June 19, 1995

TO: County Council
FROM: Karen Orlansky, VO. Director
Office of Legislative Oversight

SUBJECT: Independent Financial Review of the Solid Waste Funds

The attached independent financial analysis of the solid waste collection fund and solid waste disposal fund was prepared by KPMG Peat Marwick LLP under contract to the Office of Legislative Oversight. A two-page Executive Summary can be found at circles 5-6.

Peat Marwick's financial review of the solid waste funds was divided into three tasks:

Task 1: Analysis of the solid waste funds' internal control structure;

Task 2: Analysis of the solid waste funds' allocation methods for FY 93 and FY 94; and

Task 3: Analysis of the solid waste funds' reporting process and reporting format.

The scope of work assigned to Peat Marwick did not include consideration of the Department of Environmental Protection's efficiency or program accomplishments. It also did not include an analysis of waste stream data or a broader analysis of the County's waste processing programs.

A final draft of Peat Marwick's report was transmitted to the Chief Administrative Officer (CAO) on May 23 for Executive branch review and comment. The written comments received from the CAO on June 19 are attached in their entirety, beginning at circle 46.

This report is scheduled for public release and presentation to the Council on June 27. A T&E Committee worksession on the report is scheduled for July 17.

c: Steve Farber, Council Staff Director

973/55
June 19, 1995

Ms. Karen Orlansky  
Director  
Office of Legislative Oversight  
Stella B. Werner Council Office Building  
100 Maryland Avenue, Room 509  
Rockville, MD 20850

Dear Ms. Orlansky:

In accordance with contract 21385AA, amendment 8, we have completed the financial analysis of Montgomery County's Solid Waste Fund. We have enclosed our final report with this letter.

Please contact Vince Loiacono, senior manager or me if you have any questions or comments.

Very truly yours,

[Signature]

John H. Hummel  
Partner
Financial Review of the Solid Waste Funds

Montgomery County
Maryland
Financial Review of
Montgomery County's
Solid Waste Funds

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Financial Review of the
Solid Waste Funds

INTRODUCTION

The Division of Solid Waste Management (Division), manages Montgomery County's (County) solid waste activities. As of July 1, 1995, the Division will be transferred from the Department of Environmental Protection to the Department of Transportation. In accordance with our contract, we performed the following three tasks:

• Task 1 - Analyze the Solid Waste Funds' Current Internal Control Structure

• Task 2 - Analyze the Solid Waste Funds' Allocation Methods for FY93 & FY94

• Task 3 - Analyze the Solid Waste Funds' Current Reporting Process and Format

In analyzing the Division's internal control structure, we interviewed members of management and staff; documented and evaluated the control environment, accounting system, and control procedures; and performed detailed tests of internal controls. Finally, we interviewed representatives of other departments in the County government and discussed their departmental inter-relationship with the funds.

In performing the second task, we studied how the Division allocated its FY94 and FY93 revenues and expenses to activities and outputs. In addition, we examined how the Division calculated the disposal, recycling, and collection service charges, and reviewed the reasonableness of the underlying methodologies. Our procedures included interviews, recalculation, and vouching certain information to source documents.

To analyze the Division's reporting process and format, we interviewed representatives of the following primary users of the Division's financial information:

• County Council
• Department of Environmental Protection
• Finance Department
• Office of Management and Budget
• Northeast Maryland Waste Disposal Authority
• Montgomery County Waste Coalition
• Solid Waste Advisory Committee
• Investment Managers
• Selected County Citizens

We reviewed the current reporting vehicles and compared them to the expressed needs of the users. We tested the FY94 and FY93 financial information and developed a new reporting model for the presentation of the funds' activities, as illustrated in the attachments to this report.

The requested scope of work did not include consideration of DEP's efficiency, program accomplishments, or overall purpose. It also did not include an analysis of waste stream data.
EXECUTIVE SUMMARY

We performed a financial review of the County's Solid Waste Collection fund and Disposal fund (the funds) which included an analysis of the funds':

- internal control structure,
- allocation methods for FY93 and FY94, and
- reporting process and format.

Enhance Policies and Procedures

Our analysis of the funds' internal control structure indicated that management's policies and procedures adequately safeguard the County's assets and provide reasonable assurance that public monies were used for the intended purposes. However, we noted certain areas within the internal control structure that require further review and improvement. These areas include:

- documenting the accounting and budget process,
- better defining the duties and responsibilities related to the accounting and budget activities of the funds, and
- providing cross-training for the Division of Solid Waste Management's (the Division) accounting and budgeting staff.

Manage Activities, Not Budgets

Our analysis of the funds' allocation methods revealed that FY93 and FY94 service charges were supported by reasonable and consistent estimates or actual results. In addition, we found that some, but not all, common costs were properly allocated to principal activities. However, during the interview process, many interviewees noted that they need to know the total revenues, total costs, and unit costs of the Division's principal activities. This information is currently unavailable because the County does not allocate the costs of several of its largest common cost centers, including the County transfer facility and administrative costs, to its principal activities.

We recommend the Division allocate all of its expenses to primary solid waste activities (e.g., refuse collection, recycling, collecting hazardous materials) by identifying and measuring appropriate cost drivers. A cost driver represents the underlying activity which is responsible for changes in the expense. For example, the number of tons of recycled material collected could be the primary cost driver for recycling expenses. By properly allocating all common costs, the Division can determine the total revenues, total costs, and unit costs of its activities.
We further recommend that the Division implement activity-based management of its principal activities by:

- identifying those activities,
- capturing all revenues and expenses of those activities,
- identifying the outputs produced (e.g., tons of glass recycled and sold),
- linking the activity costs to outputs, via activity cost drivers, and
- analyzing the outcomes to determine if they are consistent with performance goals.

Activity-based management would allow the Division to better monitor its solid waste activities and assist in developing an effective set of performance measures to continually monitor and analyze the Division's operations. By focusing on the profitability and cost of each principal solid waste activity, activity-based management would provide a better tool for making financial decisions.

**Implement Popular Reporting**

The Division is not meeting many user needs in its internal and external reporting. Although the Division prepares a variety of detailed operational reports, our interviewees stated that the information is:

- difficult to summarize and comprehend,
- not presented in a format that provides for analysis of activities, and
- rarely supported by narrative descriptions of calculation methodologies.

In light of the public interest concerning the County's solid waste activities and recently-implemented systems benefit charge, an important step the Division should make is to develop and distribute a popular report. This report could include discussions, graphs, and charts concerning:

- service charge calculations,
- performance results of activities,
- financial results of activities,
- indicators of performance goals and results, and
- benchmark comparisons to industry trends and best practices.

The popular report should be issued at least annually and be distributed to the County Council, the Executive Branch, and made available to the general public and other interested parties. It should make maximum use of visuals to illustrate the solid waste funds' financial activities.

Our analyses and related recommendations should serve to strengthen the solid waste funds. Further, our suggested improvements are long-term in nature, and should not be expected to be implemented in a few weeks time.
BACKGROUND

The mission of the Division, as stated in County budget documents, is twofold:

(1) Through the solid waste disposal fund, the Division manages the County's solid waste in an environmentally and economically sound manner. The program goal is to achieve a 50 percent reduction in the waste stream by the year 2000 through a comprehensive program of detoxification, reduction, reuse, and recycling, with the remainder to be disposed of in a waste-to-energy incinerator which produces electricity after which non-processable waste and residue are landfilled.

(2) Through the solid waste collection fund, the Division provides contracted refuse collection services to single-family households in Subdistrict A of the Solid Waste Management District.

Fund Structure

The County's solid waste activities are divided into two enterprise funds: the solid waste collection fund and the solid waste disposal fund. Enterprise funds are defined as funds whose operations are financed in a manner similar to private businesses, where the costs of providing services to the public are recovered primarily through service charges.

Solid Waste Collection Fund

The solid waste collection fund accounts for the "residential refuse collection" program. Section 48-43 of the County Code established the collection fund to be used to account for the collection revenues and expenditures of the solid waste collection and disposal district. All other financial activity of the Division, including recycling collection, is accounted for in the solid waste disposal fund.

Solid Waste Disposal Fund

The solid waste disposal fund accounts for the following disposal, recycling, and administrative programs:

- Commercial Recycling
- Recycling Program Development
- Detoxification
- Dickerson Compost Facility
- Multi-Family Recycling
- Oaks Sanitary Landfill
- Paper Recycling Center
- Commercial Refuse and Recycling Regulation
- Public Volunteer Coordination and Public Outreach
- Recycling Center
- Waste Reduction
- Recycling Collection
- Resource Recovery Facility
- Satellite Sites
- Site 2 Landfill
- Solid Waste Transfer Station
Overview of the Solid Waste Collection and Disposal Activities

The County’s residential refuse and recycling system is divided between Subdistrict A and B. In the Subdistrict A (=82,000 homes), the County employs private contractors to collect refuse, recyclables (commingled glass, metal, and plastic containers and newspapers), and yard trim. In the Subdistrict B (=99,000 homes), the County employs contractors to collect recyclables and yard trim. Residents outside of Subdistrict A either contract individually with a private hauler (subscription service) or haul their own refuse to the County transfer station.

The solid waste collection fund only accounts for the residential refuse collection service in Subdistrict A. The solid waste disposal fund accounts for the collection of yard trim and recyclables, as well as all other budget programs.

Recyclable materials and on recyclable refuse are hauled to the County Transfer Station in Shady Grove, Maryland for further processing:

- non recyclable materials are trucked to Oaks Landfill where they are buried;
- recyclable materials (e.g., aluminum, plastic, glass, and newspapers) are transferred to the Materials Recovery Facility (MRF) where the materials are separated and sold; and,
- organic materials (e.g., brush, leaves, and grass) are trucked to the County’s composting facility and sold.

In 1995, the County plans to complete the Resource Recovery Facility (RRF) in Dickerson, Maryland. Once operational, non recyclable refuse will be transported from the Transfer Station to the RRF via railroad. Electricity generated from the incinerator will be sold to the Potomac Electric and Power Company.

Organizational Structure

DEP is responsible for planning, implementing, and managing the County’s solid waste activities, which are carried out through the Division of Solid Waste Management. Effective in FY96, the Division will be moved from DEP to the Department of Transportation. The Division is currently organized in three sections and the Office of Division Chief. Attachment 5 provides a draft organizational diagram for the Division of Solid Waste Management. The functions of each section are described below:

Office of the Division Chief

The Office of the Division Chief is responsible for the administration of the Division. This includes preparing the annual budget for all programs, monitoring expenditures, and overseeing contracts.

Collections Section

The Collections Section is responsible for inspecting and licensing all haulers operating in the County. This section oversees the County’s contracts for refuse and recycling collections.
Waste Management and Waste Recovery Section

The Waste Management and Waste Recovery Section is responsible for managing the construction and operations of the RRF and the Site 2 landfill at Dickerson. This section is also responsible for collecting data which are used in budgetary and operational projections of the County's solid waste activities.

Operations Section

The Operations Section is responsible for the operation of the Transfer Station, Materials Recovery Facility (MRF), the Oaks Landfill, and the Compost Facility. Although the County's facilities are operated by contractors, the County is responsible for monitoring the contractors' performance and coordinating refuse disposal and recycling.
TASK 1 - Analyze the Solid Waste Funds' Internal Control Structure

The internal control structure of an entity consists of policies and procedures established by management to provide reasonable assurance that specific objectives will be achieved. The policies and procedures relevant to internal controls are related to the entity's ability to record, process, summarize, and report financial data. The internal control structure consists of three elements:

A. Control Environment
B. Accounting System
C. Control Procedures

A. Control Environment

The control environment consists of the following factors which may enhance or reduce the effectiveness of the Division's policies and procedures:

- Management's commitment to control
- Planning processes
- Communication processes
- Appropriate staffing
- Monitoring and feedback processes

Management's Commitment to Control

The Division's management is willing to provide full disclosure of its operations by reporting program results and information. However, based on observation and discussion with division staff, it appears that the Division functions in a reactive capacity rather than a proactive capacity much of the time. The Division staff spends a great deal of time responding to citizens' requests and unexpected budgetary issues. As a result, less time is spent on daily operational and administrative tasks.

Planning Processes

The Division is responsible for implementing the County's long term solid waste goals as described in the Montgomery County Comprehensive Solid Waste Management Plan. The plan provides the Division guidance for policy making, planning, and program formulation. The plan provides specific program objectives and operating goals. Execution of the plan is performed through the County's capital and operating budgets.
Communication Processes

The Division is open to disseminating information on its operations. Employees are kept informed of important matters and are able to communicate problems within the Division to persons of authority.

We noted, however, that the Division has no written policies and procedures which communicate responsibilities to the staff, such as procedures manuals detailing tasks involved in the budget and accounting processes. If policies and procedures are not well defined and written, management is less able to maintain efficient control over its operations. It is also likely to cause disruption if a staff member leaves or is on vacation.

Appropriate Staffing

It appears that the Division is under-staffed in certain key positions, and present employees are not cross-trained, but are required to function in other areas. For example, the function of budget projection, budgeting, and accounting is handled part-time by two people. Both of these people have other duties and responsibilities, which may result in neglect of their budgeting and accounting function duties for the Division and could result in mistakes being made and controls circumvented. In addition, when staff responsible for the financial accounting is absent, there is no one qualified to answer financial related questions. This problem was apparent during our analysis of the funds.

The Division has recently undergone a reorganization under the new County Executive's administration. The Division is in the process of hiring a business manager (new position) for the Division Chief's Office. This position is planned to assist the Division chief in financial operations and provide experience in the solid waste industry.

Monitoring and Feedback Processes

An entity engaged in business should actively analyze its operations to improve efficiency and correct deficiencies. The Division's activities are monitored and feedback is provided in a number of ways:

- The Division hires consultants to review various aspects of their operations and provide recommendations.

- The Division's operations have also been discussed in industrial publications (e.g., the September/October 1994 issue of Solid Waste Technologies). The published articles provide comparative analyses of the County's waste management operations.

- The Division reviews the performance of its staff by an annual evaluation process.

- The Division also receives feedback on its operations from County citizens.
B. Accounting System

The accounting system consists of the methods used to identify, record, and classify transactions and maintain accountability. The Division's accounting system encompasses the following processes:

- Budget projections
- Budget formulation
- Budget approval
- Transaction posting and budget tracking

Budget Projections

The Division's accounting cycle begins with budget projections. In this stage, the Division analyzes the County's historic refuse disposal patterns and projects them into the future by considering economic and social conditions. This base projection of expected level of service is used by program managers to develop their program projections.

Budget Formulation

The impact of the budget projections are quantified to determine the cost of achieving program goals or providing service. The projected cost information is incorporated into the Division's budget and accounting structure by assigning an index code (tracking code) to group revenues and expenditures by program and division.

Budget Approval

The Division submits its proposed budget to the Office of Management and Budget (OMB). The budget is reviewed by OMB staff, and revised to meet the County Executive's goals. It is then included in the County Executive's recommended budget which is sent to the County Council for review.

Transaction Posting and Budget Tracking

After the budget is approved by the County Council, OMB enters the approved budget into the accounting system (FAMIS). The approved budget provides the appropriated amounts for the solid waste budgets. The FAMIS system maintains a control to ensure that expenses do not exceed the appropriated amounts.

The continuous process of entering, editing, and verifying the financial information for the Division rests with the Department of Finance in the Division of Accounting. For example, the Division of Accounting is responsible for recording revenue, payroll, and other financial transactions related to the solid waste funds.
C. Control Procedures

Control procedures are policies and procedures which management establishes to provide reasonable assurance that specific objectives will be achieved. Examples of control procedures include proper authorization of transactions, segregation of duties, safeguards over access to records, and independent reviews of transactions.

We examined the control procedures over the following cycles:

- Billings and collections
- Procurement and cash disbursements

Billings and Collections

We analyzed the following three revenue cycles which comprise the Division’s billings and collections cycle:

- service charge billings and collections
- tipping fee revenue
- revenue from the sale of recycled materials

Service Charges

Service charges are billed for collection and disposal services. They are paid by County residents via property tax bills. Internal controls relating to service charges are discussed below:

- The annual service charges are determined during budget formulation and are approved by the County Council.

- The new service charges are loaded into taxpayer records by the Department of Information Systems and Telecommunications. After the records are entered, a report is generated listing all households in the collection district with a refuse code. This code identifies the type of refuse charge for each household. The Division reviews this report to ensure accuracy of the refuse code and to ensure that all eligible households will be billed. This control ensures the accuracy of the service charges on the tax bills and inclusion of all eligible households.

- The Accounting Division of the Department of Finance handles the accounts receivable. The Division of Revenue is responsible for collection of late payments. The Accounting Division is responsible for following up on outstanding late payments and writing off uncollectable amounts. If residents have moved to the area or buy/sell property, the Maryland State Department of Assessments and Taxation (the Assessments Division) is informed by the individual or the settlement office. The Assessments Division updates their data base and generates a report on a quarterly basis. This report is reviewed and updated by the Division of Solid Waste Management. If billing adjustments are required, adjusted bills are sent out on a quarterly basis.
• Taxpayers submit their remittances to the Division of Revenue in the Department of Finance. The amount paid is entered against the taxpayer's record in the system. This control ensures the amount collected is accurately recorded.

Tipping Fee Revenue

The contract haulers are charged a tipping fee for using the County's facilities. Tipping fees are either paid at the point of service or billed monthly by the County.

• Contract haulers are charged a tipping fee based on each ton of solid waste deposited at the transfer station and the Materials Recovery Facility (MRF). The weight of the refuse is calculated and recorded in the "Autoscale" system (the system) installed in the scale-house. The contractors either pay cash, or if approved by the Department of Finance, are invoiced monthly.

• The Department of Finance is responsible for approving all contractors before they are put on account. The contractors have to post a bond for the value calculated to be one month's worth of tipping fees.

• When cash is collected, it is recorded on the cash register and in the system. The two records are reconciled monthly by the Accounting Division. This control ensures that the correct tonnage and charges are calculated and recorded in the system.

• The system generates a daily report which is sent to the Accounting Division to be input into FAMIS. Accounts receivable are tracked separately on a subsidiary ledger and an aging report. These reports are used to generate invoices and calculate any interest charges.

• The section chief at the transfer station performs a reasonableness test monthly by comparing daily tonnage per the system with historic records. Significant fluctuations are investigated.

• The Accounting Division generates invoices for the contractors who have an account with the County. The Accounting Division maintains an aging report to track delinquent payments.

Sales of Recycled Materials

Recycled materials are sold for further processing. The County uses a contractor to market and sell the recycled materials and receives a percentage of the sale proceeds. The MRF staff reconciles the money received by the County with the sale of recycled materials as reported by the contractor. This control ensures that the correct amount is received and properly recorded by the County.
**Procurements and Disbursements**

The majority of the Division’s disbursements relate to contracted services. The related internal controls are described below:

- The annual expenditures are estimated during the budget process. The program managers propose the expenditures to support the program's operating goals. Expenditures are estimated for various program categories and each category is assigned an index code. This process ensures that expenditures are planned and identified to a specific program.

- Requests for contract payments are authorized by the program manager and the Division Chief. Requests are then sent to the Office of Procurement where they are reviewed, assigned a purchase order number, and entered into the accounting system.

- Vendors send their invoices to the contract program’s managers. The program managers approve each invoice after ensuring that the services or goods invoiced have been received. They verify this by examining receiving reports and certifications of completeness from contractors.

- Approved invoices are sent to the Accounting Division where they are entered into the accounting system. The system matches the purchase order and the amount of the invoice with the respective encumbrance. Once matched, a check is issued.

- The Division follows the County's procurement regulations for procuring all its contracts.

**D. Task I Recommendations**

1.1 **Review & Document Policies and Procedures**

The Division has not formally documented its operating policies and procedures. The Division should:

- document its financial and budgeting policies and procedures. This should be the responsibility of the Division Chief’s Office.

- establish formal cross-training programs. This would ensure that services are not jeopardized in the event that the assigned staff member is not available to perform assigned duties for an extended period of time.

- review the roles and responsibilities of all staff in the Division. This process would also provide management with data for appropriate staffing given the current and projected work load. The duties should be documented and communicated to the responsible staff member.

By documenting and updating the Division's policies and procedures regularly, at least annually, the Division will be sure that all employees are aware of their duties and responsibilities.
1.2 *Provide Additional Budget Training*

Developing the Division's annual budget is a long and difficult task. Although the primary members of the Division's budget team are experienced with Division's activities, many do not have formal accounting or financial backgrounds.

We recommend that program managers and staff members who work on the annual budget be provided with formal training to enhance their understanding of and expedite the budget process.

1.3 *Consider Implementing Electronic Accounting Procedures*

Transactions from the Transfer Station are manually loaded into the Division's financial system, which is a time consuming and cumbersome process.

We recommend an on-line link between the Transfer Station and the accounting division to facilitate transmittal of transaction data from the Transfer Station to the accounting system.
TASK 2 - Analyze the Solid Waste Funds' Allocation Methods

A. Revenue Structure and Allocation Methods

In FY94 and FY93, the solid waste funds generated revenues from two primary sources:

- service charge
  - disposal charge (i.e., tipping fee)
  - recycling charge (only in FY94)
  - collection charge
- sales of recycled goods

We analyzed the internal control structure related to these revenue streams in Task 1. Service charges represent amounts the Division charges residents and haulers for the collection, recycling, and disposal of their refuse. In FY94 and FY93, the service charges were recorded in one general ledger account, as opposed to separate accounts for each type of charge. We tested the accuracy of the service charge calculations later in this task.

The Division recorded the revenue generated from the sale of recycled materials in separate accounts, which facilitates the analysis of the sales of recycled materials. For example, sales of recycled newspapers, aluminum, glass, and plastics were separately identified in the general ledger. However, total recycling revenues (i.e., recycling sales revenue plus recycling charges) cannot be separately identified for FY94 since the Division recorded revenues from recycling charges with revenues received from disposal charges. Recording various service charges in one account hinders the financial analysis of the County's solid waste activities, and does not enable the Division to identify service charges and their related costs by activity.

Inter-Governmental Revenues

Municipalities and special taxing districts within the County (e.g., City of Rockville, City of Gaithersburg, Chevy Chase Section 4, etc.) collect their own refuse and recyclables. The collected refuse is disposed at the County Transfer Station. These jurisdictions are treated like commercial haulers in that the County weighs the debris and records the respective revenues based upon the tipping fee.

Section 48-32(d)(1) of the County Code states that cities and towns within the County may receive credits toward solid waste disposal charges for refuse collection. The County refunds the jurisdictions for refuse collection. In FY94 and FY93, these refunds, which approximate $300,000 a year, were based on estimated tons disposed, not actual tons. We reviewed the calculation of the estimate of refuse collected noting that it was mathematically accurate, consistent with prior years, and reasonable. However, the refuse collection credits should be based on actual activity in order to report accurate revenue information, as discussed in the "recommendations" section of this task.
Intra-Governmental Revenues

Various County departments use the Division's services. For example, the Department of Transportation (DOT) disposes its construction materials (i.e., asphalt or other construction materials) at the County Transfer Station. DOT's refuse is subject to the same controls as commercial vehicles. The County weighs the debris and records the respective revenues based upon the tipping fee.

County departments reimburse the Division through an annual intra-governmental transfer. OMB determines the amount of this transfer based on estimates provided by the Division. Since this transfer is based on estimates, the transfer may serve to subsidize the solid waste activities if it is greater than the actual costs of disposing DOT's refuse. On the other hand, if the transfer is less than the actual cost of disposing DOT's refuse, the solid waste fund is effectively supporting the activities of other agencies. The intra-government reimbursement should equal the cost of actual services rendered to ensure equitable funding of the solid waste fund, as discussed in the "recommendations" section of this task.

B. Expense Structure and Allocation Methods

In FY94, the solid waste disposal fund had 20 budget programs. During the year, the fund's transactions were assigned to the respective budget programs. For instance, direct costs, such as the costs of residential refuse collection, were charged to the residential refuse collection budget program. As discussed below, there were many indirect or common expenses between budget programs which were not allocated for financial analysis purposes.

Allocated Expenses

In FY94 and FY93, the majority of the Division's expenses were assigned to specific budget programs. However, the Solid Hazardous Waste Planning Group and the Disposal System Implementation Group served a variety of budget programs. In order to match these expenses with the associated budget programs, the Division allocated these costs based on the estimated workyears each group spent on each budget program. For example, if management estimated that a supervisor spent 25% of his/her time (i.e., workyears) working on the compost facility during the year, 25% of his/her personnel costs should be assigned to the compost facility budget program. Any related expenses (i.e., supplies, travel costs, telephone) should also be allocated based on workyears and adjusted throughout the year if necessary.

We reviewed the allocation methodology, noting that workyears was a reasonable cost driver. The allocation methodology was also consistent between FY94 and FY93.

Unallocated Indirect Expenses

In FY94 and FY93, the County charged the Division for various indirect expenses which other departments incurred in relation to solid waste activities. There were two types of indirect expenses - general and specific. General indirect expenses represented the Division's share of the County's centralized services provided by OMB, Department of Finance, Department of Human Resources, and other departments. The Division's
share of these expenses was based upon estimates determined at the beginning of the year by OMB.

Specific indirect costs represent departments, such as the County Attorney's Office, which charged the Division an additional indirect expense (i.e., 0.5 workyears in FY96). This expense, determined at the beginning of each year, was based on an estimate of additional time that the County Attorney's Office expects to spend on solid waste issues.

These indirect expenses were considered unallocated because they were not charged against specific budget programs. Consequently, even though they were charged to the Division, they were not included in total operating expenses for the funds. Indirect costs should be allocated to the Division's program activities for more effective financial analyses, as discussed in the "recommendations" section of this task.

**Unallocated Administrative Expenses**

The Division recorded some administrative expenses in their own budget category, even though these expenses related to activities of other budget programs. For example, the expenses related to the Division Chief's Office were recorded in their own budget category. Although this may be reasonable for budget purposes, it impairs the financial analysis of the Division because the expenses were not allocated to specific activities of the Division. Administrative expenses should be allocated to the Division's program activities in order to enhance the financial analysis of the Division's operations.

**Debt Service Costs**

The solid waste fund had over $48 million and over $50 million of revenue bonds outstanding and incurred approximately $3 million and $2.5 million of interest expense, as of and for the years ended June 30, 1994 and 1993, respectively. The costs of debt service were recorded in its own budget category.
The FY94 service charge was similar to the FY93 service charge with two exceptions, 1) the Division decreased the base disposal charge (tipping fee) to be competitive with other solid waste facilities and 2) the Division added the recycling charge to the total solid waste service charge calculation. We summarized the components of the service charges below:

<table>
<thead>
<tr>
<th>Formula</th>
<th>FY94 Example (twice/week collection Subdistrict A)</th>
<th>FY93 Example (twice/week collection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal charge</td>
<td>$67.83</td>
<td>$116.80</td>
</tr>
<tr>
<td>+ Recycling charge</td>
<td>78.25</td>
<td>-</td>
</tr>
<tr>
<td>+ Collection charge</td>
<td>51.49</td>
<td>88.23</td>
</tr>
<tr>
<td>Total charge via tax bill</td>
<td>$197.57</td>
<td>$205.03</td>
</tr>
</tbody>
</table>

**Disposal Charges**

The disposal charge equals the base disposal charge times the billing rate. For example, the FY94 and FY93 disposal charges for single family households were calculated as follows:

\[
\text{Base disposal charge (tipping fee)} \times \text{Billing rate} = \text{Disposal charge}
\]

1994: $57 \times 1.19 = $67.83
1993: $73 \times 1.6 = $116.80

In FY94, the base disposal charge (tipping fee) was $57. The charge was set to be competitive with other jurisdictions. A competitive tipping fee ensures that the County's solid waste will be disposed within the County and not hauled out of the County to other landfills. For example, if the County's tipping fee was set higher than alternative disposal facilities, refuse would be exported from the County, and disposal revenues would decrease.

The billing rate represents the estimated average tons of trash disposed per single family household. The Division based this estimation on data recorded at the County Transfer Station during FY93. The FY94 billing rate was re-computed as follows:

\[
\begin{align*}
\text{Single family tons of refuse disposed} & \quad 208,690 \\
+ \text{Number of single family households} & \quad + 178,150 \\
\text{Billing rate} & \quad 1.17 \text{ (Rounded)} \\
\text{Unexplained difference} & \quad 0.02 \\
\text{FY94 billing rate} & \quad 1.19
\end{align*}
\]
The Division estimated that single family households disposed 208,690 tons of refuse. This estimate was based on FY93 results. The number of single family households was based on the approximate number of property tax bills mailed.

In FY93, the base disposal charge (tipping fee) was $73. The Division determined the charge by increasing the FY92 charge of $70 by 4.3% for inflation. The billing rate represents the estimated average tons of refuse disposed per single family household. The Division determined this estimate by reviewing results from fiscal years 1988 through 1992.

**Recycling Service Charge**

The recycling service charge represents the recycling and composting expenses which are related to single family households. The recycling service charge includes amounts for the collection, processing, administration, and development of the recycling programs. The FY94 recycling charge was reconciled below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection and processing component</td>
<td>$13,336,000</td>
</tr>
<tr>
<td>Other budget programs</td>
<td>625,396</td>
</tr>
<tr>
<td>Technology R&amp;D reserve</td>
<td>33,806</td>
</tr>
<tr>
<td><strong>Total residential recycling expenses</strong></td>
<td>$13,995,202</td>
</tr>
<tr>
<td>Number of single-family households</td>
<td>+ 178,150</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$78.56</td>
</tr>
<tr>
<td>Unexplained difference</td>
<td>(0.31)</td>
</tr>
<tr>
<td><strong>FY94 recycling charge</strong></td>
<td>$78.25</td>
</tr>
</tbody>
</table>

The collection and processing component represents the budgeted expenses (net of revenues) related to the collection and processing of residential recycled refuse. The other budget programs component represents the single family household portion of the Administration, Waste Reduction, Household Hazardous Waste, and other budget programs related to recycling activities. Only 40% of these budget programs was included in the recycling charge calculation since the Division estimated that 40% of the recycled waste stream relates to single family households. Per conversation with Division representatives, this percentage was a rough estimate and was believed to be closer to 50%.

During our testwork and with the assistance of the Division personnel, we were not able to reconcile the above components of the recycling charge to the approved budget. However, the amounts were relatively consistent with forecasted and recommended amounts. Based on discussion during our testwork, the approval of the FY94 budget was performed late in FY93 and all budget adjustments may not have been captured in the final calculation, which explains the reconciling differences.
Collection Charges

In FY93, all households in the solid waste collection district, except those in district 11, received twice-a-week collection service. In FY94, all households in the solid waste collection district, except those in districts 5, 8, 11, and 12, received twice-a-week collection service. The collection charge consisted of an administration and collection component, as discussed below:

The administration component of the FY93 and FY94 collection charge calculations represents the expenses related to the following:

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration costs</td>
<td>$1,080,890</td>
<td>$1,069,230</td>
</tr>
<tr>
<td>Indirect costs</td>
<td>122,040</td>
<td>111,170</td>
</tr>
<tr>
<td>Investment income</td>
<td>(190,130)</td>
<td>(225,680)</td>
</tr>
<tr>
<td>Fund surplus *</td>
<td>0</td>
<td>(937,500)</td>
</tr>
<tr>
<td><strong>Net administration costs</strong></td>
<td>1,012,800</td>
<td>17,220</td>
</tr>
<tr>
<td>Households serviced (divided by)</td>
<td><strong>100,460</strong></td>
<td>82,160</td>
</tr>
<tr>
<td>Administration component</td>
<td>$10.08</td>
<td>$0.21</td>
</tr>
</tbody>
</table>

* In FY93, the Division reduced the administration component by including a portion of the available fund surplus, which had the effect of not increasing the collection charge for that year.

We vouched the administration costs and other components of the calculation to the FY94 and FY93 budgets and other supporting documentation.

** In FY94, the single family households in Subdistrict A included an estimate of 18,300 units for possible expansion. This expansion never happened. Accordingly, the 18,300 units did not incur approximately $494,000 of contract costs, nor could they absorb approximately $184,000 of administrative overhead costs. However, the inclusion of these estimated units, reduced the administrative component cost/unit from $12.33/unit to $10.08/unit.

The collection component for FY94 is described below:

<table>
<thead>
<tr>
<th>Contract Costs</th>
<th>Subdistrict A Single Family Households</th>
<th>Collection Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once/week collection **</td>
<td>$1,662,700 ** 40,150</td>
<td>$41.41</td>
</tr>
<tr>
<td>Twice/week collection</td>
<td>$5,045,770 60,310</td>
<td>$83.67</td>
</tr>
<tr>
<td></td>
<td>100,460</td>
<td></td>
</tr>
</tbody>
</table>
The collection component for FY93 is described below:

<table>
<thead>
<tr>
<th>Subdistrict A</th>
<th>Contract Costs</th>
<th>Single Family Households</th>
<th>Collection Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once/week collection</td>
<td>$70,700</td>
<td>1,570</td>
<td>$45.03</td>
</tr>
<tr>
<td>Twice/week collection</td>
<td>$7,093,850</td>
<td>80,590</td>
<td>$88.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>82,160</td>
</tr>
</tbody>
</table>

The contract costs represent the expenses for private hauling firms to collect refuse. We reconciled the amount to the budget in total. We also reviewed supporting documentation, including a sample of hauling firm contracts. The number of single family households was based upon the number of County property tax bills.

The total FY94 collection service charge represented the sum of the administration and collection components, as summarized below:

<table>
<thead>
<tr>
<th>Administration Component</th>
<th>Collection Component</th>
<th>Total FY94 Collection Service Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total once/week</td>
<td>$10.08</td>
<td>+ $41.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= $51.49</td>
</tr>
<tr>
<td>Total twice/week</td>
<td>$10.08</td>
<td>+ $83.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= $93.75</td>
</tr>
</tbody>
</table>

The total FY93 collection service charge represented the sum of the administration and collection components, as summarized below:

<table>
<thead>
<tr>
<th>Administration Component</th>
<th>Collection Component</th>
<th>Total FY93 Collection Service Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total once/week</td>
<td>$0.21</td>
<td>+ $45.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= $45.24</td>
</tr>
<tr>
<td>Total twice/week</td>
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</tr>
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<td></td>
<td></td>
<td>= $88.23</td>
</tr>
</tbody>
</table>

**Conclusion - FY94 and FY93 Service Charge Calculations**

FY93 was the last year the Division determined the tipping fee based on solid waste disposal expenses, as opposed to determining a competitive tipping fee based on market forces. In FY93, the Division also did not include a separate charge for the cost of the Division's recycling programs. These expenses were included in the disposal charge.

In FY94, the Division better calculated the costs of its services by implementing a recycling charge. The recycling charge helped to match the cost of the Division's service with those who received the related service. We recalculated the service charge and vouched the components of the calculations to supporting documentation.
The calculation and components of the FY94 and FY93 service charges appeared reasonable since the collection portion of the charge was based on the type of services received. For example, households who received twice-a-week collection paid an incremental difference for the additional services. However, the service charge includes several estimates (i.e., amounts of refuse disposed and administrative expenses) which were not compared to actual results. In addition, the overhead costs of the Division can be more fairly allocated over its activities. These improvements are discussed further in the following "recommendations" section of this task.
D. Task 2 Recommendations

2.1 Manage Activities, Not Budgets

During the interview process, many interviewees noted that they were interested in determining the costs of the Division's principal activities. Often several of these activities (e.g., recycling, composting) benefit from one budget program (e.g., County Transfer Facility and administrative costs). These common costs should be allocated to reflect profits, losses, and unit costs by activities.

We recommend the Division allocate all of its expenses to primary solid waste activities (e.g., refuse collection, recycling, collecting hazardous materials) by identifying and measuring appropriate cost drivers. A cost driver represents the underlying activity which is responsible for changes in the expense. For example, the number of tons of recycled material collected could be one of the cost drivers for recycling expenses. Once identified, it should not be difficult to measure the Division's cost drivers, since the Division maintains extensive databases.

We further recommend that the Division implement activity-based management of its principal activities by:

• identifying those activities,
• capturing the revenues and expenses of those activities,
• identifying the outputs produced (e.g., tons of glass recycled and sold),
• linking the activity costs to the outputs, via activity cost drivers, and
• analyzing outcomes to determine if they are consistent with performance goals.

Activity-based management would allow the Division to better monitor its solid waste activities and assist in developing an effective set of performance measures to continually monitor and analyze the Division's operations. By focusing on the profitability and cost of each principal solid waste activity, activity-based management would provide a better tool for making financial decisions.

2.2 Perform Year-end Close-out Procedures

During our analysis, we noted that several of the Division's schedules which support the budget and service charges did not reconcile to the County's final balances reported in the Comprehensive Annual Financial Report (CAFR). Although the Division considered these differences insignificant for budgeting purposes, it is a good control to use actual financial results.

We recommend that the Division reconcile the prior year results used in its budget and service charge calculation process to the County's CAFR. This will provide the Division with more accurate amounts for the management of its activities.

2.3 Re-classify the Chart of Accounts in the General Ledger

The County is in the process of upgrading its general ledger accounting system (i.e., FAMIS). The installation of the new system provides a good opportunity to reorganize the Division's accounting structure. Currently, different types of transactions
are recorded under the same account number. For example, recycling and disposal charges paid by County residents are recorded under the same account number. This information would be more useful if the charges were recorded in separate accounts because amounts such as total recycling revenues (i.e., amounts from the sale of recycled materials and the recycling service charge) could be easily determined.

The Division maintains a myriad of detailed spreadsheets to reconcile the general ledger accounts to the budget programs. The account structure in the new FAMIS system should be designed to provide the information needed for budget purposes without having to use these spreadsheets.

We recommend that the revenue and expense categories be re-classified by activity categories which could be further detailed by site location.

2.4 Review Contractual Service Agreements

The majority of the County's solid waste activities are contracted to private companies (i.e., solid waste refuse and recycling collections as well as operations of the Resource Recovery Facility, Recycling Center, and other facilities). Many of these contractors combine the costs of different services. For example, some of the haulers who collect recycled materials (via blue bins) and yard trim do not separate the costs for the different services.

We recommend the County require its contractors to separately disclose the costs related to the services provided (e.g., refuse collection vs. recycling collection), and that the Division account for such costs in separate accounts. For example, recycling and disposal collection costs are currently combined when the County pays haulers. Separating contractors' costs will allow the County to enhance the monitoring of expenses and aid the County in developing unit costs for its solid waste activities.

2.5 Review Governmental Charges

The Division collects revenues from other governments and departments based on a level of activity which is estimated at the beginning of the year. During our interviews, several interviewees stated that these service charges are significantly less than actual.

We recommend that the Division determine if it is feasible and cost-beneficial to charge government entities based on actual costs.
TASK 3 - Analyze the Reporting Process and Format

Through discussions with representatives from the Department of Environmental Protection, Office of Legislative Oversight, Finance Department, and Office of Management and Budget, we identified the primary users of the financial information related to the County's solid waste activities. We selected and interviewed a sample of these primary users. Initial interviews lasted from one half hour to two hours per interview. This process included follow-up interviews and teleconferences.

We conducted interviews with representatives of the following primary users of financial information of the solid waste funds:

- County Council
- Department of Environmental Protection
- Finance Department
- Office of Management and Budget
- Northeast Maryland Waste Disposal Authority
- Montgomery County Waste Coalition
- Solid Waste Advisory Committee
- Investment Managers
- Selected County Citizens

During the interviews, we discussed the usefulness of the current reporting vehicles of the Fund's activities, including internal reports from the Division, the Annual Operating Budget, and the Comprehensive Annual Financial Report (CAFR). We also discussed what additional information would be useful in analyzing the fiscal activity of the solid waste funds on a prospective basis.

A. Usefulness of Current Solid Waste Fund Reports

Fiscal activity of the solid waste fund is available from three principal sources:

- Internal Reports from the Division of Solid Waste Management
- Annual Operating Budget
- CAFR

Internal Reports from the Division of Solid Waste Management

Throughout the year, the Division generates several reports to monitor and document its activities. Contractors who operate the compost facility, recycling center, and the Resource Recovery Facility also provide the Division with monthly reports. A brief discussion of the principal financial reports prepared by the Division follows:
• **Projection Report**

The Projection Report is prepared by Division's Planning Manager and provides an extensive analysis of revenues and expenses by program category based on historical data and estimates. The report projects the future activity of the fund and is used as a principal tool in the budgeting process. In addition, the report is useful in analyzing different funding scenarios. A consulting firm helped design this report during FY93. The Division prepares the report throughout the year but does not distribute it to the County Council, citizens, and other users unless requested.

• **FAMIS Report Packet**

The FAMIS Report Packet includes income and expenditure data from the FAMIS general ledger system as well as information about capital projects. This report packet includes budget-to-actual schedules which provide an opportunity for management to monitor the funds' costs and to determine if additional appropriations are necessary. The Division prepares the report and distributes it to various members of management each month.

• **Maryland State Recycling Report**

The Maryland State Recycling Report documents results of the County's recycling efforts. This report details rates of recycling different types of residential and commercial solid waste. The County submits this report to the Maryland Department of Environment on a bi-annual basis.

• **County Transfer Station Report**

The County Transfer Station Report details the amount and type of trash received (in tons) through the Shady Grove Transfer Station including the Recycling Center. This report includes charts and graphs illustrating the volume and composition of refuse received for disposal and recycling. County personnel at the Transfer Station prepare this report and distribute it to Division management each month.

• **Maryland Environmental Science (MES) Transfer Station Report**

The MES Transfer Station Report details the amount and type of refuse recycled. MES prepares this report and distributes it to the Division each month.

• **Maryland Environmental Science (MES) Composting Report**

The MES Composting Report summarizes the compost facility activity. This report includes MES's budget-to-actual comparisons of financial and tonnage information. MES prepares this report and distributes it to MES's headquarters in Annapolis, Maryland each month. The report is not distributed to the Division.
• **Recycling and Waste Reduction Reports**

The County requires local businesses and multi-family units (e.g., apartments and condominiums) to file annual recycling and waste reduction reports. These reports provide the Division with an estimate of the amount and type of trash being recycled and allow the Division to assess the progress of the recycling programs. The Division receives the individual reports and is in the process of compiling them into an annual summary.

• **Resource Recovery Facility (RRF) Progress Report**

The RRF Progress Report details the engineering, construction, operations, and overall development status of the RRF. This report includes narratives, graphs, charts, and photographs which document the project development. Ogden Martin Systems of Montgomery, Inc., contractor for the RRF, prepares the report and distributes it to the Northeast Maryland Waste Disposal Authority, Division of Solid Waste Management, R.W. Beck and Associates, and various PEPCO officials each month. DEP also distributes the status report to investment managers upon request.

These reports provide evidence that the Division maintains an extensive database of information about its activities. However, the Division's financial information is not summarized in a reporting format that provides a general understanding of the County's solid waste activities.

**Annual Operating Budget**

The County Executive's recommended budget is submitted to the County Council in mid-March each year for the following fiscal year. For example, in March 1995, the FY96 recommended budget is released. The recommended budget provides a detailed review of budget programs and operating expenditures. The budget information includes program summaries, performance indicators, and financial plans for numerous budget programs.

Although some of our interviewees mentioned that the annual operating budget presents the Division's fiscal information in an effective manner for budgeting purposes, the budget does not provide an overview or analysis of revenues and expenses by activity. Several interviewees also mentioned that many account classifications, and service charges were not completely defined.

**Comprehensive Annual Financial Report (CAFR)**

The CAFR is the annual financial statement of the Montgomery County Government. The solid waste disposal fund and the solid waste collection fund are consolidated in the CAFR in order to present the combined solid waste: balance sheet; statement of revenues, expenses, and changes in fund equity; statement of cash flows; and supplementary segment data. The CAFR is not issued until approximately six months after fiscal year-end and is audited each year.
Many of the interviewees were aware of the CAFR. However, many did not use it on a regular basis, because the information presented is not user friendly and not presented by activity. In addition, the financial information did not provide functional details of revenues and expenses for analysis purposes. For example, in the FY94 CAFR, over $26 million was classified in one expense category (i.e., contractual services) while seven expense categories related to expense line items which were less than $300,000.

B. Users' Needs of Financial Information

Based on our interviews with the primary users of the solid waste funds' financial information, the users are interested in information that would allow them to:

- gain an improved understanding of the cost of services provided,
- review the reasonableness of the service charges and user fees based on the cost of services provided,
- assess the cost-benefit relationship of the solid waste activities,
- measure performance of program activities,
- provide a vehicle to analyze future scenarios,
- review the Division's strategy for market conditions,
- monitor the environmental impact of the solid waste funds' activities, and
- help make a wide range of financial and economic decisions.

Based on our interview process, the current reporting vehicles do not present the solid waste activities in the most effective manner. The common themes discussed were:

- **User Friendliness** - Since the solid waste funds' activities are complex, the information presented should be clear and concise to provide users a starting point to analyze the Division's activities.

- **Functionality** - In order to better understand and analyze the efficiency of the Division's activities, a report which illustrates revenues and expenses by activity would be beneficial and would facilitate sound financial management decisions. In addition, functional or activity based information would assist in developing unit costs and performance measures.

- **Reliability** - The integrity of the financial information and the internal controls over the accuracy and distribution of the information is continually questioned.

- **Timeliness** - The solid waste activities are complex and are affected by changes in market conditions. In order to monitor and be aware of solid waste issues, a status report should be formally distributed on a timely basis periodically throughout the year. This would eliminate last minute decisions which are based on incomplete or inaccurate information.
C. Reporting Model for the Solid Waste Fund's Activities

KPMG developed a financial reporting model that better addresses the needs of the users of the Division's financial information. The reporting model is intended to be a working document that can be tailored to meet the evolving needs of its users and reflect changing market conditions. The format presented is a starting point of a financial statement presented on a functional (activity) basis.

Fiscal Year 1994 and 1993 Financial Information

Attachment 1 is a sample financial report of the solid waste funds for fiscal years 1994 and 1993. The Schedule of Operating Revenues and Expenses is designed to provide a simplified overview of the funds' financial information. This schedule summarizes the principal types of revenues generated by the Division and related costs of services. The accompanying Notes to the Schedule (see Attachment 2) serve to summarize the activities illustrated in the schedules as well as discuss the significant accounting policies and assumptions.

Certain revenues and expenses in Attachment 1 were not allocated among the functions of the Division. These balances are disclosed as unallocated revenues or expenses. We reviewed the Division's allocation methods for fiscal years 1994 and 1993, as discussed in Task 2, and provided recommendations as to ways to further allocate revenues and expenses. We also performed the following additional procedures:

- reconciled total revenues and expenses from the Division's report (Attachment 1) to the CAFR noting that the financial information was consistent,
- reconciled budgeted amounts to the County's approved budget in total and on a program level, and
- compared actual-to-budget amounts and investigated any unusual variances.

Activity-Based Financial Reports

Attachment 3 illustrates a financial activity-based report which allocates all of the Division's revenues and expenses to the Division's solid waste activities. As previously discussed, the Division currently maintains a detailed database of information generated internally or by contractors. If accumulated and summarized, that information could be entered into the County's new FAMIS software, with modifications to certain index codes, allowing the Division to report its financial performance based on program activities.

The Division could add subsidiary schedules to this report (see Attachment 4). The subsidiary schedules could include the amounts of revenues and expenses related to processing specific types of commercial and residential recycled materials, including aluminum, paper, glass, and plastic. Additionally, the notes could be enhanced by summarizing the status of capital projects and outstanding debt related to solid waste activities. A Schedule of Tons Disposed and Recycled, which would detail the breakdown of the County's waste stream, could also be attached to this report.
D. Task 3 Recommendations

3.1 Enhance Performance Measures

Although the Division does report program indicators for certain programs in the annual budget, we recommend that the Division enhance its measurement and reporting of the effectiveness and efficiency of its activities, in conjunction with our first recommendation in Task 2, "manage activities, not budgets." Performance measures include:

- **input measures** which assess the breakdown of labor and capital resources. Examples include a comparison of the number of personnel to the number of vehicles or facility space.

- **output measures** which assess the size of the waste stream and the remaining life of landfills. Examples include tons processed per day, per year, or other specified period.

- **outcome measures** which assess the economic, environmental, and social impact of program activities. Examples include sales of recycled goods, number of days environmental standards are met, and the number of citizen complaints.

- **efficiency measures** which assess the efficiency of program activities. Examples include cost per ton of recycled aluminum or the cost per ton of refuse to be incinerated.

Financial analysis of the operations of the Division should not end with performance measures. Performance measures provide a starting point in enhancing the quality of the Division's decisions, services, and accountability. From strategic planning to communicating results, performance measures can help improve the County's solid waste operations.

3.2 Develop and Distribute a Popular Report

As discussed, the Division prepares a variety of detailed operational reports which serve important purposes, but information provided is:

- difficult to summarize and comprehend,
- not presented in a format that provides for analysis of activities, and
- rarely supported by narrative descriptions of calculation methodologies.

In light of the public interest concerning the County's solid waste activities and recently-implemented systems benefit charge, we recommend that the Division expand its external reporting process to include a popular report for its citizenry. This report could include discussions, graphs, and charts concerning:

- service charge calculations,
- results of activities,
- financial results,
- indicators of performance goals and results, and
- benchmark comparisons to industry trends and best practices.
The popular reports should be issued at least annually and be distributed to the County Council, the Executive Branch, and made available to the general public and other interested parties. These reports should make maximum use of visuals to illustrate the solid waste funds' financial activities and position.

3.3 *Expand the Responsibilities of the Business Manager*

The accounting function of the Division is currently assigned to one employee. Due to the volume of transactions and complexities involved in the solid waste activities, this employee has primarily focused on budgeting. The program managers assist in performing the budgeting function. To provide better financial management, the County is in the process of hiring a business manager.

We recommend that the County expand the business manager's planned role to include service charge analyses, improved internal reporting techniques, and the development of performance measures related to services provided by the Division.
SUMMARY OF RECOMMENDATIONS

Task 1 Recommendations

1.1 Review & Document Policies and Procedures

The Division has not formally documented its operating policies and procedures. The Division should:

- document its financial and budgeting policies and procedures. This should be the responsibility of the Division Chief’s Office.

- establish formal cross-training programs. This would ensure that services are not jeopardized in the event that the assigned staff member is not available to perform assigned duties for an extended period of time.

- review the roles and responsibilities of all staff in the Division. This process would also provide management with data for appropriate staffing given the current and projected work load. The duties should be documented and communicated to the responsible staff member.

By documenting and updating the Division's policies and procedures regularly, at least annually, the Division will be sure that all employees are aware of their duties and responsibilities.

1.2 Provide Additional Budget Training

Developing the Division's annual budget is a long and difficult task. Although the primary members of the Division's budget team are experienced with Division's activities, many do not have formal accounting or financial backgrounds.

We recommend that program managers and staff members who work on the annual budget be provided with formal training to enhance their understanding of and expedite the budget process.

1.3 Consider Implementing Electronic Accounting Procedures

Transactions from the Transfer Station are manually loaded into the Division's financial system, which is a time consuming and cumbersome process.

We recommend an on-line link between the Transfer Station and the accounting division to facilitate transmittal of transaction data from the Transfer Station to the accounting system.

Task 2 Recommendations

2.1 Manage Activities, Not Budgets

During the interview process, many interviewees noted that they were interested in determining the costs of the Division's principal activities. Often several of these
activities (e.g., recycling, composting) benefit from one budget program (e.g., County Transfer Facility and administrative costs). These common costs should be allocated to reflect profits, losses, and unit costs by activities.

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• **outcome measures** which assess the economic, environmental, and social impact of program activities. Examples include sales of recycled goods, number of days environmental standards are met, and the number of citizen complaints.

• **efficiency measures** which assess the efficiency of program activities. Examples include cost per ton of recycled aluminum or the cost per ton of refuse to be incinerated.

Financial analysis of the operations of the Division should not end with performance measures. Performance measures provide a starting point in enhancing the quality of the Division's decisions, services, and accountability. From strategic planning to communicating results, performance measures can help improve the County's solid waste operations.

### 3.2 Develop and Distribute a Popular Report

As discussed, the Division prepares a variety of detailed operational reports which serve important purposes, but information provided is:

- difficult to summarize and comprehend,
- not presented in a format that provides for analysis of activities, and
- rarely supported by narrative descriptions of calculation methodologies.

In light of the public interest concerning the County's solid waste activities and recently-implemented systems benefit charge, we recommend that the Division expand its external reporting process to include a popular report for its citizenry. This report could include discussions, graphs, and charts concerning:

- service charge calculations,
- results of activities,
- financial results,
- indicators of performance goals and results, and
- benchmark comparisons to industry trends and best practices.

The popular reports should be issued at least annually and be distributed to the County Council, the Executive Branch, and made available to the general public and other interested parties. These reports should make maximum use of visuals to illustrate the solid waste funds' financial activities and position.

### 3.3 Expand the Responsibilities of the Business Manager

The accounting function of the Division is currently assigned to one employee. Due to the volume of transactions and complexities involved in the solid waste activities, this employee has primarily focused on budgeting. The program managers assist in performing the budgeting function. To provide better financial management, the County is in the process of hiring a business manager.

We recommend that the County expand the business manager's planned role to include service charge analyses, improved internal reporting techniques, and the development of performance measures related to services provided by the Division.
We would like to take this opportunity to thank the representatives of the Division of Solid Waste Management, County Council, Department of Finance, Office of Management and Budget, the Northeast Maryland Waste Disposal Authority, Montgomery County Waste Coalition, and the Solid Waste Advisory Committee for their participation and professionalism during the completion of this study.

This report is intended for the use of Montgomery County's Office of Legislative Oversight. We would be pleased to discuss any questions or comments at your convenience.

VP MC Post Manwick 22 P
MONTGOMERY COUNTY
Solid Waste Fund Activities

Schedule of Operating Revenues and Expenses

For the years ended June 30, 1994 and 1993

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenues:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling sales</td>
<td>$1,624,256</td>
<td>$1,505,168</td>
</tr>
<tr>
<td>Unallocated revenues</td>
<td>47,546,938</td>
<td>32,527,914</td>
</tr>
<tr>
<td>Total operating revenues</td>
<td>49,171,194</td>
<td>34,033,082</td>
</tr>
<tr>
<td>Operating expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling collection</td>
<td>7,805,494</td>
<td>7,204,620</td>
</tr>
<tr>
<td>Refuse collection</td>
<td>6,831,034</td>
<td>7,067,714</td>
</tr>
<tr>
<td>Recycling facility</td>
<td>4,925,077</td>
<td>3,241,491</td>
</tr>
<tr>
<td>Disposal facility</td>
<td>4,207,152</td>
<td>3,140,711</td>
</tr>
<tr>
<td>Incinerating facility</td>
<td>673,100</td>
<td>3,704,043</td>
</tr>
<tr>
<td>Recycling support</td>
<td>574,951</td>
<td>1,464,051</td>
</tr>
<tr>
<td>Unallocated expenses</td>
<td>8,965,545</td>
<td>5,432,892</td>
</tr>
<tr>
<td>Gross margin</td>
<td>15,188,841</td>
<td>2,777,560</td>
</tr>
<tr>
<td>Landfill closure accrual</td>
<td>5,715,322</td>
<td>21,747,589</td>
</tr>
<tr>
<td>Depreciation</td>
<td>8,995,018</td>
<td>8,626,439</td>
</tr>
<tr>
<td>Operating gain (loss)</td>
<td>$478,501</td>
<td>($27,596,468)</td>
</tr>
</tbody>
</table>

Accompanying notes are an integral part of this financial schedule.
MONTGOMERY COUNTY

Solid Waste Fund Activities

Notes to the Schedule of Operating Revenues and Expenses

For the years ending June 30, 1994 and 1993

(1) Description of Activities

The accompanying schedules include the fiscal activity of Montgomery County's Division of Solid Waste Management. This activity is recorded in the solid waste disposal and collection funds. The accompanying schedules do not include the solid waste activities recorded in other funds (i.e., leaf collection in the Department of Transportation). The Division of Solid Waste Management's activities are divided into three principal activities:

(a) Recycling

The County recycles aluminum, glass, newspaper, and other materials. In addition, the County maintains a composting facility which composes organic material including leaves and grass. The County sells the recycled and composted materials.

(b) Incinerating

The County is currently constructing the Resource Recovery Facility which will include a mass burn facility. The electricity generated from the incineration of the solid waste will be sold to PEPCO. The facility is expected to be fully operational in 1995.

(c) Burying

The Oaks Sanitary landfill is the County's only operating landfill and is expected to close in 1996. The Gude landfill is the County's former landfill which has been closed.

(2) Summary of Significant Accounting Policies and Assumptions

(a) Basis of Accounting

In accordance with governmental accounting standards, the accrual method of accounting is used to account for the solid waste fund since it is an enterprise fund of the Montgomery County government. Under this method, revenues are recorded when earned and expenses are recorded when the related liability is incurred.
(b) Description of Revenues

Recycling Sales

Sales represent the revenues earned from the sale of recycled aluminum, paper, glass, as well as other recycled products including methane gas which is expelled from the Gude landfill.

Unallocated Revenues

Unallocated revenues primarily represents the service charges on County citizen's property tax bills to help fund the recycling and disposal operations of the County. The amount also includes tipping fees and fees collected from others who drop off trash for disposal. General fund transfers, interest income, as well as other nonoperating revenues are properly not included.

(c) Description of Operating Expenses

Collection Activities

Collection activity expenses represent the following budget programs:

- Residential Recycling Collection
- Residential Refuse Collection

Facility Activities

Facility activity expenses represent the following budget programs:

- Dickerson Compost Facility
- Paper Recycling Center
- Site 2 Landfill
- Resource Recovery Facility
- Oaks Sanitary Landfill
- Satellite Sites
- Recycling Center

Support Activities

Support activity expenses represent the following budget programs:

- Commercial and Multi-Family Recycling Development
- Recycling Program Development

Unallocated Activities

Unallocated activity expenses represent the following budget programs:

- Division Administration
- Solid Waste Transfer Station
- Public Volunteer Coordination and Public Outreach
- Residential and Commercial Waste Detoxification
- Waste Reduction
- Solid Waste Enforcement
- Refuse and Recycling Regulation
Landfill Closure Costs

In accordance with government accounting standards, the County accrues the estimated closure and post closure care costs of maintaining the Oaks landfill. The County has accrued $44,997,401 and $39,282,079 for the fiscal years ending June 30, 1994 and 1993, respectively. In an attempt to match the costs of closure with the current revenues associated with the landfill, the County recognized $5,715,322 and $21,747,589 as operating expenses for the fiscal years ending June 30, 1994 and 1993, respectively.

Depreciation

The depreciation expense represent the annual depreciation of the assets used by the Division of Solid Waste Management which includes buildings, site improvements, machinery, and equipment. These assets are depreciated over a period of three to thirty years.
MONTGOMERY COUNTY
Solid Waste Fund Activities
Schedule of Operating Revenues and Expenses
For the year ended June 30, 1995

<table>
<thead>
<tr>
<th>Operating Revenues:</th>
<th>Recycling</th>
<th>Incinerating</th>
<th>Burying</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total operating revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Expenses:</th>
<th>Recycling</th>
<th>Incinerating</th>
<th>Burying</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landfill closure accrual</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MONTGOMERY COUNTY
Solid Waste Fund Activities
Supplemental Schedule of Recycling Revenues and Expenses
For the year ended June 30, 1995

<table>
<thead>
<tr>
<th>Operating Revenues:</th>
<th>Newspaper</th>
<th>Aluminum</th>
<th>Glass</th>
<th>Compost</th>
<th>Methane</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User fees</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total operating revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Operating Expenses:                         |           |          |       |         |         |       |       |
| Collection activities                      |           |          |       |         |         |       |       |
| Facility activities                        |           |          |       |         |         |       |       |
| Education activities                       |           |          |       |         |         |       |       |
| Administrative activities                  |           |          |       |         |         |       |       |
| **Gross Margin**                           |           |          |       |         |         |       |       |

| Depreciation                               |           |          |       |         |         |       |       |

| Operating Income                           |           |          |       |         |         |       |       |
DIVISION OF SOLID WASTE MANAGEMENT

ORGANIZATION CHART
Draft of March 6, 1995

FY 95  -  75
FY 96  -  67

( 8 ) : (1)- OSM; (1)- Sr. Pl. Spec.; (1)- TS Superv.;
(5)- PSW III.
MEMORANDUM

June 19, 1995

To: Karen Orlansky, Director
   Office of Legislative Oversight

From: Bruce Romer, Chief Administrative Officer

Subject: KPMG Peat Marwick DRAFT Financial Analysis of the Solid Waste Funds

Thank you for the opportunity to comment on the KPMG Peat Marwick DRAFT Financial Analysis of the Solid Waste Funds. The analysis offers a number of recommendations which merit serious consideration by the Division of Solid Waste, Department of Environmental Protection. In light of the transfer of this division to the Department of Transportation, this is a particularly opportune time to review, among other activities, its budgeting and accounting functions. We concur with the findings and recommendations of the report in general and offer the following specific comments:

• More effort is necessary relative to enhancing policies and procedures. The County is currently implementing an updated on-line version of FAMIS, the County's mainframe accounting system. Procedures will be better documented in this new system than in the previous system. The Division of Accounting, Department of Finance, has four individuals that are very knowledgeable of and familiar with the accounting requirements for solid waste accounting issues. The Office of Management & Budget (OMB) publishes annual guidance for departments to follow in developing budgets. Both of these departments will continue to work with the staff of the Division of Solid Waste to coordinate accounting and budgetary issues and will participate in the education process of the Business Manager and Administrative Specialist assigned to the Division of Solid Waste. Individuals have just been selected for these positions.

• The Division of Solid Waste should allocate all of its expenses to applicable solid waste activities. The new on-line FAMIS will facilitate that process because of increased levels for the collection of data.

• We agree that the public is deserving of a less technical, more user-friendly format for financial reporting. Finance, OMB, and the Division of Solid Waste will work together to achieve this result. The Finance Department is currently
exploring options for "Popular" reporting with respect to all financial activity of Montgomery County Government and expects to implement a reporting format for FY96. OMB continues to encourage departments to measure and report program achievements through program indicators. OMB is prepared to work with the Division of Solid Waste in developing and reporting data that measures program effectiveness and efficiency. Many of the programs and activities in solid waste are complex and difficult for the average citizen to understand although there is a significant amount of interest by the public. The publication of an annual report that would provide interested citizens with information about solid waste activities and programs is a worthwhile goal. Specific information concerning development and publication costs, means of distribution, cost recovery measures, etc. need to be assessed before any final decisions can be made.

- Because the Solid Waste Activities Fund is an enterprise fund and accounts for its activity on a proprietary basis, we concur with the recommendation that all users of the services of the fund should be charged on an actual basis rather than on estimates. We should budget for expenditures in each County agency that utilizes the services of the Solid Waste Activities Fund. The General Fund transfer based on total Government usage of the services should be eliminated and replaced with a process that recognizes all the different users of the services.

- GAAP financial reporting responsibilities should be maintained as they are currently in the Division of Accounting, Department of Finance and the Division of Accounting should maintain its reporting responsibilities as they relate to the publication of the County’s Comprehensive Annual Financial Report. The business manager assigned to the Division of Solid Waste should formulate popular reports, develop and monitor performance measures, perform budgeting tasks, and develop rate setting standards and techniques for the efficient and effective operation of the Solid Waste Division. This person should be versed in report generation techniques so as to facilitate the production of activity based and other organizational reporting formats.

- The Division of Solid Waste will explore opportunities to continue to work with KPMG Peat Marwick in implementing these recommendations. We would greatly benefit from KPMG Peat Marwick’s knowledge of both the division’s activities and the Solid Waste Funds.

I appreciate the opportunity to comment on this analysis. It is important for the citizens of the County to be assured that, as stated by KPMG Peat Marwick, this analysis of the Solid Waste Fund’s internal control structure indicated that management’s policies and procedures adequately safeguard the County’s assets and provide reasonable assurance that public monies were used for the intended purposes. Appropriate representatives of the Executive Branch will participate in future discussions of the KPMG Peat Marwick Financial Analysis of the Solid Waste Funds upon its release by the County Council.