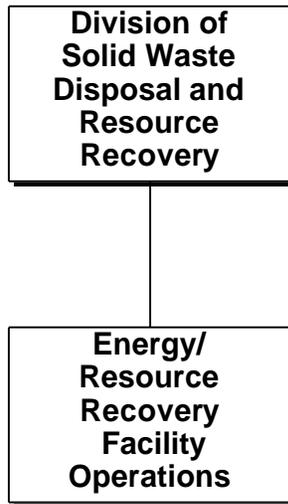


**DEPARTMENT OF PUBLIC WORKS
AND ENVIRONMENTAL SERVICES
SOLID WASTE MANAGEMENT**



FUND 112

ENERGY/RESOURCE RECOVERY FACILITY

Agency Position Summary

9 Regular Positions / 9.0 Regular Staff Years

Position Detail Information

ADMINISTRATION

1	Management Analyst III
1	Management Analyst II
1	Engineer Technician II
1	Heavy Equipment Operator
1	Administrative Assistant II
<u>4</u>	Weighmasters
9	Positions
9.0	Staff Years

FUND 112 ENERGY/RESOURCE RECOVERY FACILITY

Agency Mission

To serve Fairfax County citizens by providing effective solid waste disposal through incineration; to generate energy through the recovery of refuse resources; and to reduce the need for landfill space through volume reduction of solid waste.

Agency Summary					
Category	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	9/9	9/9	9/9	9/9	9/9
Expenditures:					
Personnel Services	\$356,034	\$463,610	\$463,610	\$486,351	\$486,351
Operating Expenses	29,282,317	33,406,171	33,406,171	33,405,444	33,405,444
Capital Equipment	4,299	26,000	26,000	0	0
Total Expenditures	\$29,642,650	\$33,895,781	\$33,895,781	\$33,891,795	\$33,891,795

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2003 Advertised Budget Plan, as approved by the Board of Supervisors on April 29, 2002:

- ◆ The Board of Supervisors made no changes to the FY 2003 Advertised Budget Plan.

The following funding adjustments reflect all approved changes to the FY 2002 Revised Budget Plan from January 1, 2002 through April 22, 2002. Included are all adjustments made as part of the FY 2002 Third Quarter Review:

- ◆ The Board of Supervisors made no adjustments to this fund.

County Executive Proposed FY 2003 Advertised Budget Plan

Purpose

Fund 112 manages the contract for the I-95 Energy/Resource Recovery Facility (E/RRF), owned and operated by Covanta Fairfax Inc. (CFI), which burns municipal solid waste (MSW). The facility produces approximately 72 megawatts of electricity, which is sold to Virginia Power. Under the terms of the Service Agreement, the County is required to deliver at least 930,750 tons of MSW per year, for which it pays a disposal fee to CFI. In order to meet this guarantee, the County has accepted additional MSW through Supplemental and Spot Market operations, as well as refuse collected from Prince William County through a refuse exchange agreement. The County charges a disposal fee to all users of the E/RRF and subsequently pays the contractual disposal fee to CFI from these revenues. Revenues for the sale of electricity are used to offset the cost of the disposal fee paid to CFI.

Key Accomplishments

- ◆ In FY 1999, the bonds used to fund the construction of the E/RRF were refinanced through an innovative option sale agreement, resulting in annual savings to the County of over \$4 million.

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- ◆ The Power Purchase agreement between Virginia Power and CFI, of which the County is the principal beneficiary, was also previously renegotiated. This has resulted in an increase in the County's share of electric power revenues from \$16.5 million in FY 1997 to \$19.8 million in FY 2001, serving to lower overall disposal costs.
- ◆ Fund 112 continues to process waste tires and participate in the Virginia Waste Tire End User Program, and is the area's preeminent waste tire disposal facility, generating net revenues for the agency. Tires were originally incinerated in the E/RRF, but now are shredded at the I-95 Landfill site due to operational problems caused by burning tires. Shredded tires are used as a protective layer in the next cell of the ash landfill, lowering construction costs and providing beneficial use for waste tires as a recycled product.

FY 2003 Initiatives

- ◆ County staff was successful in obtaining a permit from the Virginia Department of Environmental Quality for direct discharge of E/RRF cooling tower water into Mills Branch Culvert. Discharges of cooling tower water have been increasing dramatically in the past few years, due to increases in conductivity values of water supplied by the Fairfax County Water Authority. The discharges had been directed to the sanitary sewer, an inefficient and uneconomical method since the water contains no harmful pollutants. The elimination of the need to purchase additional sewer capacity results in a cost avoidance to the County of almost \$1 million that would be passed through from Covanta Fairfax. Construction of the direct discharge system is scheduled to begin in FY 2002. The modified system will save the cost of additional sewer capacity, free capacity at the Noman M. Cole pollution control plant, reduce existing sanitary sewer pass through costs, and have no deleterious effect on the environment.
- ◆ The State of Virginia passed additional regulations regarding development of Solid Waste Management Plans. A new Solid Waste Management Plan will be required for submittal to the Virginia Department of Environmental Quality. Development of the plan will begin in FY 2003.
- ◆ County staff will continue to monitor the flow of MSW into the E/RRF and if required search for additional waste to meet the tonnage commitment contained in the Service Agreement.

Performance Measurement Results

The performance measures for Fund 112, Energy/Resource Recovery Facility are related to the operation and efficiency of the facility. The measurement of tons above the Guaranteed Annual Tonnage (GAT) quantifies the ability of the County, as stated in the Service Agreement, to "deliver or cause to be delivered at least 930,750 tons of municipal solid waste" for which the County must pay a disposal fee to Covanta Fairfax. This minimum guarantee measures staff's ability to find new waste sources when needed, and manage those that are already being delivered to the E/RRF. In addition, energy generated per ton is directly related to waste delivered, since increased amounts of fuel (tons of municipal solid waste) result in more steam generation, and therefore, more energy produced. Likewise, electricity sold is a measure of the E/RRF's waste deliveries as well as its operating efficiency.

In FY 2001, efforts to ensure that waste deliveries remain above the minimum level were once again successful, resulting in delivery of an additional 139,794 tons over GAT. Energy sold totaled 87.25 percent, slightly higher than the previous year and above the measurement target of 87 percent.

Funding Adjustments

The following funding adjustments from the FY 2002 Revised Budget Plan are necessary to support the FY 2003 program:

- ◆ An increase of \$22,741 in Personnel Services associated with salary adjustments necessary to support the County's Compensation Program.

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- ◆ An increase of \$2 in the Disposal Rate from \$28/ton to \$30/ton, based on increased net debt service and operating and maintenance costs due to increased air pollution control system costs. This will generate an additional \$1.8 million in revenue required to avoid drawing down the Rate Stabilization Reserve, which must be available to absorb a contractual decrease in anticipated energy revenue beginning in FY 2005.
- ◆ A decrease of \$727 in Operating Expenses primarily due to a decrease in the cost of Wearing Apparel and Professional Memberships and Subscriptions.

The following funding adjustments reflect all approved changes in the FY 2002 Revised Budget Plan since passage of the FY 2002 Adopted Budget Plan. Included are all adjustments made as part of the FY 2001 Carryover Review and all other approved changes through December 31, 2001:

- ◆ There have been no revisions to this agency since approval of the FY 2002 Adopted Budget Plan.

Objectives

- ◆ To deliver no less than the Guaranteed Annual Tonnage (GAT) amount of 930,750 tons of municipal solid waste to the E/RRF as required under the contractual obligations of the Service Agreement between Covanta Fairfax and Fairfax County.
- ◆ To sell at least 87.5 percent of electric energy generated from the operation of the E/RRF after internal use.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 1999 Actual	FY 2000 Actual	FY 2001 Estimate/Actual	FY 2002	FY 2003
Output:					
Tons municipal solid waste delivered	984,573	1,055,343	1,102,200 / 1,070,544	1,070,000	1,070,000
Energy generated (kWh in thousands)	644,707	676,978	680,000 / 701,136	680,000	680,000
Efficiency:					
Tons above GAT	53,823	124,593	171,450 / 139,794	139,250	139,250
Energy generated per ton	655	641	617 / 655	636	636
Service Quality:					
Percent of GAT Delivered	105.78%	113.39%	118.42% / 115.02%	114.96%	114.96%
Energy sold (kWh in thousands)	557,957	590,059	595,000 / 611,774	595,000	595,000
Outcome:					
Met GAT requirement	Yes	Yes	Yes / Yes	Yes	Yes
Percent of energy sold (internal use approx. 12.5%)	86.54%	87.16%	87.50% / 87.25%	87.50%	87.50%

FUND 112 ENERGY/RESOURCE RECOVERY FACILITY

FUND STATEMENT

Fund Type G10, Special Revenue Funds

Fund 112, Energy/Resource
Recovery (ERR) Facility

	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan
Beginning Balance	\$17,041,404	\$11,597,021	\$12,993,592	\$9,934,280	\$9,934,280
Revenue:					
Disposal Revenue: ¹					
County of Fairfax	\$19,890,390	\$20,720,000	\$20,720,000	\$25,922,100	\$25,922,100
District of Columbia	5,444,614	4,585,000	4,585,000	2,165,800	2,165,800
Waste Exchange Agreement	834,600	840,000	840,000	933,000	933,000
Wastewater Services	806,124	105,600	105,600	123,200	123,200
Other Jurisdictions	366,100	504,000	504,000	392,400	392,400
Tire Program	688,415	997,500	997,500	737,380	737,380
Supplemental/Spot Market Programs ²	1,438,920	2,305,000	2,305,000	2,886,100	2,886,100
Subtotal Revenue	\$29,469,163	\$30,057,100	\$30,057,100	\$33,159,980	\$33,159,980
Other Revenue:					
Interest on Investments	\$599,167	\$564,369	\$564,369	\$221,293	\$221,293
Miscellaneous ³	986,883	215,000	215,000	250,000	250,000
Subtotal Other Revenue	\$1,586,050	\$779,369	\$779,369	\$471,293	\$471,293
Total Revenue	\$31,055,213	\$30,836,469	\$30,836,469	\$33,631,273	\$33,631,273
Total Available	\$48,096,617	\$42,433,490	\$43,830,061	\$43,565,553	\$43,565,553
Expenditures:					
Personnel Services	\$356,034	\$463,610	\$463,610	\$486,351	\$486,351
Operating Expenses ⁴	29,282,317	33,406,171	33,406,171	33,405,444	33,405,444
Capital Equipment	4,299	26,000	26,000	0	0
Total Expenditures	\$29,642,650	\$33,895,781	\$33,895,781	\$33,891,795	\$33,891,795
Transfers Out:					
Refuse Disposal (110) ⁵	\$5,460,375	\$0	\$0	\$0	\$0
Total Transfers Out:	\$5,460,375	\$0	\$0	\$0	\$0
Total Disbursements	\$35,103,025	\$33,895,781	\$33,895,781	\$33,891,795	\$33,891,795
Ending Balance	\$12,993,592	\$8,537,709	\$9,934,280	\$9,673,758	\$9,673,758
Tipping Fee Reserve ⁶	\$1,888,767	\$1,936,801	\$1,936,801	\$1,500,000	\$1,500,000
Rate Stabilization Reserve ⁷	6,600,908	6,600,908	6,600,908	8,173,758	8,173,758
Unreserved Ending Balance	\$4,503,917	\$0	\$1,396,571	\$0	\$0
Disposal Rate/Ton ⁸	\$28/Ton	\$28/Ton	\$28/Ton	\$30/Ton	\$30/ton

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¹ Disposal Revenue for FY 2003 has increased as a result of the \$2 increase in the Disposal Rate from \$28/ton to \$30/ton. Although waste tonnages directed to the Energy Resource Recovery Facility from the District of Columbia are expected to decrease, any resulting unused waste processing capacity will be filled with spot market waste.

² Disposal revenue shown from Supplemental Waste and Spot Market Program operations reflects only that refuse tonnage for which the tipping fee/per ton disposal rate is charged. Additional income derived from charges in excess of the tipping fee for these operations is reflected as miscellaneous revenue.

³ Miscellaneous revenue includes income received in excess of the tipping fee which is derived from the Spot Market and Supplemental Waste Programs.

⁴ In order to account for revenues and expenditures in the proper fiscal year, an audit adjustment in the amount of \$1,518,590 has been reflected as a decrease to the FY 2001 expenditures. The audit adjustment has been included in the FY 2001 Comprehensive Annual Financial Report (CAFR). Details of the FY 2001 audit adjustments will be included in the FY 2002 Third Quarter Package.

⁵ In FY 2001, an amount of \$5,460,375 was transferred to Fund 110, Refuse Disposal to offset FY 2001 expenditure requirements. The transfer amount is comprised of \$4,201,554 from the available Rate Stabilization Reserve and \$1,258,821 in unreserved balance. The funding provided a subsidy to allow the County to continue to provide the level of service to specific refuse disposal programs that do not fully recover costs. Subsidized programs include the County's Recycling Program, the Household Hazardous Waste Program, and the Code Enforcement Program. Fund 110's current fee structure did not support these expenses in FY 2001. The Rate Stabilization Reserve was established to address revenue shortfalls and contingency requirements of funds that make up the disposal operations under the Division of Solid Waste Refuse Disposal and Resource Recovery. A balance of \$8,173,758 remains in this reserve FY 2003.

⁶ The Tipping Fee Reserve was established to provide for adjustments associated with additional funding requirements to Covanta Fairfax as a result of a year-end shortfall or audit reconciliation.

⁷ On November 4, 1998, earlier bonds sold to finance the E/RRF were retired and refinanced at lower interest rates. The new bonds were refinanced at a rate between 5.5 to 6.1 percent compared to the older rate of 7.75 percent. Excess proceeds from the original bond issue totaling \$10.8 million, were released to the Solid Waste Authority (SWA). At its annual meeting held January 25, 1999, the SWA approved the transfer of these monies from a separate Solid Waste Authority account to Fund 112. As part of their discussions, the Solid Waste Authority directed that the funds be moved to, and reside in, a "Rate Stabilization Reserve" in Fund 112 where the funds were to be used to offset operating shortfalls in any of the funds that comprise the Division of Solid Waste Refuse Disposal and Resource Recovery.

⁸ An increase of \$2 in the Disposal Rate from \$28/ton to \$30/ton based on increased net debt service and operating and maintenance costs due to increased air pollution control system costs. This will generate an additional \$1.8 million in revenue required to avoid drawing down the Rate Stabilization Reserve, which must be available to absorb a contractual decrease in anticipated energy revenue beginning in FY 2005.