

T&E COMMITTEE #2  
March 9, 2009

**MEMORANDUM**

March 6, 2009

TO: Transportation, Infrastructure, Energy and Environment Committee  
FROM:  Keith Levchenko, Senior Legislative Analyst  
SUBJECT: Solid Waste Management Plan Comprehensive Update

**Committee members should bring their copy of the Executive's Recommended Solid Waste Management Plan 10 Year Plan 2007-2016 to the worksession**

On January 16, 2009 the Council received the County Executive's recommended Comprehensive Solid Waste Management 10 Year Plan 2007-2016 (transmittal memorandum and Executive Summary attached on ©3-7). A draft resolution is attached on ©1. Councilmembers were previously provided copies of the full Recommended Plan.<sup>1</sup>

Officials and staff expected to attend the T&E Committee worksession include:

- Robert Hoyt, Department of Environmental Protection (DEP) Director
- Dan Locke, Chief, Division of Solid Waste Services (DSWS), DEP
- Bill Davidson, Section Chief, Northern Operations, Emissions, Strategic Planning, DSWS-DEP
- Steve Findley, Planner Coordinator, Environmental Planning, M-NCPPC

**BACKGROUND**

State law (Sections 9-503 and 9-515, Environment Article, of the Maryland Code) requires the governing body of each County to adopt and submit to the Maryland Department of

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<sup>1</sup> The Recommended Comprehensive Update is available for download at the Council website at: [http://www.montgomerycountymd.gov/cs!tmpl.asp?url=/content/council/news/Reports\\_home.asp](http://www.montgomerycountymd.gov/cs!tmpl.asp?url=/content/council/news/Reports_home.asp)

the Environment a ten-year plan dealing with solid waste disposal systems, solid waste acceptance facilities, and the systematic collection and disposal of solid waste.

In short, State law and regulations mandate that a County Solid Waste Management Plan consist of three major components:

1. Projections of the amount of waste and recyclables that will be generated in the County over the next decade;
2. A description of existing and planned services, programs, and facilities that the County has identified for the collection, disposal, and recycling of solid waste;
3. A finding that the services, programs, and facilities identified in the plan are adequate to accommodate the amount of waste and recyclables estimated to be generated in the County for the next ten years.

The Environment Article further requires each County to review its solid waste management plan at least every three years. The current plan was adopted in November 2005 via Council Resolution 15-1218.

### **PUBLIC HEARING TESTIMONY AND AGENCY COMMENTS**

A public hearing on the Recommended Plan was held on February 24, 2009. The Council heard testimony from one speaker representing the Gude Landfill Concerned Citizens group (see ©19-20) who expressed opposition to the planned yard trim handling facility relocation to the Gude landfill property because it could exacerbate environmental issues such as groundwater contamination and leachate migration. The speaker suggested that, if yard trim handling operations needed to move from the Transfer Station, then consideration should be given to moving it to the Site 2 property near Dickerson (a site reserved for a future landfill). A second letter was recently received from the same group (see ©21-22).

The Montgomery County Planning Board reviewed the Recommended Plan on February 26, 2009 and sent a letter to the Council (see ©23-29). While expressing general support for the Recommended Plan, the Planning Board noted its concerns with the planned relocation of the yard trim handling operations to the Gude Landfill site which is referenced in the Recommended Plan. Both the Gude Drive landfill and the Site 2 property are discussed in more detail later in this memorandum.

The Council also received comments from the Washington Suburban Sanitary Commission (WSSC) (see ©30-32). **WSSC's comments mostly involve corrections and/or clarifications to the Recommended Plan and Council Staff recommends that these changes be incorporated into the Final Approved Plan.**

### **SUMMARY OF ISSUES FOR DISCUSSION**

Council Staff believes the Plan Update before the Council now does not include major policy changes as has been the case in past plans. This document mostly reaffirms the overall

Solid Waste policies included in the current plan with updates, new initiatives, and some new subject areas of emphasis (such as climate protection, see pages 4-65 through 4-68, compact fluorescent bulbs, see pages 4-24 through 4-25 and others.) and some additional long range planning detail in areas such as recycling and yard waste issues.

This Council Staff report includes a brief review of some of the major current policies and discussion of some additional areas of particular interest to the Council. Council Staff will work with DEP staff to incorporate, prior to Council action, any nonsubstantive corrections and clarifications that have been identified during this review.

## **WASTE PROJECTION ASSUMPTIONS**

The Recommended Plan includes revised demographic information and projections through 2016. This data is identical to information and assumptions built into last year's FY09 budget and the resulting solid waste rates. Population, household, and employment data is from the Maryland-National Capital Park and Planning Commission Cooperative Forecast, Round 7.1.

The other key assumptions for waste projection is the per capita waste generation rate and the per employee waste generation rates. DEP is assuming a per capita waste generation rate of 3.45 pounds per day and a per employee waste generation rate of 6.54 pounds per day across the entire projection period through 2016. These are the same rates assumed as part of the FY09 budget. These rates are modified from time to time based on actual tonnages of waste and revised demographic information.

The per capita waste generation rates are used to project tons of waste per year for single-family and multi-family residential households. These household rates are approved by the Council each year via Method 2 Executive Regulation.

The Recommended Plan's municipal solid waste generation estimates through 2016 by waste category are shown on page 3-3 (©8). Trends are discussed in more detail later in this memorandum.

## **SOLID WASTE MANAGEMENT PLAN GENERAL GOALS, OBJECTIVES, AND POLICIES (see page 1-2 through 1-4)**

The Current Policy, reiterated in the Plan Update, establishes a hierarchy of preferred solid waste management techniques. These strategies, in order of preference are:

- Waste reduction
- Recycling
- Waste to energy from burning of combustible waste remaining after waste reduction and recycling
- Out-of-County landfilling of ash from waste to energy operations and non-processible waste which cannot be recycled.
- In-County landfilling only if cost-effective out-of-county landfilling options become unavailable or legislatively prohibited.

This policy also notes that the County's solid waste facility capacities were designed based on projections of solid waste generated within the County and the use of the County's Solid Waste facilities (with the exception of the Materials Recovery Facility (MRF)<sup>2</sup>) are exclusively reserved for waste generated within Montgomery County.

Finally, one clarification added during the Council's last plan update, was that County facilities are primarily intended to accommodate municipal solid waste<sup>3</sup> (MSW) and not necessarily other types of waste such as construction and demolition debris (C&D)

**Council Staff believes the current hierarchy is still valid and supports the language as included in the Recommended Plan.**

## **COUNTY REFUSE COLLECTION SERVICE – COLLECTION SUBDISTRICTS**

The entire County is designated as a collection and disposal district. Municipalities can choose whether to opt into or out of the collection district.

The collection district is divided into two collection subdistricts (see map on page 3-26, ©12) for residential trash collection. In Subdistrict A trash collection for single family residences and multi-family residences with six or fewer units is managed by the County which contracts with haulers. In Subdistrict B, haulers contract directly with residents.

### **Neighborhood Transfer Between Subdistricts**

Until last fall, the County's 10-Year Solid Waste Management Plan included transfer procedures that allow neighborhoods or groups of homeowners to transfer to or from either subdistrict.

On October 7, 2008 the Council approved an amendment to the 10 Year Plan that removed the subdistrict transfer requirements and procedures from the 10 Year Plan and created a Method 2 Executive Regulation process in its place. At the same time, the Council approved via the new Executive Regulation, a reduction in the number of homes required to be in a proposed transfer area from 650 to 450 (for areas not adjacent to the receiving subdistrict). A 200 home requirement if the proposed area is immediately adjacent to the receiving subdistrict remained unchanged in the new Executive Regulation.<sup>4</sup>

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<sup>2</sup> Under the terms of the County's contract with Office Paper Systems, the County may allow excess capacity at the MRF to be utilized by other jurisdictions.

<sup>3</sup> Municipal Solid Waste is defined as solid waste generated at residences, commercial establishments and institutions. This category of waste excludes land clearing, construction and demolition debris as well as specially regulated materials such as medical or hazardous waste.

<sup>4</sup> The requirement of a minimum number of households is intended to ensure that approved switches do not result in many small service area islands in either subdistrict that would be difficult and/or inefficient to serve.

As a result of last fall's actions, the Recommended Plan before the Council now does not include any language regarding the requirements or procedures for subdistrict transfer.

Representatives of the haulers have suggested additional changes to the transfer policy and DEP is considering these items. Changes in subdistrict policies are sensitive topics with the refuse collection companies. **Council Staff encourages DEP to continue to coordinate with haulers on issues affecting Subdistrict B.**

### **Subdistrict Review**

As part of the Council's last comprehensive update of the 10 Year Plan, The Council required that the Department of Public Works and Transportation (DPW&T), which housed the Division of Solid Waste Services at the time, report to the Council on a number of solid waste issues. Two items involved the County's subdistrict policies as noted below:

“Report on the effect of the modifications in the subdistrict transfer policy including but not limited to truck traffic in neighborhoods and the cost effectiveness of refuse collection service in the two subdistricts.”

“Recommendations on possible modifications to single family residential refuse collection policy (retention or modification of two subdistricts).”

In response, in June 2006 the DPW&T director recommended that a survey be done of residences in two recycling contract areas (one where individuals contract with refuse collection companies and the other where the County contracts with one company) to measure customer satisfaction. In addition, field studies in each area were suggested to quantify the number of trucks, road travel, safety, and environmental and neighborhood effects in each area. This work would then be used to make future recommendations regarding modifications to the subdistrict transfer policy.

Some haulers raised concerns that the proposed survey and field work was an attempt by DPW&T to enlarge Subdistrict A and/or eliminate the two subdistricts altogether. There ultimately was no support from the T&E Committee for the survey and DPW&T did not pursue it.

As Council Staff noted to the T&E Committee in 2006, there appear to be economies of scale for customers that are part of a large collection contract (whether part of a County contract in Subdistrict A or for example an HOA contract in Subdistrict B). These economies of scale may result in favorable refuse collection rates and less truck traffic in neighborhoods.

**Any future study of conditions in Subdistrict B needs to be done cooperatively with community groups and haulers to see how best to provide single family residents competitively priced refuse collection while preserving a role for a variety of haulers.**

## REFUSE DISPOSAL: POLICIES

### Tip Fee Policy (see pages 5-66 through 5-67)

The tip fee is the per ton fee charged businesses, institutions, and residents that dispose refuse at the County's Transfer Station.

In approving the comprehensive update to the Solid Waste Management Plan 4 years ago, the Council established a policy that links tip fee pricing to projected demand on County solid waste facilities. The current plan includes language that sets a target operational range of processed waste for the Resource Recovery Facility of 85% (558,450 tons) to 92% (604,440 tons) of permit capacity (657,000 tons per year). Tip fees are adjusted in order to keep waste levels within the target range. This year's Plan Update assumes to continue this policy.

Projecting future tons processed is as much art as science, and maintaining a sufficient cushion is important to avoid exceeding permit capacity in the future.

While actual demand will be determined by market factors that are difficult to predict and often beyond the influence of just the County's tip fee decisions, tip fee actions appear to have helped the County meet its processed waste targets at the RRF.

For FY05, the Council approved an increase from \$48 to \$52 for the Tip Fee to reduce waste delivered to the Transfer Station. The objective of the fee adjustment was to encourage private waste collectors to deliver waste to disposal facilities outside of the County. In addition, the Council sought to raise the tip fee to provide an economic incentive for recycling. After raising the tip fee in FY05, the County experienced its first decline in facility demand in seven years. However, demand climbed back up in FY06 and the tip fee was increased again in FY08. For FY09, demand was projected to stay within the target range and a tip fee increase was not recommended by the Executive.

**Council Staff concurs with this policy.**

### Managing Refuse in Excess of System Capacity

Bypass waste occurs when the amount of processible waste received exceeds the capacity or constraints of the Resource Recovery Facility (RRF) (i.e. the permit level of 657,000 tons per year). If bypass is projected, the County can increase tip fees (discussed earlier) to influence the amount of non-residential waste exported out of the County instead of disposed of at the rather. Additional waste reduction and recycling efforts can also be instituted to reduce bypass.

If tip fee increases and other measures are unsuccessful in preventing bypass, the County can send its excess processible waste to the same Brunswick County, Virginia landfill that accepts the County's RRF ash and non-processible waste. Alternatively, the County could seek an increase in its permit capacity for the RRF. **However, both the bypass of processible waste and the increase in the permit capacity of the RRF run contrary to longstanding County policies that the County should be self-sufficient in its waste management practices. Council Staff suggests that both of these options should be considered only as stopgap measures until other actions (such as tip fee increases, recycling and waste reduction**

**initiatives, and the opening of a potential future landfill) can address capacity issues in the long-term.**

Current municipal solid waste and recycling rate projections (see page 3-23, ©10) show that bypass will be a growing concern in coming years. Municipal solid waste is projected to grow about 11 percent during that time and exportation rates are expected to decrease. While the recycling rate is assumed to increase (up to a 47% level in DEP’ rate modeling) the RRF is still projected to reach 98 percent capacity in 2016 (see chart below). The County will need to continue improving its recycling rate and waste reduction efforts and/or consider future tip fee increases to keep waste processed at the RRF within target levels and to avoid future bypass concerns.

	FY07 actual		FY08 actual		FY09 projected		FY11 projected		FY16 projected	
	% of MSW	Tons	% of MSW	Tons	% of MSW	Tons	% of MSW	Tons	% of MSW	Tons
Total Municipal Solid Waste (MSW) (in tons)		1,222,475		1,249,376		1,257,068		1,288,391		1,357,896
Recycling Rate/Tons	43.2%	528,187	44.3%	553,501	45.4%	570,149	47.3%	608,923	47.0%	637,676
Exportation Rate/Tons	13.1%	159,602	12.9%	160,556	7.9%	99,227	6.7%	85,713	7.1%	96,595
Processable Waste to RRF	43.7%	534,686	42.8%	535,319	46.8%	587,692	46.1%	593,755	45.9%	623,625
addback metals from ash (counted in recycling)	1.3%	15,916	1.1%	14,222	1.3%	16,308	1.3%	16,476	1.3%	16,981
C&D burned at RRF		42,583		30,119						
<b>Total RRF Throughput</b>	<b>48.5%</b>	<b>593,185</b>	<b>46.4%</b>	<b>579,660</b>	<b>48.0%</b>	<b>604,000</b>	<b>47.4%</b>	<b>610,231</b>	<b>47.2%</b>	<b>640,606</b>
Percent of Permit Capacity (657,000 tons per year)		90%		86%		92%		93%		98%

### Ban on Out-of County Refuse

The approved Plan bans the acceptance of out-of-County waste at County disposal facilities. This ban dates back to 1992 and was intended to preserve capacity at County disposal facilities for County waste. The Plan Update maintains this ban. **Given the trends in municipal solid waste projected in the chart discussed earlier, the County will continue to face capacity issues in the coming years and County Staff believes the ban is still justified.**

### Land Clearing and Construction and Demolition Debris (C&D) (see pages 3-7 through 3-8, pages 4-25 through 4-30, and pages 5-56 through 5-58)

This category of waste does not fall under the definition of municipal solid waste and is not included within the County’s recycling rate calculations. For many years, the County dealt mostly with only C&D generated from its own operations. However, in recent years, the C&D level coming to the Transfer Station has increased. About two-thirds of what the County receives is shipped to an out-of-county landfill. Most of the rest is burned at the RRF. A small amount is recycled.

In FY07, the County accepted approximately 58% of all C&D generated in the county. However, a private C&D recycling facility in Clarksburg has sufficient permitted capacity to handle all non-governmentally generated C&D through 2016. This facility is currently recycling less than 40% of the material it does accept.

There are also several regional facilities that are expected to remain as options through 2016.

**Overall C&D disposal capacity does not appear to be an impending problem. However, the County’s hierarchal policy of supporting recycling of waste over disposal where feasible suggests that further study by DEP of how to improve C&D recycling rates,**

**as is suggested in the Recommended Plan, is warranted. DEP intends to explore how best to promote private sector recycling of C&D and other special wastes within Montgomery County, and what the County role should be in the future with regard to C&D disposal.**

### **Land Held in Reserve for a Future Landfill**

The County has approximately 820 acres of land (known as “Site 2”) along Wasche Road near Dickerson held in reserve for use as a possible future landfill. The Council selected this site in 1990 for a possible future solid waste facility. The footprint of a future landfill at this site would be approximately 125 acres.

The approved Plan assumes to maintain Site 2 in agricultural use as long as the out-of-County landfill option remains viable. The only improvements to the site assumed are activities needed to preserve historic structures on the site.

The Recommended Plan maintains the same language as in the Approved Plan.

At the public hearing on February 24, the Council heard testimony (see ©19-20) from one speaker representing the Gude Landfill Concerned Citizens group who expressed opposition to the planned yard trim facility relocation to the Gude landfill property. The representative suggested that, if needed, yard trim operations could be moved to the Site 2 property near Dickerson. The Gude landfill issue is discussed later. **However, as noted above, the use of Site 2 for a yard trim facility or for any other solid waste facility is not assumed in the Approved Plan or in the Recommended Plan before the Council now.**

The Council has received some comments in opposition to the possible use of Site 2 for yard trim operations. These comments note the practical, economic, environmental, regulatory, and legal complications of this approach (see ©33-34).

**Council Staff believes that any discussion of the potential use of the Site 2 future landfill site for yard trim operations is premature. DEP is working with MDE to locate the yard trim facility at the Gude Drive landfill (as assumed in the Approved FY09-14 CIP). Concerns have been raised by citizens living near the landfill and by the Planning Board as to whether the yard trim relocation to the Gude landfill will exacerbate environmental issues at the Gude landfill. These questions should be answered first before other possible sites are investigated. The relocation of yard trim operations to Gude is discussed later in this memorandum.**

## **RECYCLING POLICIES AND PROGRAMS**

### **County Recycling Goal**

The County’s overarching recycling goal (see page 1-4 and page 5-32 of the Recommended Plan) is to recycle 50% of the County’s municipal solid waste by the end of 2010.

Over the past four years, the County has implemented a number of policies designed to increase the recycling rate. These include:

- Executive Regulation 15-04 AM: revised the requirements regarding the types of materials that must be recycled, the set out requirements for single family recycling, multi-family and commercial reporting requirements, and multi-family and commercial recycling container set out requirements.
- Executive Regulation 18-04: prohibits the collection, transport, and disposal of recyclables as refuse.
- Cooperative Recycling Collection: DEP facilitates partnerships among businesses to address recycling concerns and to bring down the cost of recycling efforts.
- Distribution of high capacity wheeled toters for curbside collection of mixed paper.
- Expansion of the plastics recycling program.
- Instituted television and e-waste drop off centers at the Transfer Station
- Continuous education and outreach efforts

These and other efforts appear to have led to a steady increase in recycling rates over the past several years. The following chart shows generally steady increases across all categories.

**County Recycling Rate: FY03 – FY09**

Category (% of waste generation, FY08)	Actuals						Proj.
	FY03	FY04	FY05	FY06	FY07	FY08	FY09*
<b>Single Family (39.2%)</b>	51.4%	51.6%	54.8%	55.7%	56.2%	55.8%	57.1%
<b>Multi-Family (8.2%)</b>	11.6%	11.9%	12.1%	12.1%	13.5%	13.7%	13.9%
<b>Non-Residential (52.6%)</b>	30.2%	30.2%	33.9%	34.1%	37.3%	40.0%	41.3%
<b>COMBINED</b>	<b>37.1%</b>	<b>37.6%</b>	<b>41.1%</b>	<b>41.7%</b>	<b>43.2%</b>	<b>44.3%</b>	<b>45.4%</b>

\*FY09 Budget assumption

During budget deliberations for FY09, DEP estimated an FY09 recycling rate of 45.4 percent. With existing efforts in place and based on demographic projections discussed earlier, DEP estimates that the recycling rate will reach 47% by 2016 (see page 3-23, ©10).

In order to reach a 50% rate, the County will need to consider ways to increase recycling rates through existing efforts and/or expand the scope of its efforts.

Page 4-8 (see ©14) of the Recommended Plan provides an excellent snapshot of estimated FY07 waste recycling by material and type (based on the last waste composition sampling done at the Transfer Station several years ago). Note: Because this information is from FY07, the expanded plastics recycling put in place in 2008 is not reflected in these numbers.

Some general conclusions that can be drawn from the data are:

- Paper is the single biggest volume item of municipal solid waste generated (31% of the total) and represents the single biggest opportunity for the County to substantially increase its recycling rate. The overall recycling rate for paper is 44 percent. If that rate were 66% in FY07, the County would have achieved its 50% goal. While a jump to a 66% rate would be a major stretch goal even over a multi-year period, some progress in this area, combined with increased rates in other areas is needed to approach the 50% rate goal.

- As mentioned in the Recommended Plan, banned items are already recycled at a rate of 63.2 percent. This rate would need to go up to 74.3 percent to achieve the 50% recycling goal.
- Items that are “encouraged” to be recycled make up about 8% of the municipal solid waste stream and are recycled at about a 54% rate. Some ramp-up in this area may be possible (especially in some categories such as electronics which has a relatively low recycling rate. DEP may also want to consider whether to add one or more of the items in this category to the “Banned” list (items that are required to be recycled; i.e. banned from disposal in waste).
- Food waste represents a significant portion of the County’s municipal solid waste (9.3%) and virtually none is diverted from the waste stream now. If food waste could be efficiently separated from the waste stream and added to the County’s composting efforts, or perhaps collected and sent out to private entities, the County could see a big jump in its recycling rate.

A new waste composition study was approved as part of the FY09 budget and DEP has completed one of the two seasons of sampling to be done. The second season of sampling will be done this May. This work will help to clarify where the County’s opportunities and challenges lie for expanded recycling.

One important point to keep in mind is that the County’s hierarchy of solid waste management techniques places waste reduction above recycling and these efforts can affect the County’s recycling rate as well. Waste reduction can affect the County’ recycling rate in either direction depending on whether the waste reduced was previously being recycled or not.

**Council Staff recommends that the Council include in the Approval Resolution for the Recommended Plan a requirement that DEP update the Council on the findings of the 2009 Waste Composition Study by February 1, 2010 and that DEP identify short and long-term strategies available to maximize the County’s recycling rate. At that time, the Council can decide whether to maintain or modify the County’s recycling goal.**

#### **Television Recycling (see pages 4-16 through 4-17)**

The deadline in the United States for all broadcasts to switch from analog to all digital signals (originally set for February 17, 2009) was extended to June 12, 2009. It is unclear how much of an increase in television disposals will occur as a result of the digital switchover. Analog Television set owners who use decoder boxes now (for cable or satellite TV for example) will still be able to use their analog TVs. Also, for those who use antennas, analog to digital converter boxes can be purchased to allow continued use of analog televisions. The federal government’s converter box coupon program (up to two \$40 coupons per household) has been so popular (40 million requested by the end of 2008, although only 16 million redeemed up to that point), that there is now a waiting list for coupons (i.e. only when previously issued coupons expire are new coupons made available).

In anticipation of the potential increase in the number of analog TV sets being disposed of, DEP expanded its computer recycling program (begun in 2000) to include other consumer

electronics (such as television sets) in October 2007. The program was expanded again in April 2008 to include many other electronics. In December 2008, the program recycled 70 tons of televisions. DEP has been conducting satellite drop-off events since June 2008. The Council has received some correspondence from residents suggesting that DEP consider a curbside pickup program for analog televisions. It's not clear that there is a demand or need for this effort, but Council Staff suggests DEP carefully monitor television drop off trends and maintain some flexibility in case expansion of this program is needed.

**Council Staff recommends that DEP update the Council quarterly on the status of the television recycling program.**

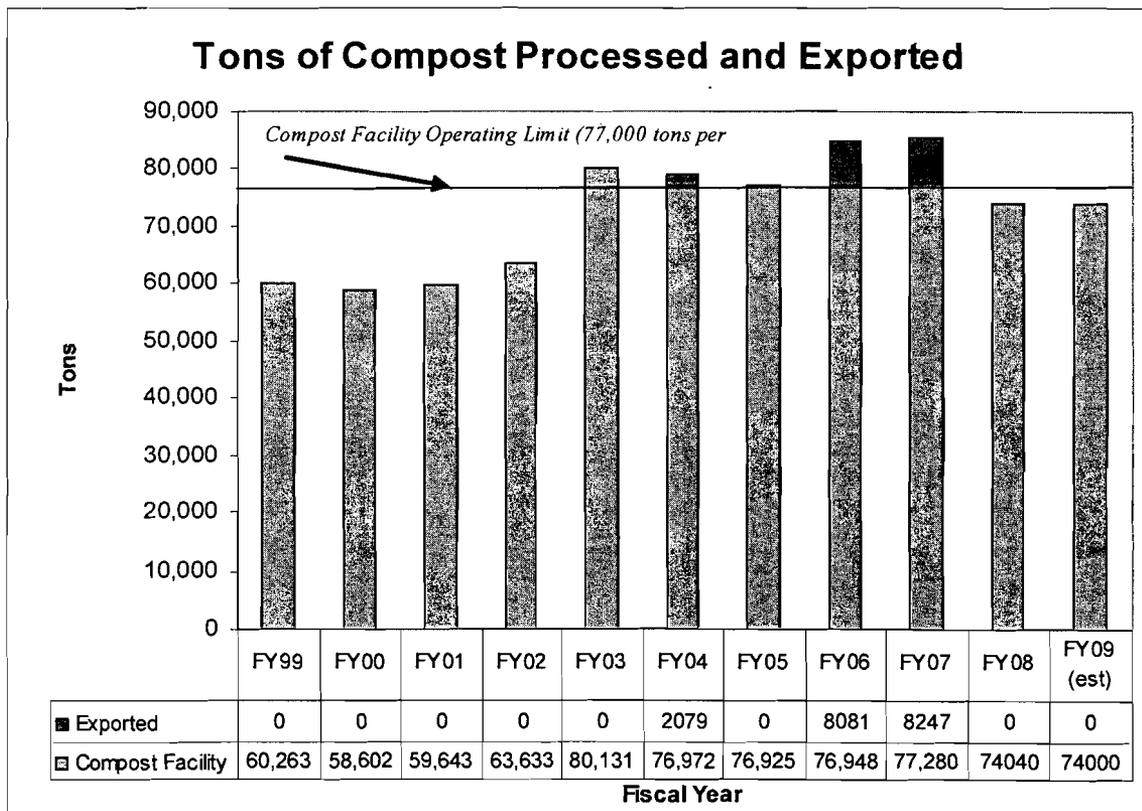
**YARD TRIM COMPOSTING**

**Compost Facility Capacity (see pages 5-23 through 5-26)**

The Dickerson Compost Facility receives leaves and grass collected from County residences and produces "LeafGro," a commercially sold soil amendment product.

In 1996, the County and the Sugarloaf Citizens Association entered into a supplemental Agreement of Settlement and Compromise as a settlement between the parties with regard to earlier disputes. The agreement limits Compost Facility operations to a maximum of 77,000 tons per year. The cost per ton to export ranges from \$21 per ton to \$42 per ton, depending on the contractor used.

The chart below shows tons of yard waste processed at the Compost Facility or exported.



**Recent Tonnage History:** In FY03 the County entered into a one-year agreement with the Sugarloaf Citizens Association to exceed the cap. In FY04, the County shipped about 2,500 tons of yard trim to an out-of-County facility to avoid exceeding the limit. In FY05 the amount increased to 2,600 tons. The export total jumped up to nearly 8,100 tons in FY06 and 8,300 in FY07. However, for FY08 no export was required. No export is expected for FY09 either. DEP attributes this drop-off to a combination of factors, including weather, but also to its efforts to control demand.

**Controlling Demand:** DEP continues to pursue efforts to control the amount of yard trim brought to the Compost Facility:

- Free compost bins are given to residents at no charge, last year over 2,374 bins were given out.
- Posters, fliers and display advertising are posted in local media to promote grasscycling and mulching.
- Transit advertising is done on buses.
- 30-second PSAs are done on County and Municipal Cable Channels (PEG - Public Education and Government network).
- Backyard composting seminars and workshops are done with Master Composter volunteers.
- Worm-composting exhibitions are done for residents and students in the County.
- Other initiatives include placing a series of short articles in local area newspapers encouraging grasscycling and composting.

Also, in FY08, the Tip Fee for yard trim was increased from \$36 to \$40 and additional education and outreach (\$80,000) regarding grasscycling and composting was recommended.

These demand control efforts appear to be paying off as demand on the composting facility fell to 74,040 tons during FY08 and may drop further in FY09. However, capacity concerns persist and the Recommended Plan notes that over the next five years, DEP will seek either long-term contractual capacity or select a site and apply for permitting of at least 20,000 tons of additional yard waste composting capacity for County use. DEP notes that the potential for expanding the composting program to accept certain limited types of food waste will also be considered.

**Council Staff concurs with DEP's plans to consider expanded composting capacity. This additional capacity may well be needed to address additional tonnages associated with single-family population growth. In addition, the potential diversion of food waste out of the waste stream could provide a significant bump up in recycling rates in the future. However, additional capacity and some operational changes will be needed.**

**Council Staff recommends that DEP provide a report to the Council on the progress of its efforts to seek additional capacity and with regard to consideration of expanding composting to include food waste by no later than February 2011.**

## **Yard Trim Operations Relocation to the Closed Gude Landfill**

On February 9, the T&E Committee was briefed on various issues associated with the closed Gude landfill. Representatives of a community that borders the northern edge of the landfill have expressed concerns about the documented ground and surface water contamination, the dangers of potential methane migration into the community, and the impacts any new projects at the landfill may have on these issues. One approved project which is currently in design involves the relocation of yard trim operations from the Transfer Station to the Gude landfill. Construction is scheduled to begin in FY10. On January 15, 2009, the County Executive transmitted his FY10 Recommended Capital Budget to the Council which included an FY10 appropriation for construction of the facility.

DEP noted at the February 9 meeting that the County is working closely with the Maryland Department of the Environment (MDE) to establish a formal gas monitoring plan (by February 10, 2009), expand the ground water and surface water monitoring plan (by March 31, 2009) and to develop a remediation plan (by April 30, 2009). The Committee asked DEP to provide future updates to the Council on these issues. A February 26 letter from MDE to DEP regarding the yard trim proposal is attached on ©35-36.

On February 26 the Planning Board discussed the Recommended 10 Year Plan and the Council received a letter from the Planning Board (see ©23) on March 4. In the letter, the Planning Board expresses concerns about the yard trim relocation and notes that it,

“cannot endorse moving the yard trim operation or establishing any other uses on the site of the Gude landfill without further analysis and a clear determination that such actions will not exacerbate the existing pollution problems.”

**Council Staff recommends that language be added to the Recommended Plan (in various sections referencing the closed Gude landfill) to note DEP’s work with MDE on a remediation plan to address water quality and methane migration issues at the closed Gude landfill and that construction of a yard trim facility at the Gude Drive landfill will not commence until the potential environmental impacts of the yard trim facility are fully investigated and concerns addressed.**

attachments

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Resolution No.: \_\_\_\_\_  
Introduced: \_\_\_\_\_  
Adopted: \_\_\_\_\_

**COUNTY COUNCIL  
FOR MONTGOMERY COUNTY, MARYLAND**

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By: County Council

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**SUBJECT:** Comprehensive Amendment to the Comprehensive Solid Waste Management Plan

**Background**

1. State law (Sections 9-503 and 9-515, Environment Article, of the Maryland Code) requires the governing body of each County to adopt and submit to the Maryland Department of the Environment a ten-year plan dealing with solid waste disposal systems, solid waste acceptance facilities, and the systematic collection and disposal of solid waste.
2. The Environment Article further requires each County to review its solid waste management plan at least every three years.
3. The County Council adopted the Comprehensive Solid Waste Management Plan for the years 2004 through 2015 for Montgomery County, Maryland by Resolution 15-1218 on November 15, 2005.
4. On January 16, 2009, the County Executive transmitted to the County Council a revised and updated comprehensive amendment to the Comprehensive Solid Waste Management Plan which sets forth the goals, policies, and plans for the management of solid waste in the County from 2007 through 2016.
5. A public hearing on the revised proposed comprehensive plan amendment was held on February 24, 2009.

**Action**

The County Council for Montgomery County, Maryland approves the following resolution:

The Comprehensive Solid Waste Management Plan for the Years 2007 through 2016 is approved as attached.

This is a correct copy of Council action.

\_\_\_\_\_  
Linda M. Lauer  
Clerk of the Council



OFFICE OF THE COUNTY EXECUTIVE  
ROCKVILLE, MARYLAND 20850

Isiah Leggett  
County Executive

MEMORANDUM

January 16, 2009

TO: The Honorable Phil Andrews, President  
Montgomery County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: Solid Waste Management, Comprehensive Update

2009 JAN 16 PM 12:20

MONTGOMERY COUNTY  
COUNCIL

I am pleased to transmit my proposed update to the Montgomery County Comprehensive Solid Waste Management Plan (Plan) for County Council review and approval.

The current Plan for the Years of 2004 – 2013 was adopted by the County Council by Resolution Number 15-1218, dated November 15, 2005. The Environment Article requires each county to revise and update its solid waste management plan every three years. This revised Plan sets forth the goals, policies and action plans for the management of solid waste in Montgomery County through fiscal year 2016. It was developed in accordance with Article 9, Subtitle of Environment Article of the Annotated Code of Maryland and Title 26, Subtitle 03, Chapter 03 of the Code of Maryland Regulations.

The revised Plan demonstrates that the County is on course to properly manage its solid waste through the planning period. Importantly, the revised Plan confirms the County's 50 percent goal and, with detailed analysis, identifies additional opportunity areas. The revised Plan includes maximizing revenues from sales of renewable energy and recyclable materials. New initiatives that support the County's objective of sustainable communities include: performing a comprehensive analysis of Greenhouse Gas (GHG) and ozone-related emissions related to solid waste management; and, identifying net emissions from potential changes in our solid waste management system. Staff members from the Department of Environmental Protection will be available at the Council work sessions to answer questions regarding the revised Plan.

The Division of Solid Waste Services prepared this revised Plan, met with the Planning Committee of the Solid Waste Advisory Committee on the proposed revisions, and gave the Dickerson Area Facilities Implementation Group opportunity to comment. All comments received were addressed.

If you have any questions, please call Dan Locke, Chief, Division of Solid Waste Services, at 240-777-6402. Thank you for your attention to this matter.

Attachment

cc: Dan Locke, Chief, DEP-DSWS

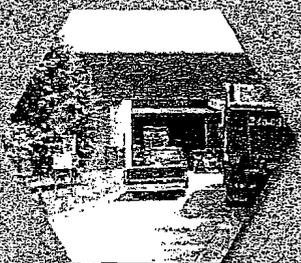
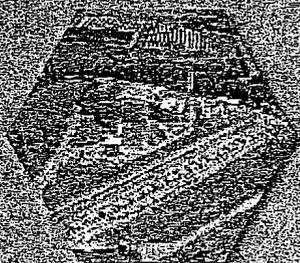
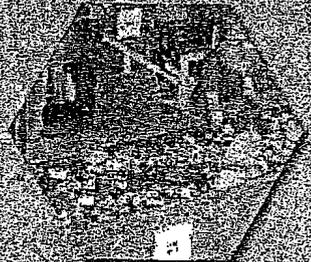
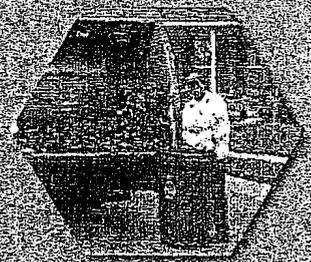
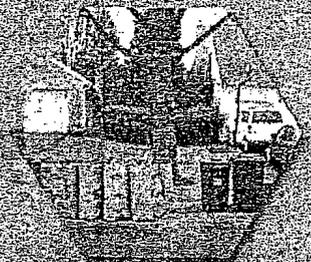
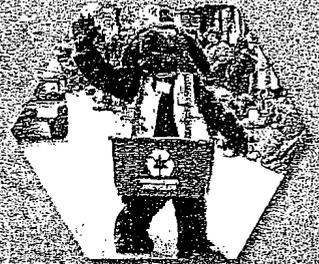
Montgomery County, Maryland

# DIVISION OF SOLID WASTE SERVICES



## Comprehensive Solid Waste Management 10 Year Plan

2007-2016



(Proposed) 1/05/09 

## Executive Summary

The Montgomery County, Maryland, Comprehensive Solid Waste Management Plan for the Years 2007 - 2016 has been prepared in accordance with Subtitle 5, Title 9 of the Environment Article, Annotated Code of Maryland. The Plan has been adopted by the Montgomery County Council Resolution [ - ] (see page [ ]), and approved by the Maryland Department of the Environment (see page [ ]).

This Ten-year Plan is updated every three years, as required by Maryland law to reflect amendments by the County Council and the continuing changes that are occurring in the County related to solid waste management. The following amendments, changes, additional appendices and other pertinent documents are included in this Plan:

Chapter 1 provides an overview of the laws, regulations, and government agencies that are a part of this Comprehensive Solid Waste Plan. Changes to this chapter include:

- Dates are updated throughout.
- Tables of applicable laws and regulations are updated. No significant changes have occurred since the last Plan update.
- Enabling laws and regulations are updated and clarified.

Chapter 2 provides an overview of population and employment trends and land use considerations that impact present and future solid waste management considerations. Changes to this chapter include:

- Dates and population/employment numbers are updated throughout.

Chapter 3 provides detailed data on waste generation and descriptions of waste collection and acceptance facilities. Changes to this chapter include:

- Dates and waste generation tonnages are updated throughout.

- Tables are repositioned to follow text references.
- The County recycling rate calculation method is clarified.
- Waste collection district and sub-district descriptions and the sub-district transfer process are conformed to recently passed Council Resolution, allowing adjustments to take place by means of Executive Regulation.
- Recycling descriptions are updated for Office Paper Systems (OPS) mixed paper operation.

Chapter 4 assesses solid waste management needs to address waste generation issues and acceptance facility constraints. Changes to this chapter include:

- Dates and generation percentages are updated throughout.
- A table, with accompanying text, is added enabling analysis, by sector, of the extent to which individual types of recyclable materials are being recycled and disposed.
- The recycling goal of 50 percent by 2010 is confirmed.
- Text is added clarifying the relationship between the recycling goal and tonnage projections under the County's solid waste management system.
- Text describing the County's electronics recycling program is added.
- Documentation concerning the options and currently known disposal of MSW and C&D at facilities other than the County Transfer Station is substantially expanded.
- A new planning direction towards exploring food waste composting is indicated.
- Text is added on the management of compact fluorescent lamps.
- A new section on green house gasses (GHG) and ozone related emissions is added.

Chapter 5 provides a Plan of Action to address solid waste generation issues and acceptance facility needs. Changes to this chapter include:

- Dates and generation data are updated throughout.
- Discussion of Transfer Station modifications to address peak flows under a current CIP project and relocate yard waste operations to the Gude landfill site is updated.

- The County's ban on disposal of recyclables is described with respect to Executive Regulations 14-04AM and 18-04, and enforcement of those regulations is discussed.
- Contingency plans for yard waste management, to avoid exceeding the agreed limitation on annual tonnage received at the Dickerson Composting Facility, are expanded.
- Discussion of bypass in the context of facility capacity is expanded.
- The tipping fee policy is expanded and clarified.
- The summary Plan of Action table is updated and expanded.

Appendix A provides a list of term definitions. Changes to this appendix include:

- A definition for Land Clearing Debris is added.

Appendix B is updated to provide a material flow diagram and recycling calculations for a new Base Year.

Appendix C provides a copy of the County landfill site selection criteria.

Appendix D provides copies of community agreements related to solid waste facilities.

Appendix E provides a copy of Council Resolution 13-1498 "Creation of Dickerson Area Facilities Implementation Group (DAFIG)".

Appendix F provides a copy of Montgomery County Executive Regulation 6-99AM Expansion of Leaf Vacuuming Collection District.

**Table 3.1**  
**Municipal Solid Waste Generation in Montgomery County, Maryland (Tons/Yr)**

	<u>2007</u> Processed at County Gov't Facilities	<u>2007</u> Processed at Private Facilities	<u>2007</u> Estimated Generation In County	<u>2011</u> Projected** Generation In County	<u>2016</u> Projected** Generation In County
<b>Municipal Solid Waste (MSW)</b>	<b>768,087</b>	<b>454,388</b>	<b>1,222,475</b>	<b>1,288,391</b>	<b>1,357,896</b>
<b>(a) Residential (Single-Family and Multi-Family)</b>	<b>472,819</b>	<b>131,294</b>	<b>604,113</b>	<b>629,442</b>	<b>657,165</b>
Recycled	192,889	104,613	297,502	312,380	322,463
Disposed	279,930	26,681	306,611	317,062	334,702
<b>Non-Residential</b>	<b>295,268</b>	<b>323,094</b>	<b>618,362</b>	<b>658,949</b>	<b>700,731</b>
Recycled	40,512	190,173	230,685	297,018	315,833
Disposed	254,756	132,921	387,677	361,931	384,898
<b>State-Required Breakout of Non-Residential MSW</b>					
<b>(b) Commercial (61.1% of Non-Residential)</b>	<b>180,497</b>	<b>197,508</b>	<b>378,005</b>	<b>402,816</b>	<b>428,357</b>
Recycled	24,765	116,253	141,018	181,567	193,069
Disposed	155,732	81,255	236,987	221,248	235,288
<b>(c) Industrial (33.1% of Non-Residential)</b>	<b>97,674</b>	<b>106,880</b>	<b>204,554</b>	<b>217,980</b>	<b>231,802</b>
Recycled	13,401	62,909	76,311	98,254	104,478
Disposed	84,273	43,970	128,243	119,727	127,324
<b>(d) Institutional (5.8% of Non-Residential)</b>	<b>17,096</b>	<b>18,707</b>	<b>35,803</b>	<b>38,153</b>	<b>40,572</b>
Recycled	2,346	11,011	13,357	17,197	18,287
Disposed	14,750	7,696	22,446	20,956	22,286
<b>(e) Land Clearing and Construction &amp; Demolition Debris (C&amp;D)</b>	<b>139,227</b>	<b>102,786</b>	<b>242,013</b>	<b>252,160</b>	<b>263,266</b>
<b>(f) Hazardous Waste</b>	<b>140</b>	<b>13,764</b>	<b>14,000</b>	<b>14,899</b>	<b>15,844</b>
<b>(g) Special Medical Waste</b>	<b>0</b>	<b>1,435</b>	<b>1,435</b>	<b>1,527</b>	<b>1,624</b>
<b>(h) Animal Carcass</b>	<b>0</b>	<b>236</b>	<b>236</b>	<b>246</b>	<b>257</b>
<b>(i) Bulky Waste Scrap Metal [Included in (a) through (d) above]</b>	<b>8,202</b>	<b>50,015</b>	<b>58,218</b>	<b>60,659</b>	<b>63,330</b>
<b>(j) Automobiles</b>	<b>0</b>	<b>58,900</b>	<b>58,900</b>	<b>61,370</b>	<b>64,072</b>
<b>(k) Scrap Tires</b>	<b>213</b>	<b>9,280</b>	<b>9,493</b>	<b>9,891</b>	<b>10,326</b>
(kk) Portion included in (a) through (d) above	213	4,378	4,590	4,783	4,993
<b>(l) Biosolids</b>	<b>0</b>	<b>6,046</b>	<b>6,046</b>	<b>6,299</b>	<b>6,577</b>
<b>(m) Septage</b>	<b>0</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>	<b>18,000</b>
<b>TOTAL WASTE (all categories) *</b>	<b>768,227</b>	<b>552,769</b>	<b>1,321,092</b>	<b>1,390,733</b>	<b>1,464,270</b>

Notes:

\* Sum of (a) through (m) less (i) less (kk).

\*\* Projections assume zero growth in per capita and per employee waste generation rates.

The recycling rate calculation report to the County Council is developed using a comprehensive accounting methodology that incorporates all data available on County MSW flows. Appendix C displays the result for the County for Fiscal Year 2007. The calculation is necessarily conservative in that it assumes that all waste burned at the RRF is MSW.

Table 3.2 displays MSW recycled and disposed according to four categories specified in COMAR 26.03.03.03.D “residential waste”, “commercial waste”, “industrial waste” and “institutional waste”.

The total County MSW generation follows the methodology detailed in Appendix C which yields 1,222,475 tons, not including any amounts of C&D burned at the RRF. The County estimates that 42,583 tons of C&D were burned at the RRF in FY07<sup>1</sup>. Generation projections for Fiscal Years 2011 and 2016 are adjusted for increases in County population and employment only.

**Table 3.2**  
**Municipal Solid Waste Generation in Montgomery County, Maryland (Tons/Yr)**  
**Residential, Commercial, Industrial, and Institutional Sectors**

	2007 Processed at County Gov't Facilities	2007 Processed at Private Facilities	2007 Estimated Generation In County	2011 Projected Generation In County	2016 Projected Generation In County
<b>(a) Residential (Single-Family and Multi-Family)</b>	<b>472,819</b>	<b>131,294</b>	<b>604,113</b>	<b>629,442</b>	<b>657,165</b>
Recycled	192,889	104,613	297,502	312,380	322,463
Disposed	279,930	26,681	306,611	317,062	334,702
<b>(b) Commercial (61.1% of Non-Residential)</b>	<b>180,497</b>	<b>197,508</b>	<b>378,005</b>	<b>402,816</b>	<b>428,357</b>
Recycled	24,765	116,253	141,018	181,567	193,069
Disposed	155,732	81,255	236,987	221,248	235,288
<b>(c) Industrial (33.1% of Non-Residential)</b>	<b>97,674</b>	<b>106,880</b>	<b>204,554</b>	<b>217,980</b>	<b>231,802</b>
Recycled	13,401	62,909	76,311	98,254	104,478
Disposed	84,273	43,970	128,243	119,727	127,324
<b>(d) Institutional (5.8% of Non-Residential)</b>	<b>17,096</b>	<b>18,707</b>	<b>35,803</b>	<b>38,153</b>	<b>40,572</b>
Recycled	2,346	11,011	13,357	17,197	18,287
Disposed	14,750	7,696	22,446	20,956	22,286
<b>Municipal Solid Waste (MSW)</b>	<b>768,087</b>	<b>454,388</b>	<b>1,222,475</b>	<b>1,288,391</b>	<b>1,357,896</b>
		<b>Recycling Rate*</b>	<b>43.2%</b>	<b>47.3%</b>	<b>47.0%</b>

\* Projected recycling is conservative. It assumes approval of ER18-04, but it counts C&D burned in RRF as MSW, thus overstating recycling rate denominator.

1 See Appendix C.

**Table 3.10**  
**Municipal Solid Waste Recycling Rate: County Calculation (Tons/Yr)**

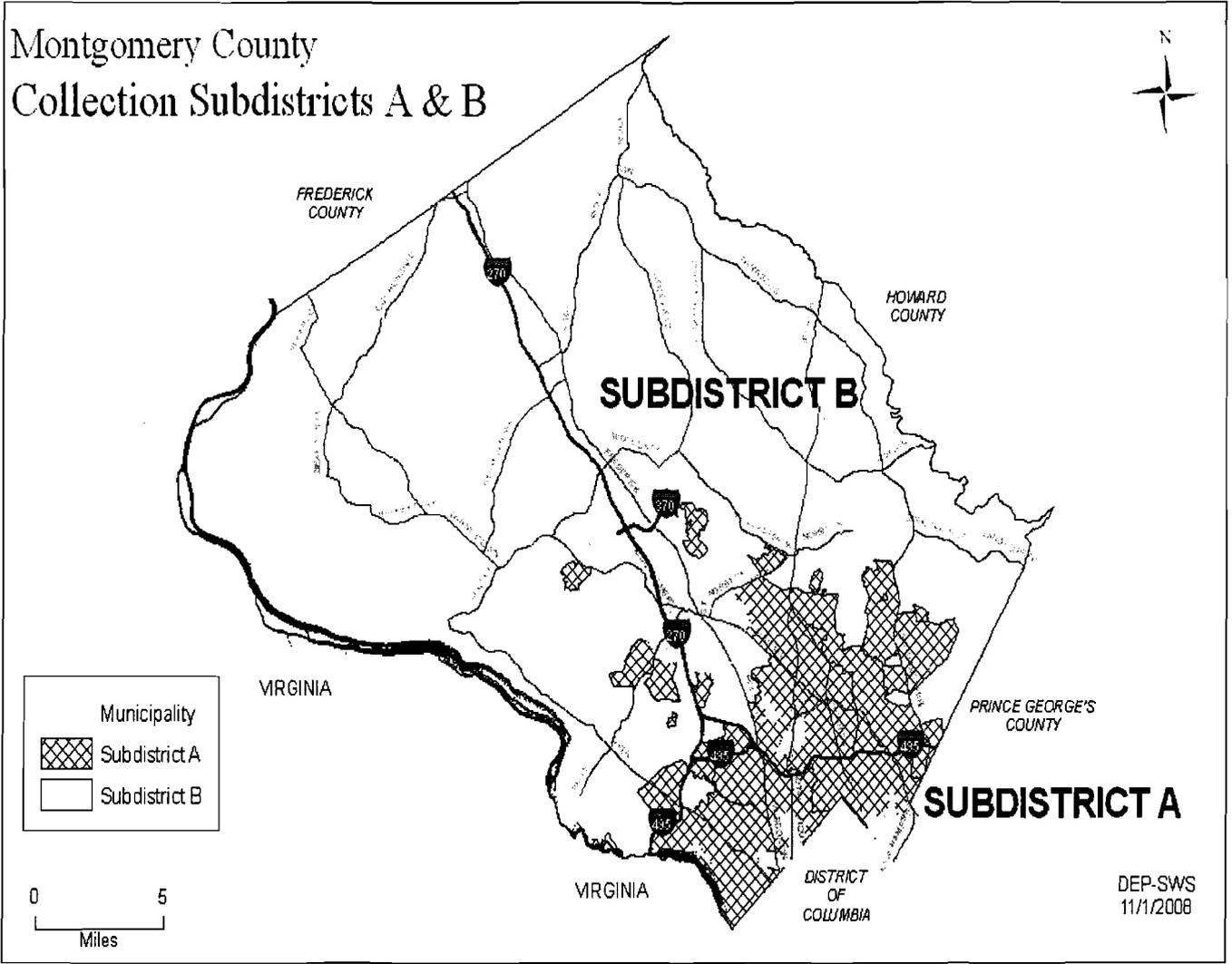
**Includes Back Yard Composting and Grasscycling, and  
Assumes That All Tons disposed in RRF Were Eligible for Recycling**

	<u>2007</u> Processed at County Gov't Facilities	<u>2007</u> Processed at Private Facilities	<u>2007</u> Estimated Generation In County	<u>2011</u> Projected Generation In County	<u>2016</u> Projected Generation In County
<b>Residential (Single-Family and Multi-Family)</b>	<b>472,819</b>	<b>131,294</b>	<b>604,113</b>	<b>629,442</b>	<b>657,165</b>
Recycled	192,889	104,613	297,502	312,380	322,463
Disposed	279,930	26,681	306,611	317,062	334,702
<b>Non-Residential</b>	<b>295,268</b>	<b>323,094</b>	<b>618,362</b>	<b>658,949</b>	<b>700,731</b>
Recycled	40,512	190,173	230,685	297,018	315,833
Disposed (including C&D burned at County RRF)	254,756	132,921	387,677	361,931	384,898
<b>Municipal Solid Waste (MSW)</b>	<b>768,087</b>	<b>454,388</b>	<b>1,222,475</b>	<b>1,288,391</b>	<b>1,357,896</b>
		Recycling Rate	43.2%	47.3%	47.0%

**Table 3.11**  
**Municipal Solid Waste Recycling Rate: MRA Calculation (Tons/Yr)**

**Does not Include Back Yard Composting or Grasscycling**

	<b>2007</b>	<b>2007</b>	<b>2007</b>	<b>2011</b>	<b>2016</b>
	<b>Processed at County Gov't Facilities</b>	<b>Processed at Private Facilities</b>	<b>Estimated Generation In County</b>	<b>Projected Generation In County</b>	<b>Projected Generation In County</b>
<b>Residential (Single-Family and Multi-Family)</b>	<b>472,624</b>	<b>48,986</b>	<b>521,610</b>	<b>550,724</b>	<b>576,198</b>
Recycled	192,693	22,305	214,998	233,662	241,495
Disposed	279,930	26,681	306,611	317,062	334,702
<b>Non-Residential</b>	<b>295,258</b>	<b>311,532</b>	<b>606,791</b>	<b>649,889</b>	<b>691,096</b>
Recycled	40,512	178,611	219,123	287,958	306,198
Disposed (including C&D burned at County RRF)	254,746	132,921	387,667	361,931	384,898
<b>Municipal Solid Waste (MSW)</b>	<b>767,882</b>	<b>360,518</b>	<b>1,128,400</b>	<b>1,200,613</b>	<b>1,267,293</b>
			<b>MRA (State) Recycling Rate</b>	<b>43.4%</b>	<b>43.2%</b>
			<b>State Recycling Credit for Approved County Reduction Programs</b>	<b>5.0%</b>	<b>5.0%</b>
			<b>MRA (State) Waste Diversion Rate</b>	<b>48.4%</b>	<b>48.2%</b>



Map of Collection Subdistricts A and B

Figure 3.1

# Montgomery County Leaf Collection District

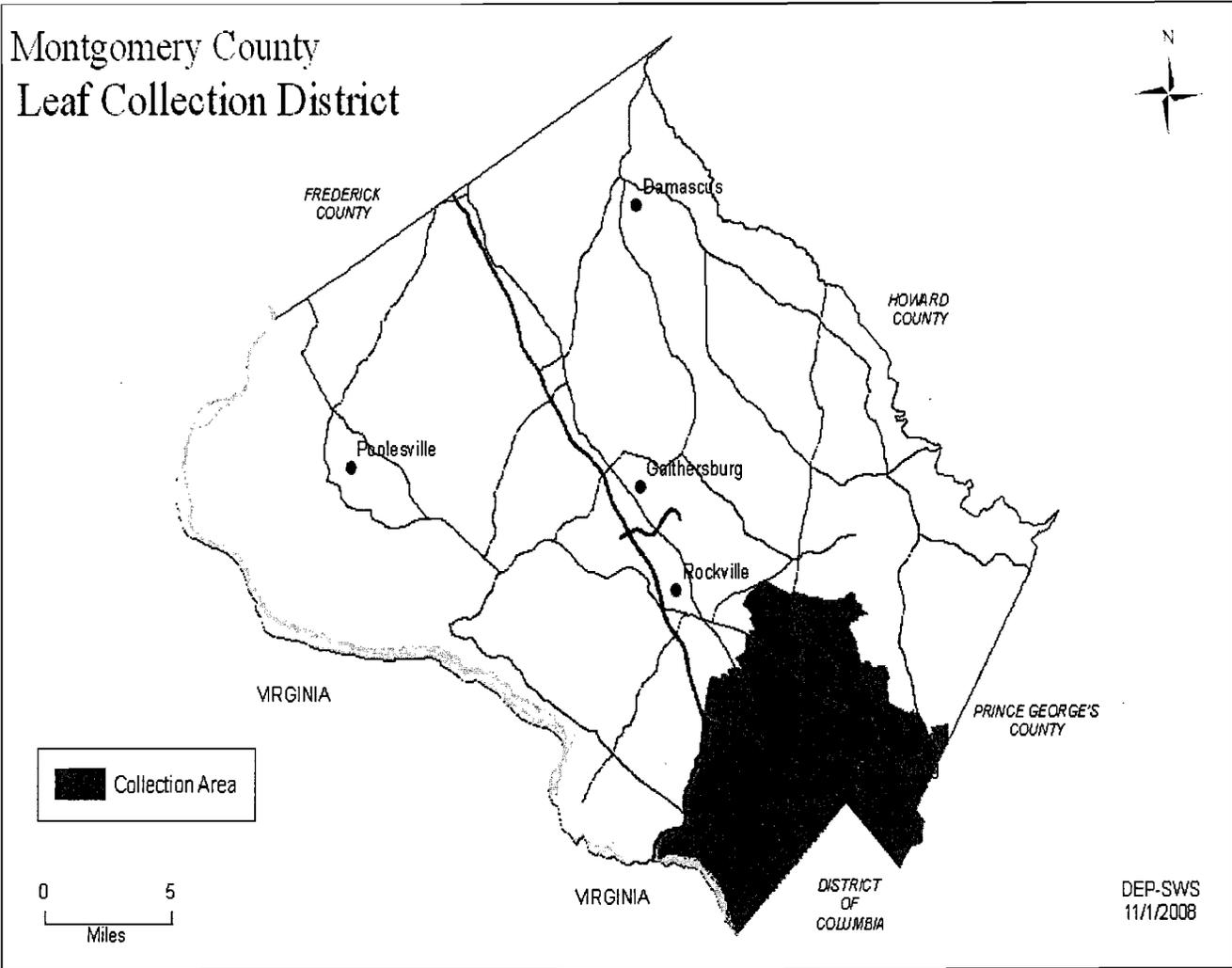


Figure 3.2  
Map of Leaf Collection District

Table 4.1

Waste Recycling by Material Type: Achievement and Opportunity

Basis for composition of disposed waste is the waste composition sampling at County Transfer Station.	FY07 Actuals									The Opportunity; Recyclable But Disposed				
	Single-Family			Multi-Family			Non-Residential			Disposed By Sector (tons)			Total Disposed (Tons)	
	Generated (tons)	Captured (tons)	Capture Rate %	Generated (tons)	Captured (tons)	Capture Rate %	Generated (tons)	Captured (tons)	Capture Rate %	Single-Family	Multi-Family	Non-Residential		
Banned ER15-04AM	Subtotal, Banned Components	338,844	265,331	78.3%	44,182	11,189	25.3%	368,550	198,824	53.9%	73,513	32,992	169,726	276,231
	Paper	125,484	73,029	58.2%	25,597	1,917	7.5%	228,040	91,853	40.3%	52,455	23,681	136,186	212,322
	Glass	20,589	14,412	70.0%	3,627	735	20.3%	7,477	2,011	26.9%	6,176	2,892	5,468	14,534
	Other Ferrous	18,362	13,839	75.4%	3,971	1,943	48.9%	73,217	58,376	79.7%	4,523	2,028	14,841	21,393
	Yardwaste	160,663	157,614	98.1%	6,909	6,075	87.9%	46,351	41,690	89.9%	3,049	834	4,661	8,544
	Narrow-Neck Plastics	7,917	4,019	50.8%	2,145	206	9.6%	5,319	554	10.4%	3,898	1,940	4,765	10,603
	Ferrous/Bimetal Containers	3,753	1,720	45.8%	1,242	277	22.3%	2,121	231	10.9%	2,033	966	1,890	4,889
	Aluminum Beverage Cans	1,693	697	41.2%	572	36	6.2%	1,213	144	11.8%	996	536	1,069	2,602
	Other Non-Ferrous Metal	364	0	0.1%	118	2	1.7%	4,812	3,965	82.4%	383	116	847	1,346
Encouraged	Textiles & Leather (no Rugs)	5,913	111	1.9%	1,819	4	0.2%	4,998	262	5.2%	5,802	1,815	4,737	12,353
	Wood Waste (including pallets)	12,216	10,874	89.0%	788	325	41.3%	43,164	22,284	51.6%	1,342	462	20,880	22,684
	Whole Tires (as Rubber)	1,836	1,836	100.0%	515	459	89.1%	4,708	3,699	78.6%	-	56	1,009	1,065
	Lubricants (e.g. motor oil)	4,786	4,708	98.4%	1,275	1,274	99.9%	3,117	3,069	98.5%	78	1	48	127
	Electronics	4,188	785	18.3%	1,373	27	1.9%	2,820	613	21.7%	3,422	1,346	2,207	6,974
	Batteries	205	199	97.3%	49	7	14.2%	834	473	56.7%	6	42	361	408
	Tire Steel	471	241	51.3%	125	60	48.4%	890	302	33.9%	230	64	589	882
Potential	Food Waste	41,707	18	0.0%	13,196	1	0.0%	59,228	659	1.1%	41,689	13,195	58,567	113,452
	Film Plastic	16,930	-	0.0%	5,885	-	0.0%	24,500	489	2.0%	16,930	5,885	24,011	46,826
	Other Plastic	6,122	46	0.8%	2,543	2	0.1%	11,243	15	0.1%	6,075	2,542	11,229	19,846
	Carpets / Rugs	4,475	-	0.0%	640	-	0.0%	12,060	-	0.0%	4,475	640	12,060	17,175
	Other Aluminum (foil)	19	18	0.0%	140	1	0.4%	2,267	1	0.0%	1	139	2,266	2,407
No Markets	Other Wood	4,220	-	0.0%	1,893	-	0.0%	13,130	-	0.0%	-	-	-	19,242
	Other Glass	946	-	0.0%	231	-	0.0%	821	-	0.0%	-	-	-	1,998
	Disposable Diapers	11,105	-	0.0%	4,357	-	0.0%	3,275	-	0.0%	-	-	-	18,738
	Other Waste	51,573	-	0.0%	19,552	-	0.0%	62,757	-	0.0%	-	-	-	133,882
<b>TOTAL</b>		<b>505,553</b>	<b>284,148</b>	<b>56.2%</b>	<b>98,560</b>	<b>13,348</b>	<b>13.5%</b>	<b>618,362</b>	<b>230,688</b>	<b>37.3%</b>				<b>694,291</b>

Notes:

Banned ER15-04AM

These materials are required to be recycled under Executive Regulation 15-04, and are banned from disposal in waste from all sectors.

Encouraged

Although not subject to a disposal ban, these materials are recycled via standing programs. Consistent, if not strong, markets exist for these materials. Textiles are recycled only via voluntary drop-offs (does not include donations).

Potential

Markets exist for these materials, or could exist with additional processing. (On 7/01/08, additional rigid plastics were deemed reliably marketable and added to the County's recycling program. This table does not reflect that change.)

No Markets

No existing or anticipated markets for these materials.

14

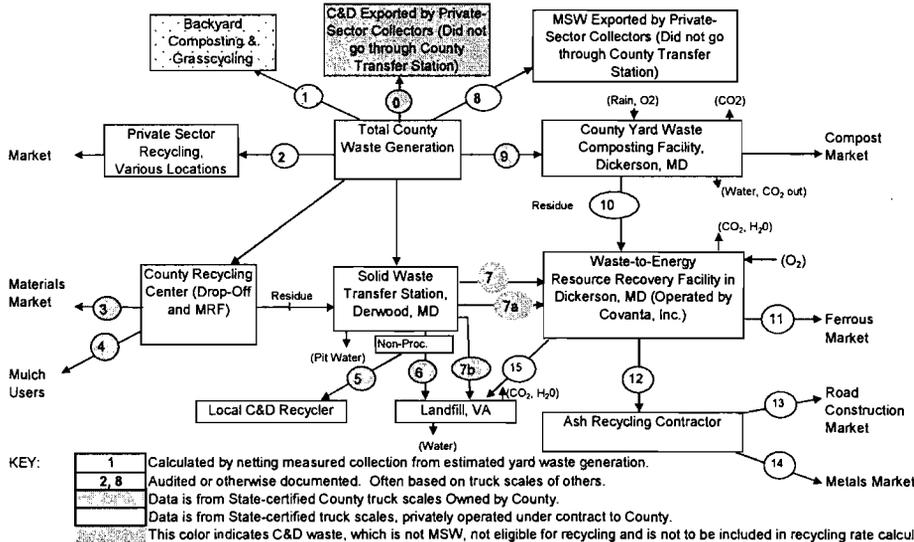
**Table 5.1**

**Solid Waste Management System: Summary Plan of Action**

<b>FACILITY/ PROGRAM</b>	<b>SUMMARY PLAN OF ACTION</b>
<b>Shady Grove Processing Facility and Transfer Station</b>	Relocate yard waste transfer and grinding operations to Gude Landfill to reduce site traffic and make space available for future options consistent with CIP project. Maximize materials sold as mulch to minimize tonnage sent for composting. Set yard waste tip fee per Section 5.4.2.1
<b>Resource Recovery Facility</b>	Periodically explore the feasibility of RRF ash and/or non-ferrous recycling. Set tip fee per Section 5.4.2.1. Aggressively market electricity and ferrous to secure the best prices available. Conduct detailed energy balance analysis to maximize thermal and power efficiency.
<b>Materials Recovery Facility</b>	Continue to aggressively market recovered materials to capture best prices. Encourage increased usage of unused MRF capacity by non-residential generators.
<b>Yard Trim Composting Facility</b>	Continue aggressive promotion of grasscycling and backyard composting. Maintain back-up contracts for composting yard trim in excess of 77,000 tons. Increase market share and diversity of compost products produced by the County. Continue on-going program to periodically replace portions of paved pad and improvements to on-site storm water management.
<b>Out-of-County Landfill</b>	Encourage private sector recycling of construction and demolition materials and other nonprocessable solid waste rather than landfilling.
<b>Land Reserved for Potential Future In-County Landfill</b>	Retain the Site 2 property, located in Dickerson, MD, through the entire life of Plan for use in the event economic conditions, changes in law or other circumstances render out-of-County waste disposal infeasible.
<b>Waste Transportation System</b>	Monitor the performance of all transportation contractors to ensure reliability. Build contingency capacity to ensure waste transport.

<b>Recycling and Waste Reduction Programs</b>	<p>Aggressively encourage backyard composting including giving away compost bins.</p> <p>Periodically evaluate the rates at which each type of recyclable is being captured.</p> <p>Increase capture of all recycled materials through existing programs and outreach.</p> <p>Rigorously enforce the recycling bans instituted by ER15-04AM and 18-04.</p> <p>Vary size and styles of replacement carts to fit housing types and maximize usage.</p> <p>Examine the feasibility of targeting additional materials types for recycling including food waste generated at restaurants, schools and institutions.</p> <p>Continue to evaluate innovative collection techniques to increase recycling.</p> <p>Continue to promote cooperative collection contracting among commercial generators</p>
<b>Private Facilities</b>	<p>Work cooperatively to promote expansion and use of private recycling infrastructure within County, including C&amp;D.</p>
<b>Oaks and Gude Landfills</b>	<p>Operate an oil-grit separator for nonprocessable solid waste collected from County storm water captors at Oaks.</p> <p>Implement gas-to-energy projects at both landfills.</p> <p>Improve gas capture and minimize migration.</p>
<b>System Financing</b>	<p>Maintain transparency in fiscal management.</p> <p>Monitor revenue generation methods to assure fair and equitable rates.</p> <p>Track current market conditions to maintain competitive tip fees.</p> <p>Monitor commodity markets to assure County receives most favorable revenues and credits possible from the sale of all recovered resources.</p>
<b>Greenhouse Gasses and Ozone-Related Emissions</b>	<p>Complete solid waste system-wide inventory of GHG and ozone-related emissions. Include net emissions effects in the consideration of future changes in solid waste management system, including but not limited to any addition of new materials targeted for recycling, and changes to the collection and transportation systems.</p> <p>Work with the private sector (subscription) collectors to quantify and reduce emissions.</p>
<b>Collection</b>	<p>Use creative techniques to encourage contracted haulers to propose environmentally friendly options.</p>

## MATERIAL FLOW DIAGRAM Fiscal Year 2007



Total Waste Generation, including C&D Exported by Private Sector	1,464,488
County-Managed Waste (CMW) = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 7a + 7b + 8 + 9 =	1,361,702
MSW Generated (above less streams 5, 6 and 7a)	1,222,475

Stream No.	Material Description	Sources of Data	Total (tons/yr)	Comments
0	Construction & Demo Debris Private Export	Licensed Collector Reports under ER 92-59	102,766	Not County-managed and not eligible for recycling
1	Yard Waste Source Reduction	Calculated w/ estimates & measurements	85,024	17.5% of MSW less leakage less yard waste facility tons
2	Recycled via non-County Facilities	Collector, Processor, Business & Self-Hauler Rpts.	209,762	Filtered to avoid double-counting
3	County Recycling Facility Material Sales	County TS & MRF Scales, Outbound	118,546	Outgoing to Market from County Recycling Center
4	Mulch Loaded Out From TS	County Transfer Station (TS) Scale Records	21,658	Scaled Out As Taken to Mulch Preserve Locations
5	Non-Processibles Recycled**	County TS Scale Out Records	1,965	
6	Non-Processibles Land filled**	County Trans. Stat'n. & Covanta Scale Records	94,679	
7	Loaded on Rail to RRF (MSW burned)	Covanta Scales as Loaded	550,602	Total Tons Loaded on Rail to RRF Net of 7a
7a	Loaded on Rail to RRF (C&D Burned)	County Transfer Station (TS) Scale Records	42,583	In-Bound C&D less Outbound Non-Processibles Landfilled
7b	By-pass (Accepted Processible Land filled)	County TS Scale Out Records	-	
8	Refuse Disposed Out of County	Audited 6-Mo. Hauler Reports	159,602	Private Sector MSW Collection not delivered to County TS
9	All Incoming Leaves and Grass	Compost Facility & TS Scale Records	77,280	Includes 8,247 to Backup Composters
10	Composting Residue to RRF	Covanta Scale Records	-	
11	Ferrous recovered at RRF	Covanta Scale Records	15,916	
12	Ash Loaded to Ash Recycling Contractor	No ash recycling at this time.	-	No ash recycling at this time.
13	Non-Metal Outgoing from ash Recycler	No ash recycling at this time	-	No ash recycling at this time.
14	Metals (Fe, Cu, Brass, Coins)	No ash recycling at this time.	-	No ash recycling at this time.
15	All ash not recycled	Covanta Scale Records	178,915	

Recycling Rate Calculations		Numerator	Denominator	Rate
County Recycling Rate	$(1 + 2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 5 - 6 - 7a) =$	528,187	1,222,475	43.2%
County Recycling Rate "Without Ash"	(Same as above but without Stream 13)	528,187	1,222,475	43.2%
State Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 1 - 5 - 6 - 7a) =$	434,109	1,128,397	38.5% ***
State Recycling & Reduction Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 1 - 5 - 6) + 5.0% =$	434,109	1,128,397	43.5% ***
EPA Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 14) / (CMW - 1 - 5 - 6 - 7a) =$	434,109	1,128,397	38.5% ***

Notes:

\*\* Nonprocessibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.

\*\*\* For State and EPA methods, numerator and denominator exclude motor oil

Nomenclature:

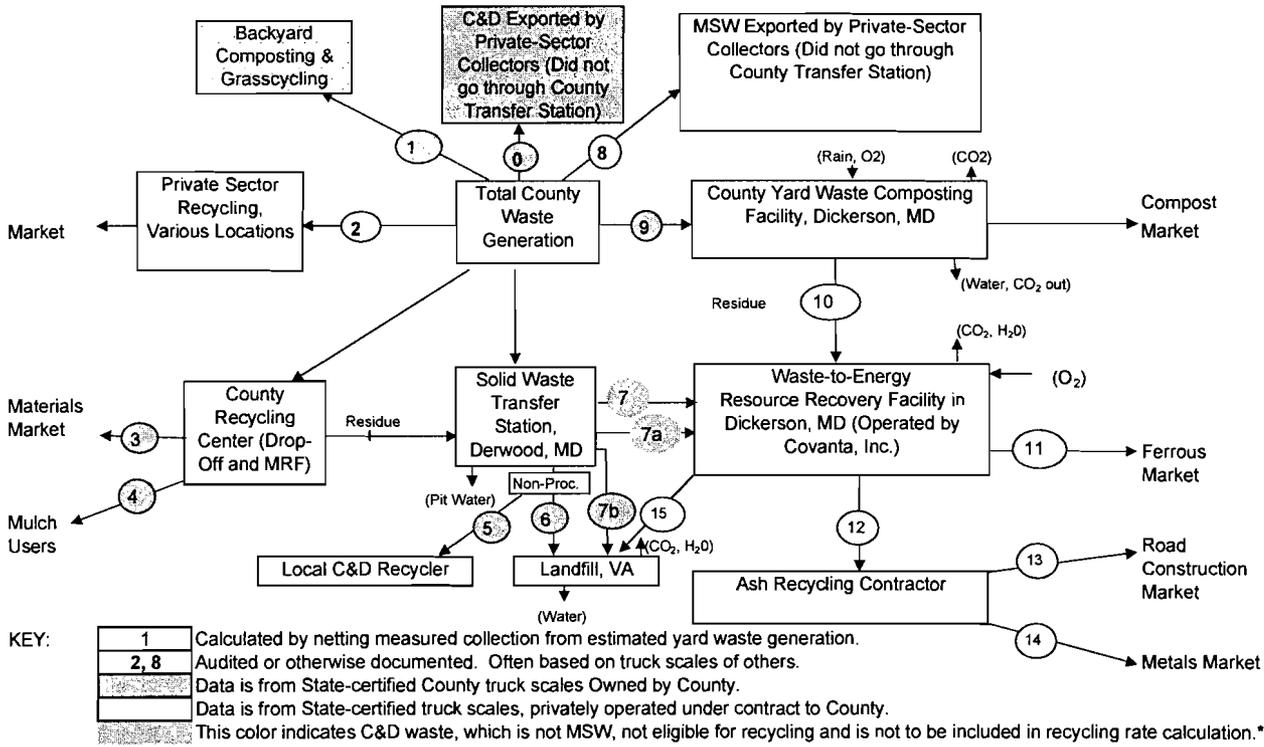
"C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.

"CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.

"MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.

"TS" stands for the County's "Transfer Station", located in Derwood, Maryland, just south of Gaithersburg.

## MATERIAL FLOW DIAGRAM Fiscal Year 2008



Total Waste Generation, Including C&D Exported by Private Sector	1,488,636
County-Managed Waste (CMW) = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 7a + 7b + 8 + 9 =	1,359,977
MSW Generated (above less streams 5, 6 and 7a)	1,249,376

Stream No.	Material Description	Sources of Data	Total (tons/yr)	Comments
0	Construction & Demo Debris Private Export	Licensed Collector Reports under ER 92-59	128,660	Not County-managed and not eligible for recycling
1	Yard Waste Source Reduction	Calculated w/ estimates & measurements	80,617	17.5% of MSW less leakage less yard waste facility tons
2	Recycled via non-County Facilities	Collector, Processor, Business & Self-Hauler Rpts.	246,585	Filtered to avoid double-counting
3	County Recycling Facility Material Sales	County TS & MRF Scales, Outbound	101,584	Outgoing to Market from County Recycling Center
4	Mulch Loaded Out From TS	County Transfer Station (TS) Scale Records	36,453	Scaled Out As Taken to Mulch Preserve Locations
5	Non-Processibles Recycled**	County TS Scale Out Records	5,057	
6	Non-Processibles Land filled**	County Trans. Stat'n. & Covanta Scale Records	75,424	
7	Loaded on Rail to RRF (MSW burned)	Covanta Scales as Loaded	549,541	Total Tons Loaded on Rail to RRF Net of 7a
7a	Loaded on Rail to RRF (C&D Burned)	County Transfer Station (TS) Scale Records	30,119	In-Bound C&D less Outbound Non-Processibles Landfilled
7b	By-pass (Accepted Processible Land filled)	County TS Scale Out Records	-	
8	Refuse Disposed Out of County	Audited 6-Mo. Hauler Reports	160,556	Private Sector MSW Collection not delivered to County TS
9	All Incoming Leaves and Grass	Compost Facility & TS Scale Records	74,040	Includes 0 to Backup Composters
10	Composting Residue to RRF	Covanta Scale Records	-	
11	Ferrous recovered at RRF	Covanta Scale Records	14,222	
12	Ash Loaded to Ash Recycling Contractor	No ash recycling at this time.	-	No ash recycling at this time.
13	Non-Metal Outgoing from ash Recycler	No ash recycling at this time.	-	No ash recycling at this time.
14	Metals (Fe, Cu, Brass, Coins)	No ash recycling at this time.	-	No ash recycling at this time.
15	All ash not recycled	Covanta Scale Records	183,441	

### Recycling Rate Calculations

		Numerator	Denominator	Rate
<b>County Recycling Rate</b>	$(1 + 2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 5 - 6 - 7a) =$	553,501	1,249,376	44.3%
County Recycling Rate "Without Ash"	(Same as above but without Stream 13)	553,501	1,249,376	44.3%
State Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 1 - 5 - 6 - 7a) =$	465,111	1,161,006	40.1% ***
State Recycling & Reduction Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 1 - 5 - 6) + 5.0\% =$	465,111	1,161,006	45.1% ***
EPA Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 14) / (\text{CMW} - 1 - 5 - 6 - 7a) =$	465,131	1,161,006	40.1% ***

Notes:

\*\* Nonprocessibles are Construction and Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.

\*\*\* For State and EPA methods, numerator and denominator exclude motor oil

Nomenclature:

"C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.

"CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.

"MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.

"TS" stands for the County's "Transfer Station", located in Derwood, Maryland, just south of Gaithersburg.

# GUDE LANDFILL CONCERNED CITIZENS

15461 INDIANOLA DRIVE  
DERWOOD, MD 20855

Testimony before the Montgomery County Council  
February 24, 2009

My name is Julia Tillery; I'm here on behalf of the Gude Landfill Concerned Citizens, representing 500 families adjacent to the Gude Landfill.

We appreciate the Council's recognition that there's a significant hazard at the Gude Landfill, with the known migration of toxins offsite--onto parkland, and we now suspect into our backyards.

We've all seen the charts showing the increasing hazard from carcinogenic leachate. The plume of contamination is moving beyond the sample wells. While the County's experts told you a couple of weeks ago that data over 8 years aren't conclusive, other experts see it differently.

These are the data that GLCC brought to the attention of the State. This is what alarmed the Maryland Department of the Environment. And it's the reason the State has asked Montgomery County to prepare a remediation plan.

The only responsible action at this point, is to do specialized testing to determine how far the toxic migration reaches beyond the Gude Landfill, stop it, and clean it up where it has contaminated neighboring lands.

What is not responsible is the Yard Trim proposal in the solid waste plan which adds tons of additional weight on the surface of the landfill, under an impermeable surface, forcing more contamination out the sides, like squeezing a dirty kitchen sponge. The County's answer is "we hope that doesn't happen." That's not good enough.

And let's stop calling it "yard trim" because we're not talking about bags of leaves. We still take those to the transfer station. We're talking about a commercial wood waste facility—one that draws tens of thousands of big trucks per year, and tens of millions of dollars per year from the fees charged to those trucks. It's not an eco-friendly neighborhood compost pile. And the storm water permit—which has expired—is grossly insufficient to handle the runoff that this kind of facility will create.

It should be the objective of the County to minimize the impact of solid waste management facilities on the environment, on residents, and on any one area of Montgomery County. In fact, that is, verbatim, what the Department of Environmental Protection said 15 months ago, in the 10-year-Comprehensive Solid Waste Management Plan. That rhetoric is not consistent with

today's plan, when it comes to the Gude Landfill.

We don't want to see further harm at the Gude Landfill. The County can move its wood waste to the secret location known as Site Number 2, or any other environmentally-safe site. The priorities for Gude need to deal first with the recognized and growing hazard:

**DELINEATE .....REMEDiate ..... RE-EVALUATE.**

# Gude Landfill Concerned Citizens

15461 Indianola Drive  
Derwood, MD 20855

March 5, 2009

Nancy Floreen, Chair Energy and Environment Committee  
George Leventhal, Member Energy and Environment Committee  
Roger Berliner, Member Energy and Environment Committee  
Phil Andrews, President, Montgomery County Council

RE: March 9 Hearing on 10 Year Solid Waste Management Plan

Dear Council Members:

Next week you will review the Department of Environmental Protection (DEP) 10-Year Comprehensive Solid Waste Management Plan. We have read the plan and believe it is a good plan except for one section. That section states DEP's desire to move the Yard Trim operations from the Shady Grove Transfer Station to the Gude Landfill. We object to this and we believe you should reject the County Executive's ongoing efforts to build on the landfill prior to the completion of remediation efforts and complete analysis.

Our views are supported by the Montgomery County Planning Board which has reviewed the County's 10 year plan and finds that it "cannot endorse moving the yard trim operation or establishing any other uses on the site of the Gude landfill without further analysis and a clear determination that such actions will not exacerbate the existing pollution problems."

The County Council should provide equally clear instruction to the County Executive.

DEP uses the terms "yard trim" or "yard waste", but please understand that they are not talking about leaves or grass from our yards. Yard Trim refers to commercial wood waste processing brought in by large trucks, run through a large grinder, with the resulting wood chips sent to Dickerson for mulching. The DEP proposal for the Gude Landfill includes paving over 7 acres of the landfill, putting structures on the site, storing diesel fuel tanks on top a landfill gas leaking surface, with lots of noise and fumes of various grinders, back-loaders, and commercial haulers dumping tons of bulk wood. 57,000 truck visits per year is the estimate and that will add significant congestion to Gude Drive and Southlawn Lane.

Any planned reuse must follow the necessary remediation and analysis for the following reasons:

First, the Gude Landfill has known contamination that needs to be remediated, before any other activity occurs on the Landfill. The Maryland Department of the Environment (MDE) has told DEP that the “analytical data indicates that Gude Landfill is having an adverse effect on the surface and groundwater on the site and suggests that the impact may extend beyond the property boundary of the landfill. Montgomery County is directed to monitor and evaluate the potential risks associated with the documented contamination. The County must complete a "Nature and Extent Study" (NES) to determine the exact nature of the contamination, the specifics of the site the lead to the contamination and the extent to which the contamination has traveled. That must be done first and DEP must bear the cost.

Second, DEP has not done any analysis as to the impact of such a project on the Landfill or the surrounding area. DEP formally proposed moving the Yard Trim activities to the Landfill Site in a letter to MDE. However, notification of intent was insufficient for MDE, and DEP will be required to submit much more justification - such as the impact analysis.

Third, DEP will not be allowed to do any construction on the Landfill without the approval of MDE and MDE has required DEP to submit a remediation plan. It would be financially irresponsible to commence a project only to find that the remediation plan requires the entire project be removed. (The County Council should note that MDE has approval authority for any construction on the Gude Landfill.)

We appreciate the need to relocate these operations. But, there are alternatives which have not been considered, and there has been no community outreach over the impact such a development would have. We have made repeated requests to the County Executive staff on the need for remediation first but to no avail. Instead, DEP has begun site preparation for the Yard Trim Project.

We support intelligent reuse of the Landfill. But, urge that we focus first on remediation of known environmental concerns – before we add to the problem.

As you know, the County is facing a significant and expensive remediation at the Gude Landfill. Our cherished taxpayer funds, in this very tight budget environment, must be dedicated to remediation first, not development.

Thank you for your consideration.

Keith Ligon  
Chairman, Gude Landfill Concerned Citizens Committee  
15501 Moravia Court  
Derwood, MD 20855  
GLCC@hollybrooke.org



**MONTGOMERY COUNTY PLANNING BOARD**  
 THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

March 3, 2009

The Honorable Phil Andrews  
 President  
 Montgomery County Council  
 100 Maryland Avenue  
 Rockville, Maryland 20850

Subject: Review of Comprehensive Solid Waste Management 10 year Plan

During the Summer of 2008, Planning Board staff provided comments to the Division of Solid Waste Services for the revision of the Montgomery County Comprehensive Solid Waste Management 10 Year Plan. Based on the updated plan's response to staff's comments, we endorse the overall plan and commend Division of Solid Waste Services staff on formulating a thorough and intelligent approach to solid waste management in the County. This plan contributes significantly to protecting the environment of Montgomery County.

Regarding the proposal to relocate yard trim handling operations from the Shady Grove Transfer Station to the site of the closed Gude Landfill: The Board has serious concerns about the continuing leaching of contaminants from the Gude Drive landfill into the surrounding groundwater and surface waters. Due to these concerns, the Board cannot endorse moving the yard trim operation or establishing any other uses on the site of the Gude landfill without further analysis and a clear determination that such actions will not exacerbate the existing pollution problems. Planning Board staff will continue to monitor this proposal and expects these questions to be resolved before any mandatory referral on the re-use of the Gude Landfill is submitted to the Planning Board for review.

Attached is the staff report from our Planning Board hearing on February 26, 2009, listing the Planning Board staff comments and how the Plan update has responded to our comments. If you have any questions or comments, please direct them to Steve Findley of our Environmental Planning staff. He can be reached at (301) 495-4727.

Thank you for the opportunity to review and comment on this Plan.

Sincerely,

Royce Hanson  
 Chairman

RH:SF:ss  
 Attachment

cc: Keith Levchenko, Montgomery County Council

2009 MAR 10 11:24 AM  
 MONTGOMERY COUNTY PLANNING BOARD

23



**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

February 13, 2009

**MEMORANDUM**

To: Montgomery County Planning Board

Via: Mark Pfefferle, Acting Chief *MP*  
Environmental Planning Division

From: Steve Findley, Planner Coordinator *SFH*  
Environmental Planning Division

Subject: Comprehensive Solid Waste Management 10 Year Plan, 2007-2016  
Triennial Review

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**STAFF RECOMMENDATION:** Approval to transmit comments to the County Council.

**BACKGROUND**

Title 9, Subtitle 5 of the Environment Article of the Annotated Code of Maryland requires that the County develop a Solid Waste Management Plan for the County. The plan is to cover a ten-year period and must be updated every 3 years. It must detail the County's solid waste disposal systems, including solid waste acceptance facilities and systems for collection and disposal of solid waste by public or private entities.

The Comprehensive Solid Waste Management 10 Year Plan addresses all aspects of solid waste management in the county, including source reduction, recycling, municipal solid waste collection and disposal, yard waste, and special waste streams such as construction waste, hazardous waste, and biosolids from wastewater treatment operations. It prioritizes waste management approaches, placing the highest priorities on waste reduction, followed by recycling, then incineration with energy recovery. Landfilling is the last and least preferred approach.

The 10 Year Solid Waste Management Plan was introduced by the County Council on Jan. 27, 2009. A public hearing is scheduled for Feb. 24, 2009 and the work session with the Council's Transportation and

Environment Committee is scheduled on Mar. 9, 2009. It is anticipated that the Council will adopt the 10 Year Solid Waste Management Plan during the spring.

### **SUMMARY AND ANALYSIS**

Staff had the opportunity to comment on this plan last summer when it was in draft form. The updated plan contains substantial changes and additions that address staff's comments. We endorse the overall plan, and believe that it contributes significantly to environmental quality in Montgomery County.

The plan does propose that the closed Gude Drive landfill be upgraded to allow a yard waste handling facility to operate on the site, with the intention of shifting yard trim handling operations currently conducted at the solid waste Transfer Station to the Gude Drive site. This project is included in the County Executive's CIP. The plan states that "final decisions on site improvements being designed for relocation of yard waste operations from the Transfer Station to an area at the Gude landfill will be made during subsequent CIP review of that design."

#### **Waste reduction**

Waste reduction is monitored by tracking per capita and per employee waste generation trends. Waste reduction is promoted through "consumer education and technical assistance using various media, including development, production and distribution of education and promotional materials, public and private schools outreach, training and support of [volunteers who assist with recycling and composting efforts], workshops, demonstrations and seminars... Both national and local data indicate trends toward increased waste generation." The plan urges that all county agencies strive to model behaviors that result in reductions in waste generation.

#### **Recycling Goals and Performance**

The County has established a goal to "achieve, maintain or exceed 50 percent recycling of municipal solid waste by the end of Calendar Year 2010." In support of this goal, the County operates the Materials Recovery Facility (MRF) at the Solid Waste Transfer Station in Derwood, Maryland. Paper is baled at the MRF for transfer to a private company under contract to the County for paper recycling. Comingled plastic, metal and glass containers are separated by the MRF for sale to other recycling companies. Through aggressive education and enforcement of mandatory recycling laws, the County has achieved a recycling rate of over 43% in Fiscal Year 2007. The plastics recycling program was expanded significantly in 2008 to include plastic lids, food-grade tubs, jars, pails and buckets.

#### **Yard Waste Recycling**

The County encourages grasscycling and backyard composting to reduce the amount of yard waste reaching the Transfer Station. County yard waste handling is done at two facilities: the Transfer Station in Derwood and the Yard Waste Composting Facility in Dickerson. Yard trim is delivered to the Transfer Station by County and private haulers as well as private individuals and landscaping firms. Yard trim received at the Transfer Station may be ground into mulch for sale; the remainder is transferred to the Yard Waste Composting Facility where it is composted and bagged for sale. When rail capacity is

available, yard trim is transferred to the Dickerson site by rail, helping to reduce truck traffic. There is a proposal in the Comprehensive Solid Waste Management 10 Year Plan to relocate the yard trim handling operation currently housed at the Transfer Station to the closed Gude landfill. A final decision on this will be made as part of the review of the County Executive's CIP.

#### Resource Recovery Facility

Combustible non-recyclable municipal solid waste is collected at the Transfer Station for shipment to the County's Resource Recovery Facility (RRF) in Dickerson, Maryland. The waste is burned to turn its captured energy into electricity using steam-driven turbines. In the process, certain resources, such as heavy metals, are recovered for recycling. The RRF is considered a model for its efficiency and state of the art pollution-reduction technology. Emissions are continuously monitored to ensure compliance with State and Federal emissions limits.

Advantages of the RRF include generation of electricity by a method that produces lower emissions than coal-burning power plants; reduction of methane production normally associated with landfilling operations (methane is much more potent as a greenhouse gas than CO<sub>2</sub>); resource recovery; and reduction of landfill requirements. Incineration of municipal solid waste reduces its weight by 70% and its volume by 90% prior to landfilling, resulting in much more efficient landfill disposal.

The County and their partner Covanta Energy are continually seeking ways to improve the RRF and its operations. A project currently underway should significantly reduce NO<sub>x</sub> emissions from the facility. Use of the rail line for transfer between the Transfer Station and the RRF adds efficiency and reduces greenhouse gas emissions by reducing the number of truck trips needed to haul municipal solid waste to the RRF.

While the RRF has many significant advantages for municipal solid waste disposal, it is not perfect. No energy generation plant that burns fuel is emission-free. Neighbors in the Dickerson area have reported problems with odors and stack emissions. Truck traffic into and out of the facility and occasional blasts associated with maintenance disturb the peace of the agricultural reserve. The Dickerson Area Facility Implementation Group (DAFIG) was created to give neighbors a venue for interacting with County, Covanta, and Mirant (coal burning power plant located adjacent to the RRF) officials to find ways to improve operations and reduce impacts on the community.

#### Landfill

The County has a contract with a commercial landfill in Brunswick, Virginia to landfill ash from the RRF as well as "bypass" waste (waste that is non-combustible and non-recyclable that bypasses the RRF, MRF and Yard Waste Composting Facility). Most of the ash from the RRF is transported by rail to a railhead near the landfill site in Brunswick. The ash travels the remaining distance by truck. Bypass waste is transported directly to the landfill by truck.

The County maintains 820 acres near Dickerson, Maryland as a potential in-County landfill site in the event that “economic conditions or changes in the law render out-of-County waste disposal infeasible.” This property, known as Site 2, is currently leased out for agricultural use.

### Special Waste Streams

The **Comprehensive Solid Waste Management 10 Year Plan** details the collection and disposition of a variety of special waste materials, including *Land Clearing and Construction and Demolition Debris (C&D)*, *Hazardous Waste*, *Special Medical Waste*, *Animal Carcass Waste*, *Bulky Waste*, *Wastewater Treatment Biosolids*, and *Agricultural Waste*. Many of these are hauled out of County for treatment at specialized processing facilities.

### Adequacy of Facility Capacities

A primary concern of staff is that the systems and facilities for collecting, hauling, processing, and/or disposing of solid waste are adequate to accommodate existing and projected future County development. The Montgomery County Division of Solid Waste Services uses M-NCPPC projections to assess the adequacy of these systems and facilities. Their assessment indicates that there is sufficient capacity in all of these areas for current and projected development.

## **STAFF COMMENTS ON THE DRAFT 10 YEAR PLAN AND RESPONSES**

Environmental Planning staff was given the opportunity to review and comment on the Draft Comprehensive Solid Waste Management 10 Year Plan in the summer of 2008. Following are staff's most substantial comments on the draft, and how the Plan introduced for Public Hearing addresses staff comments:

### Staff Comment #1:

“We recommend an increasing focus on sustainability in this plan, particularly in regard to monitoring and reducing greenhouse gas emissions. In particular, we encourage refinement of efforts to model existing and projected greenhouse gas emissions associated with solid waste management. We would like to recognize work that has been done in this area, and endorse such efforts as the Resource Recovery Facility that recovers energy from municipal solid waste to generate electricity, the Materials Recovery Facility that facilitates recycling, and the Yard Trim Composting Facility that recycles yard waste into beneficial products for gardening and agriculture. These combined efforts significantly reduce the need to landfill solid waste and reduce the greenhouse gas emissions that accompany landfill operations.”

### DEP Response to Comment #1:

The updated Plan has added a new section on Greenhouse Gas and ozone emissions (Section 4.6), and a new Action Plan item, 5.5.1.12: “The County will develop a complete, solid waste system-wide, inventory of GHG (greenhouse gas) and ozone-related emissions, and will include net emissions effects in the consideration of future changes in (the) solid waste management system.”

Staff Comment #2:

“Page 5-53, second paragraph (Section 5.3.2) states: “Land clearing and demolition debris generation is thought to be tied directly to population growth and the resulting need for land clearing and new construction. As stated in Chapter Three, this category is expected to grow at the rate of population change with existing and proposed private facilities adequately serving County needs for the next decade.”

Our master and sector plans as well as development review projects indicate that building in the County is shifting from greenfield development to redevelopment of existing developed areas. This shift will result in generation of larger amounts of construction and demolition debris. This study should include strategies for increasing deconstruction of old buildings and the re-use and recycling of deconstructed building materials. Given reasonable assumptions for re-use and recycling, confirm the adequacy of existing and proposed private facilities to handle the resulting volume.”

DEP Response to #2:

The updated Plan significantly expands discussion of C&D waste in Sections 4.2.1 and 5.3.2., including an acknowledgement that the larger proportions of land clearing and demolition waste may shift away from land clearing debris toward more demolition debris. Section 4.2.1 notes that, although there are currently multiple destinations for disposal of C&D waste, most are not equipped for recycling the materials. The section concludes that “the County’s hierarchical preference that waste be recycled rather than disposed dictates a planning direction with respect to C&D management. Specifically, the County will continue to explore the fiscal and operational feasibility of increased recycling for land clearing and demolition debris generated from County roadway construction projects. In addition, the County should endeavor to more closely monitor and encourage private sector C&D recycling activities and opportunities.”

Staff Comment #3:

“In Section 5.2.1.1, item f(4), “Plan of Action: Transfer Station,” the 2004 plan notes the proposed “evaluation of alternative sites, including a surplus WSSC site on Gude Drive, for the possible movement of certain discrete waste operations that are presently handled at the Transfer Station site.” An update of this evaluation might be helpful in this plan.”

DEP Response to #3:

As noted above, the updated Plan includes discussion of a plan to move yard trim handling operations from the Transfer Station to the site of the closed Gude landfill. The primary reasons are space and safety considerations at the Transfer Station. At certain times of year, the amount of yard trim coming into the Transfer Station, combined with the number of people using the Transfer Station, puts people in uncomfortably close proximity to the tub grinders that grind up the yard trim. In addition, increases in traffic cause traffic jams at the Transfer Station, resulting in long lines of idling cars and trucks. The Plan proposes that moving the yard trim operations to the Gude site will increase the safety and efficiency of both the yard trim and Transfer Station operations. Operations at the Gude site would include drop off of yard trim and grinding operations, sale and/or distribution of mulch, and loading of truck/rail containers for shipment to the yard composting facility at Dickerson. Loaded containers would be taken back to the Transfer Station to be loaded onto rail cars for transport.

**Staff Comment #4:**

“Has a study been done to determine the effectiveness of the drop-off program for computers, automotive fluids and batteries, rechargeable batteries, building materials, textiles and tires? In particular, do we know if there is any problem with these materials being improperly disposed of, or if we could increase the percentage of these materials collected and properly treated in a cost-effective manner by increasing opportunities for disposal?”

**DEP Response to Comment #4:**

The updated Plan includes a discussion of expanded drop-off programs for many of the above items, including special collections at Park & Ride lots and schools (Section 4.1.2.4). There is also a discussion of expanded programs to handle “Solid waste with hazardous characteristics” (Section 4.1.6). The County will monitor the need to continue such programs.

**Staff Comment #5:**

“Regarding hazardous wastes (Section 5.1.2.5): How does the County address the disposal of fluorescent light bulbs, including the new cfl bulbs? This question covers both public education and collection and disposal processes.”

**DEP Response to Comment #5:**

The updated Plan includes a discussion of cfc disposal in the section on solid waste with hazardous characteristics (4.1.6). This section states: “There is a growing use of and interest in CFLs. Some private retailers such as Home Depot and IKEA stores have begun to offer CFL recycling opportunities at their stores. These retailers contract CFL collection services with their current hazardous waste collection company or through designated CFL recycling collection companies and programs. DEP will encourage this practice, and also will investigate the feasibility of County-sponsored satellite collection centers for CFLs and fluorescent tubes.”

**Staff Comment #6:**

The Parks Department will monitor parks following increases in tipping fees to make sure that illegal dumping does not increase. (Statement – no response required)

The remaining comments were editorial in nature, and have been addressed in the update of the plan.

WATER & ENERGY



# Washington Suburban Sanitary Commission

14501 Sweitzer Lane • Laurel, Maryland 20707-5902

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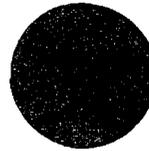
INTERIM  
GENERAL MANAGER  
Teresa D. Daniell

INTERIM DEPUTY  
GENERAL MANAGER  
Rudolph S. Chow

040542

February 12, 2009

The Honorable Phil Andrews, President  
Montgomery County Council  
Stella B. Werner Office Building  
100 Maryland Avenue  
Rockville, MD 20850



Dear Council President Andrews:

Thank you for giving us the opportunity to comment on the Comprehensive Solid Waste Management 10 Year Plan for 2007-2016 for Montgomery County. Attached are our comments for your review. If you should have any further questions, please do not hesitate to call my office at 301-206-8777.

Sincerely,

*Teresa D. Daniell*  
Teresa D. Daniell  
Interim General Manager

Attachment

2009 FEB 18 AM 9:25  
MONTGOMERY COUNTY  
GENERAL



## WSSC Comments on the Montgomery County Comprehensive Solid Waste Management 10 Year Plan (2007 – 2016)

- Page 1-9 & 10; “In addition, WSSC is responsible for the management of biosolids from wastewater treatment plants in Montgomery County and from the Blue Plains Wastewater Treatment Facility in the District of Columbia”.

WSSC is responsible for biosolids of three of the four wastewater treatment plants in Montgomery County, but not the Poolesville treatment plant. WSSC is responsible for approximately 45% of the Blue Plains Wastewater Treatment Facility biosolids. This is based on WSSC’s allocation of capacity at the Blue Plains Wastewater Treatment Facility. The remainder of biosolids is the responsibility of DC Water and Sewer Authority (WASA).

- Page 1-18, Table 1.2; Summary of Federal Regulations Affecting Solid Waste Management

Part 503: Standards For The Use Or Disposal Of Sewage Sludge should also be added.

- Page 2-2; While not related to WSSC, we believe that the statement “Between 1990 and 2000, minorities accounted for 125 percent of the County’s population growth...” is not clear.

Perhaps the intent of this statement was to indicate that the growth rate of minorities increased 125 percent as compared to the overall growth rate of the county during the 1990-2000 time period.

- Page 3-17, Table 3.7; The preceding paragraph lists the four WWTP facilities located in Montgomery County, however the table indicates that all biosolids are treated at WSSC facilities. WSSC is not responsible for operation of the Poolesville WWTP.
- Editorial, pages 5-44 and 5-45; Section 5.2.2 is repeated on both pages.
- Page 5-45; “Plan of Action: Seneca Wastewater Treatment Plants”. This title should read Plan of Action: Seneca Wastewater Treatment Plant.

2002 was the last full year that the old 5 mgd plant operated.

Seneca plant expansion from 20 mgd to 26 mgd is currently under design.

The sentence “However, the increased efficiency of the sludge dewatering facilities will improve future land application by reducing the number of wet tons of biosolids that will be transported and applied to agricultural land” is somewhat misleading.

Here is a comparison of 2002 and 2008 with the new plant and dewatering facility in operation:

<u>Year</u>	<u>Final Effluent Flow (avg mgd)</u>	<u>Wet Tons Hauled</u>	<u>Percent Solids</u>	<u>Dry Tons Hauled</u>
2002	6.3	11,124	11.9%	1,324
2008	15.2	23,945	26.4 %	6,206

Even though the dewatering efficiency did increase significantly, the large flow increase (plus lime addition) resulted in an overall increase in wet tons hauled.

- Potomac WFP solids are not mentioned in the report. For 2005 – 2007, about 14,000 wet tons per year were hauled from the plant, at ~28% total solids. The solids were hauled by a contractor and used in blended topsoil and mulch products.

**Levchenko, Keith**

**From:** Leventhal's Office, Councilmember  
**Sent:** Tuesday, March 03, 2009 11:57 AM  
**To:** Richard Hill  
**Cc:** Levchenko, Keith; Locke, Dan  
**Subject:** RE: Your Proposed use of Site 2 Landfill

Dear Mr. Hill:

Thank you for these very helpful comments. I am requesting that they be included in the packet for the Transportation, Infrastructure, Energy and Environment Committee's March 9 meeting on the Solid Waste Management Plan.

Best regards,  
 George Leventhal  
 Montgomery County Councilmember

---

**From:** Richard Hill [mailto:rhill@asis.org]  
**Sent:** Fri 2/27/2009 11:16 AM  
**To:** Floreen's Office, Councilmember; Berliner's Office, Councilmember; Leventhal's Office, Councilmember  
**Cc:** Knapp's Office, Councilmember  
**Subject:** Your Proposed use of Site 2 Landfill

February 26, 2009

Dear Council Members Floreen, Leventhal, and Berliner

(copy of message attached)

I am writing to you on behalf of the County's Dickerson Area Facilities Implementation Group (DAFIG) because I was informed that you requested the Division of Solid Waste Services (DSWS) to respond to a suggestion by Ms. Tillery that DSWS develop the proposed Site 2 landfill property for receipt of the County's yard trim collection and grinding operations instead of conducting those operations on a portion of the Gude Landfill site, which already was approved for this purpose. DAFIG is the County's citizen advisory group with oversight of facilities in the Dickerson area including Site 2. Other high impact facilities located in the Dickerson area within DAFIG's purview include the Resource Recovery Facility where all of the County's trash is incinerated, and the Yard Trim Composting Facility where all the County's leaves and grass clippings are dumped for composting. Adjacent to those facilities is one of the largest coal-fired power plants in the state, the Mirant Power Plant, with a coal ash landfill site adjacent. These high impact, environmentally undesirable land uses occupy over 1000 acres of the County's model Agricultural Reserve.

Consequently, developing Site 2 to accommodate the operations currently being performed at the closed Gude Landfill appears very problematic to us, both economically and environmentally for the following reasons:

- An access road into the site would have to be prepared which would be costly and require its own environmental review. Any development of Site 2 would reopen a suspended lawsuit filed by Sugarloaf Citizens Association, which would be costly to the County both financially and politically.
- Being open and in the middle of the Agricultural Reserve, the land is being actively farmed and supporting the County's agricultural economic base. Agricultural operations and its economic benefits would cease if the site were developed
- Utilizing Site 2 would require cancelling, altering, or renegotiating leases on the land, as Site 2 is currently largely leased for residential and farming purposes
- The site itself would have to be prepared. There are no scales or paved roads now. It is problematic, in our minds, whether the current permit and other agreements would apply for this use.
- Operations would be occurring atop an EPA-designated Sole Source Aquifer, the only source of drinking water for Upcounty residents, which makes the threat of contamination unacceptable
- All the materials would have to be moved to the area by truck, whereas now material being brought to the nearby Resource Recovery Facility and Yard Trim Composting facility arrive primarily by way of rail, which is more efficient and much safer than trucking material along narrow Upcounty rustic roads.
- It would necessitate trucking materials from all over the county to the least central point, increasing road congestion as

3/6/2009

well as costs.

□ Materials would have to be trucked again from the grinding area to the compost facility (leaves and grass) or would be hauled away by the mulch hauler to his site for further processing. This would again necessitate loading and trucking the materials over roads that are "rustic" and decidedly not built for heavy truck traffic.

The rural/rustic roads around Site 2 are defined by the County as narrow, low volume roads intended primarily for local use, as designated by Maryland-National Park and Planning Commission. They often have substandard bases. Any work on a rustic road right of way has to go through additional permitting from DPS and review by the County's Rustic Roads Advisory Committee. See link <http://permittingservices.montgomerycountymd.gov/dpstmpl.asp?url=/permitting/r/nfrr.asp>.

Access to the site would be problematic. Options could include: 1) Rt. 28 to a dangerous turn onto Martinsburg Road, and then over a designated rustic and historic road that is not built for such traffic; 2) Rt. 28 to a very dangerous turn onto West Hunter Road; or 3) accessing through downtown Poolesville along Rt. 107 to Wasche Road, another designated rustic road. None of these options would be acceptable to the communities involved. If Ms. Tillery's number of "tens of thousands of trucks" is accurate, these cannot safely be routed along any of these roads.

In her testimony to you on behalf of the Gude Landfill Concerned Citizens, Ms. Tillery stressed the County's goal of minimizing the impact of activities on any one part of Montgomery County. Upcounty has suffered decades of environmental abuse for the benefit of Downcounty residents and businesses. Another environmentally undesirable land use is not acceptable. Site 2 is not "another environmentally preferable" site as Ms. Tillery suggests. It is far from that. It is a very fragile land area that is already stressed to the max by environmentally undesirable land uses.

In short, developing Site 2 to handle the operations currently taking place at the Gude Landfill would be very costly not only financially, but from an environmental and public health and safety standpoints as well.

The Dickerson area Facilities Implementation Group, whose mission is to provide citizen input and oversight advice to the County on the environmental and socio-cultural impacts of the County's Dickerson Area facilities, strongly opposes the notion of developing Site 2 for any purpose other than its current use - farming. Our opposition is not just based on the location in our neighborhood, but also on the cost implications for the County. Given the current environmental and economic challenges facing the County, now is not the time to expend scarce revenues on such an endeavor, especially one that would greatly increase the County's carbon footprint..

Sincerely,

Richard B. Hill  
Chair, Dickerson Area Facilities Implementation Group

Cc: Council Member Knapp, Dan Locke, FIG, SCA

Richard B. Hill  
Executive Director  
American Society for Information Science and Technology  
1320 Fenwick Lane, Suite 510  
Silver Spring, MD 20910  
Fax: (301) 495-0810  
Voice: (301) 495-0900



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard, Suite 605 • Baltimore MD 21230-1719  
410-537-3000 • 1-800-633-6101

Martin O'Malley  
Governor

Shari F. Wilson  
Secretary

Anthony G. Brown  
Lieutenant Governor

Robert M. Summers, Ph.D.  
Deputy Secretary

February 26, 2009

Mr. Peter R. Karasik, Section Chief  
Montgomery County  
Department of Environmental Protection  
Division of Solid Waste Services  
16101 Frederick Road  
Derwood MD 20855

Dear Mr. Karasik:

On January 22, 2009, the Maryland Department of the Environment (the "Department") received a letter from you requesting to relocate Montgomery County's commercial yard trim/bulky wood processing operation from the Shady Grove Processing Facility and Transfer Station to the closed Gude Landfill. You state that the Yard Trim Facility will be located on approximately seven (7) acres of the landfill property located at 600 East Gude Drive, Rockville, Maryland.

The Department has reviewed the proposal and has the following comments. The proposal does not address the integrity of the existing landfill soil cover and its ability to withstand subsequent damage from the operation of the Yard Trim Facility, nor does the proposal evaluate if the operation will result in increased percolation of rainwater into the waste thereby increasing the generation of leachate moving through the unlined landfill. In order for the Department to consider your proposal, you must submit the following items for the Department's review and approval:

1. Measures to be taken to prevent or control ground and surface water pollution from the proposed operation. The Yard Trim Facility must be designed so that the proposed operation will not increase infiltration of water into the landfill.
2. An engineering analysis evaluating the effects of the proposed Yard Trim Facility on the closed landfill. The demonstration must include stability analyses showing that the operation of the Yard Trim Facility will not damage the underlying soil cover or negatively affect the ability of the cover to serve as a base capable of providing support to the yard waste activity, and that the soil cover's integrity would not be compromised by equipment use during the yard waste operation.

Mr. Peter R. Karasik  
Page Two

3. An evaluation of any potential impact from the proposed operation on the landfill gas control system at the landfill. Please include provisions for managing and venting of any gases that may form in proposed structures and measures to be taken for fire control for all auxiliary support facilities.
4. The proposed yard waste operation may require approval from the local soil conservation district prior to the start of construction of the proposed activity. Please submit to the Department an approved and certified Sediment and Erosion Control and Stormwater Management Plan for the proposed facility.

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As you are aware, the Department has sent a letter advising the County to determine the nature and extent of groundwater and surface water contamination on the site and submit a remedial action plan addressing the contamination. Please note, the course of action that the County decides to take to address the contamination may interfere with the plans for relocation of the Yard Trim Facility at Gude Landfill.

If you have any questions concerning the comments addressed in this letter, please call Mr. Kassa Kebede, Head of the Construction & Maintenance Section, at (410) 537-3318.

Sincerely,



Martha Hynson, Chief  
Landfill Operations Division

MH:KK:sm

--cc: - Mr. Horacio-Tablada -  
Mr. Michael Richardson