (The State of Delaware has adopted this as a guiding principle).

Desired Action: Adopt the paradigm shift

Taking Charge of the Waste Stream

Recommendation #2: That the BOC take the necessary legislative steps to place Carroll County in a position where it is <u>in charge</u> of its own waste stream and that in creating a managed system, the County work in close cooperation with the haulers to develop a system that supports local businesses whenever possible.

Currently, trash collection outside of the municipal areas is not managed. It is common to see multiple haulers on the same street. Such an arrangement is inefficient. It also contributes to excess diesel emissions.

By managing the waste stream, the County might follow the model of Baltimore County where there are franchising routes. A variety of scenarios is possible. By taking control of the waste stream in the unincorporated areas, the County can design efficient routes, direct waste to facilities it deems most appropriate, prevent waste from going out of County and execute better control of our own trash.

Desired Action: Utilize the findings of the forthcoming report by Rick Anthony and Associates that will detail the legislative changes that must be adopted at the County level to facilitate the change to and management of a Resource Management system.

Recommendation #3: That the BOC elevate recycling as the <u>driving element</u> of its Resource Management strategy by a) creating and verifying recycling reporting policies, (for haulers, businesses, processors), b) by managing its own system in order to direct recycled good to specific recovery centers, c) by increasing funding to the Recycling operation for expanded public education efforts and that d) phases in the mandatory recycling of specific commodities like paper, glass, plastic.

Increased funding: the County spends a little over 200K per year for the management of its recycling operation and is spending close to this amount to review the WTE proposals. A significant increase in funding that will support a vigorous recycling effort is essential. This effort should be designed in such a way that it pays for itself by marketing recovered materials.

Disallowing certain products from the waste stream: Both Hanover and Montgomery County have adapted mandatory recycling policies. A phased in approach to mandatory recycling should be adapted. Montgomery County disallows paper, glass and yard waste in its waste stream. Carroll already disallows yard waste as a first step. Carroll could develop a "put or pay" arrangement with a private company to recycle its residential mixed paper. Montgomery County set a goal of 90,000 tons. In this scenario, the private company can count on the County for a guaranteed income stream to pay the note while the County does not have to pay the capital costs of owning the facility.

To manage a County wide Resource Recovery System, source separation of resources is essential. As citizens understand the value of their trash and begin to understand they are responsible for the trash they generate, support for source separation will grow. At some point, there will be a cultural shift toward viewing the burying of scarce and valuable commodities as irresponsible.

The recycling data is incomplete and needs to be improved. We believe the data is questionable because the County does not manage its own system and because reporting requirements are not expansive enough or verified where they exist to determine what is actually being recycled, where and what could be recycled.

Desired Action: Commission the EAC to work with the Department of Public Works to identify five model Recycling Programs from around the country that can share strategies

for markedly increasing residential and commercial recycling suitable for adaptation in Carroll County. (See Appendix "B" on Spokane citizen and commercial recycling program with reimbursement incentives for recyclables)

Recommendation #4: That the BOC view public education/behavior modification as essential to the transition to the new paradigm of Resource Management and that resources for staff and media be appropriated to help raise public awareness and change public behaviors to achieve higher rates of waste reduction, reuse and recycling. Such education efforts should include the following elements:

> First, the *Three R's*:

Reducing waste at the front Reusing Materials and products whenever possible Recycling all recyclable materials

> Second, the *Three E's*:

Environment (reducing the impact of solid waste on our environment)

Economics (supporting strategies that will create local jobs and hold or reduce costs to county residents and businesses

Equity (supporting strategies that are inherently fair, that is treating trash collection and disposal services like we do electric or gas utilities so that you pay less if you use less.

Desired Action: Establish funding for a county wide public education effort on the benefits and expected behavior changes of the new paradigm.

From Burn or Bury to Reduce, Reuse and Recycle

Recommendation #5: That the BOC <u>not support</u> the planning or construction of a Waste to Energy Facility at this time, but rather direct County efforts toward a Resource Management strategy as outlined above for a period of at least five years to determine the success of the newly instituted efforts designed to reduce waste, recover resources, generate revenue from commodity markets and reduce costs to County residents.

This recommendation is in keeping with the vision articulated in Recommendation #1, that land filling and WTE be considered the back end options that are most expensive and least desirable.

Desired Action: Decline all of the bids for a Waste to Energy Facility at this time.

Recommendation #6: That the BOC support the implementation of a Pay as You Throw Program and commission the EAC to work in concert with the Department of Public Works to create a community process to design the essential elements of the program.

Over 4000 communities across the United States have adopted Pay as You Throw programs as a strategy of reducing the solid waste that needs to be land filled and encouraging recycling for resource recovery and revenue generation. In the first year of operation, communities reduce their solid waste by a *minimum of 25%*. (Source: EPA)

Such a study should include the following elements:

- Establishing a Pay as You Throw Work Group comprised of members from the EAC, Department of Public Works, elected officials, local haulers, local businesses, school representatives and area residents to set program goals, identify potential barriers and methods of overcoming the barriers, determine code changes that might be necessary to implement the program, assist in the design of the program, conduct public outreach to educate citizens about the benefits of pay as you throw in terms of waste reduction, cost reduction and general economic fairness to consumers and businesses.
- > Evaluate container and pricing strategies
- Create rate structure design based on waste collection forecast.
- > Determine program costs
- Establish base line data in tons of recyclables collected to measure effectiveness of Pay as You throw on waste reduction and resource recovery
- ➤ Identify and expand recycling options that will encourage recycling and support residences and businesses in trash reduction strategies.

NOTE# 1: Pay as You Throw is one of the Environmental Protection Agency's most vigorous program efforts in reducing solid waste. The supportive materials available to communities include Step by Step Guides to building community support, DVDs explaining the program, analyses of various pricing mechanisms and essential program elements. If the County elected to pursue this critical option, the resources would be in place to conduct the process. They would not have to be reinvented locally.

NOTE#2: All nine members of the EAC unanimously endorsed Pay as You Throw as a key element of Carroll's Resource Recovery strategy. Two separate motions centered on "how to proceed" not "whether to adopt Pay as You Throw."

Desired Action: Charge the Department of Public Works to join with the EAC in creating a community process to draft the essential elements of a Pay as You Throw Program in the unincorporated areas. The plan should also include an outline of opportunities for municipalities who wish to link up with the County to establish a Pay as You Throw Program in an incorporated area. (An approach that will result in cost savings to municipalities in tipping fees).

Recommendation #7: That the BOC undertake a study of the feasibility of creating a County wide composting facility that could remove the organic materials from our waste

stream, turn such materials into marketable/usable products for local farmers and reduce green house gases caused by the decomposition of organics in the landfill.

<u>Compost:</u> Composting is key to achieving 50% and higher diversion levels and doing so cost-effectively. Keeping organics and putrescibles out of landfills will make landfills less of a nuisance and source of pollution. Emphasize backyard or at-home composting followed by community composting. Target many types of clean organic materials and offer year-round, frequent, and convenient collection.

On farm composting: studying the feasibility of creating a permitting process that allows local farmers to accept yard waste, separated food scraps, and soiled papers from school cafeterias or restaurants that could be used as a soil amendment while generating tipping fees for farmers.

Requiring residents and businesses to participate in recycling and composting programs. Local ordinances can either require residents and businesses to source-separate or ban them from setting out designated recyclable or compostable materials with their trash.

Desired Action: That the BOC commission the EAC to draft a report outlining the benefits/challenges of establishing a county wide composting facility.

Burying: Necessary but Reserved for Residual Waste

Recommendation #8: That the County begin the process of locating and purchasing a piece of land sized according to the recommendations in the Resource Assessment study to serve as a landfill for the residual waste that can neither be recycled or reused from the plurality of front end resource recovery initiates employed. The goal should be to reduce our solid waste to such an extent that only 10-15% by volume is land filled in 5 to seven years.

Since land filling and burning are two of the most cost intensive waste management options for any county or municipality, the objective is to reduce dependence on those options as aggressively as possible. Even with well developed front end resource recovery options, there will always be a percentage of waste that needs to be buried in a secure landfill. The identification of a site and the construction of a landfill requires many years to operationalize. This work should begin immediately.

Desired Action: Direct the Department of Public Works to begin the process of citing a new landfill within the County, if not already started.

Recommendation #9: That the County enter into contract negotiations with Waste Management in December with the intent of gradually decreasing the percentage of trash committed for delivery under the contract for each of five years and that the County reserve the right under the contract to sell unused capacity to other counties if it does not meet the required minimum of trash to be delivered in any given year.

Under the current terms of our contract with Waste Management the County must deliver a base number of tons of trash per year to be hauled to a landfill in Virginia. As the County shifts its emphasis from a "bury" approach to a "resource recovery approach" there will be less and less trash to haul to Virginia. The County must take care not to create a disincentive to pursuing recovery strategies in the near term (the next five years), i.e. penalties for not delivering the threshold of trash required in the new Waste Management contract. The Council recommends a gradual decrease in the amount of trash "promised" to Waste Management per year:

Example: 100 tons per day (illustration only)

Year 1: 100% Year 2: 90% Year 3: 80% Year 4: 70%

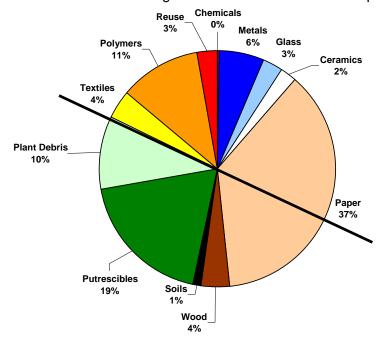
Year 5: 60%

Desired Action: Instruct DPW to incorporate these considerations into the contract renegotiation process.

Appendix A

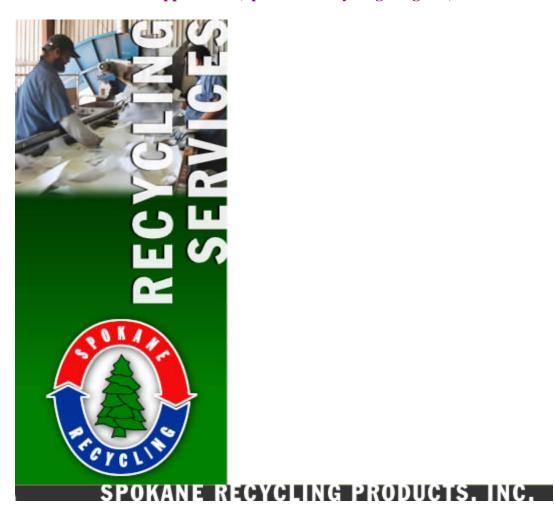
Delaware Discards Sorted into the 12 Market Categories

Note: Half of the Pie is Organic Material Suitable for Composting



Source: A Scenario for Resource Management in the State of Delaware: Report to the Secretary: The Institute for Local Self Reliance, May 2007

Appendix B (Spokane's Recycling Program)



Local Recycling Services

- Local Recycling Services
- Public Drop Off
- Commercial Recycling Services
- Community Recycling Services

Public Drop Off

INFO & PRICES

Effective date April 2005

The public is welcome to bring their recyclables directly to our plant in Spokane. We are located at 3407 E. Main Ave. This is very close to the intersection of Freya Street and Sprague Avenue. Below is information on the what we are currently accepting.

Some prices are per ton. If you don't have a ton it's ok; We'll figure it out for you.

Some prices are per pound. We figure that out too.

MIXED PAPER



We charge \$50.00 per ton to take Mixed Paper. This is half the charge for disposing of this as garbage. Save 50%.

Mixed Paper is just what it sounds like, different kinds of paper all mixed together. Along with newspaper, cardboard and office paper this grade may also include limited quantities of files, magazines, catalogs, ream wrappers, tablets, cereal boxes, bright colors, junk mail, post-it notes and all envelopes.

TELEPHONE BOOKS



No Charge / No Pay

We accept telephone directories at no charge.

We accept both white and yellow pages. No bias here.

Please keep out any other bound books and catalogues.

MAGAZINES



No Charge / No Pay

Bring it on in!

We take your magazines, catalogues and similar publications printed on coated, glossy paper.

NEWSPAPER



Current Price: \$20 per ton

Bring in your Spokesman Review, Wall Street Journal, etc. for full circle recycling in Spokane County. No need to remove the slick ads or comics.

CARDBOARD



Current Price: \$20 per ton

Corrugated Cardboard Boxes, the boxes with the squiggle in the middle. Also your brown paper bags. Please no food contaminated containers, waxed boxes, non-corrugated paperboard like cereal boxes, shoeboxes and beverage containers.

WHITE LEDGER



Current Price: \$40 per ton

This is basically white bond paper and includes white typing paper, white writing paper, white photocopy paper, white scratch paper, white letterhead, white Laser or Ink Jet print paper. It may also include Blue, Green or no bar continuous form paper for use in impact printers without pressure sensitive (NCR), carbon or groundwood content.

OFFICE PACK



Current Price: \$20 per ton

Our most popular and least understood grade of paper. Probably because it is a teenager. Please accept our apologies for the lengthy description which follows. We are beginning to develop a parental complex ourselves.

Acceptable Papers In Office Pack:

- Computer paper
- Fax paper
- Carbonless paper
- White papers: bond, typing, copier, index cards, etc.
- Colored papers: bond typing, copier, index cards, etc.
- Envelopes: colored or white, with or without windows
- Slick or glossy paper: including pamphlets and brochures
- Heavily printed or coated white papers
- Manila and bleached file folders
- Direct mailings
- All White Ream wrappers

Unacceptable Papers:

- Goldenrod colored papers
- Pre-consumer dyed or coated papers
- Unbleached papers
- Newspapers or newspaper inserts
- Magazines, catalogs
- Plastics/wet strength containing papers
- Plastic window envelopes from bulk mailing/billing centers
- Medical files
- Astrobrights: neon colored papers
- Two color ream wrappers White & Brown

Don't Worry! No Need To Remove From Office Pack:

- Paper Clips
- Metal Fasteners
- Rubber Bands
- Staples
- Pressure Sensitive Notes
- Plastic Tabs
- Wire Spirals

ALUMINUM BEVERAGE CANS



Current Price: \$0.40 per pound

You know what these are, beverage containers (pop, juice and beer) made of 100% aluminum. Of course they must be emptied of contents and free of foreign materials. Excessive moisture may be deducted for.

The good news is, the more you have, the more we pay:

100-199 lbs.——\$ 0.42 per pound 200-299 lbs.——\$ 0.44 per pound 300-499 lbs.——\$ 0.46 per pound 500 lbs. & up——\$ 0.48 per pound

ALUMINUM FOIL



Current Price: \$ 0.05 per pound

What can we say about this exciting material? Bring in your foil pie plates, etc. Please no food residue.

ALUMINUM SCRAP



Current Price: \$ 0.10 per pound

We don't profess to be the non-ferrous gurus of Spokane. But, if you got a little scrap to recycle, with the rest of the goodies, bring it on in.

TIN CANS

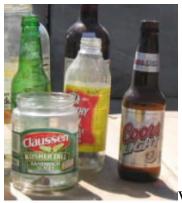


Current Price: \$20 per ton

These cans are really made of steel and are plated with Tin.

They are food and beverage containers and need to be emptied of contents and free of foreign materials. Steel cans may be with or without labels. Sorry, no paint cans.

GLASS BOTTLES AND JARS



We charge \$35.00 per ton to take glass bottles and jars.

These are all food and drink containers only and need to be emptied of contents, rinsed and free of foreign materials

PLASTIC MILK JUGS



Current Price: \$0.05 per pound

In the biz we call this NATURAL HDPE and all of these un-pigmented plastic bottles are clearly stamped with a 2 in a triangle, usually on the bottom of the container.

You can include other Natural HDPE, (#2), containers such as water bottles, juice bottles and other drink bottles manufactured of un-pigmented High Density Polyethylene with your milk jugs.

Cooking oil, motor oil and colored (pigmented) bottles are not acceptable with your milk jugs.

COLORED HDPE BOTTLES & JUGS



No Charge / No Pay

These are made of the same HDPE plastic, except a coloring agent has been added. These containers will also be stamped with the (#1) symbol, usually on the bottom. Colored HDPE bottles primarily include juice bottles and detergent or shampoo bottles. Please no margarine tubs, cooking oil or motor oil bottles.

PLASTIC POP & LIQUOR BOTTLES



Current Price: \$0.05 per pound

These bottles are made of Polyethylene Terephthalate, say that ten times real fast. We call it PET and all of these plastic bottles are clearly stamped with the recycling symbol on the bottom of the bottle. PET bottles include clear and green soda bottles, liquor bottles and other drink bottles manufactured of Polyethylene Terephthalate. Please no cooking oil, motor oil, Peanut butter bottles, microwave trays or PVC bottles.

CARPET PAD



Current Price: 0.05 per pound

We take the polyurethane foam Carpet Pad. This can be new or used padding which is used under residential or commercial carpeting. Also, the padding may be made of either Prime (new and all one color) or Rebond (recycled) foam. To be acceptable the carpet pad must be free of odor, moisture and foreign materials. Rubber and Jute padding are not acceptable in this material.



Spokane Recycling Products, Inc. 3407 East Main Avenue Spokane, WA 99202 Phone: (509) 535-0284 | Fax: (509) 536-4403