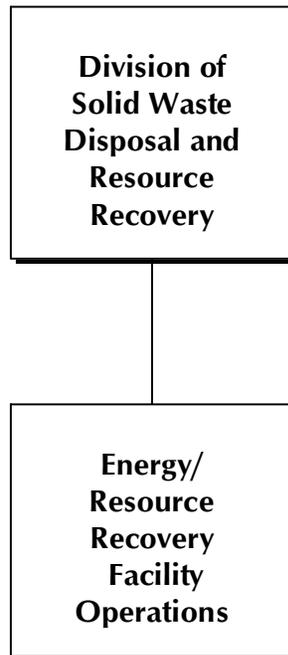


# Fund 112

## Energy/Resource Recovery Facility

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### **Mission**

To serve Fairfax County citizens by providing effective and environmentally-sound solid waste disposal by converting waste-to-energy; by reducing the need for landfill space through volume reduction of solid waste; and by managing the operational contract in the best interests of the citizens.

### **Focus**

Fund 112 manages the contract for the I-95 Energy/Resource Recovery Facility (E/RRF), owned and operated by Covanta Fairfax, Inc. (Covanta). Under the terms of the Service Agreement, the County is required to deliver at least 930,750 tons of municipal solid waste (MSW) per year for which it pays a disposal fee to Covanta. The facility disposes approximately 1,085,000 tons of waste annually to produce approximately 80 megawatts of electricity that is sold to Dominion Virginia Power.

In order to meet the guaranteed annual tonnage, the County accepts additional MSW from other regional jurisdictions and through the Supplemental Waste program. Refuse is exchanged with Prince William County under a mutually beneficial agreement. Efforts by the fund to maximize revenues through additional MSW from other jurisdictions and the refuse exchange agreement with Prince William County have significantly increased revenues in those categories and have reduced the burden on Fairfax County ratepayers.

The County charges a disposal fee to all users of the E/RRF and subsequently pays the contractual disposal fee to Covanta from these revenues. Revenues from the sale of electricity and supplemental waste are used to offset the cost of the disposal fee paid to Covanta. When the E/RRF is not able to handle the amount of waste available, some waste is diverted to Virginia landfills. Staff must be constantly vigilant in balancing waste as a commodity to ensure that it is disposed of efficiently and cost-effectively.

Pursuant to an agreement between Dominion Virginia Power and Covanta signed in 1987 and amended in 1996, Dominion Virginia Power will purchase electricity from Covanta at a lower rate starting in May 2005. As a result, Covanta will realize lower electricity revenues beginning in FY 2005 until the end of the County's contract with Covanta. Since less electricity revenue will be available to offset the costs of operating the E/RRF, Covanta will begin charging the County more in Fund 112 for the operation of the plant. In order to minimize the future impact of this revenue loss, a \$1 per ton increase in the tipping fee from \$32 to \$33 is planned for FY 2006.

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The E/RRF has state-of-the art emissions control technology that reduces pollution from the processing of waste. In order to comply with the 1990 Clean Air Act standards as amended in 2000, reagents are added during the processing of the waste to remove constituents of concern such as nitrogen oxide. A recent independent engineering study indicated that the air pollution control measures are performing as expected with overall reductions in air emissions from the FY 2001 retrofits of:

- 98.3% Removal of Sulfur Dioxide
- 95.5% Removal of Hydrochloric Acid
- 98.6% Removal of Mercury
- 45% reduction in Nitrogen Oxide

Additionally, the dolomitic lime ash-conditioning system that was installed in FY 2004 is providing additional protection to further chemically bind metals and other constituents with the ash that will be disposed in the landfill, so that leaching is reduced. The dolomitic system further assures that the E/RRF operates in an environmentally sound manner.

In FY 2005, the agency began execution of the Solid Waste Management Plan (SWMP) initiatives. These initiatives involve the entire integrated waste management system in the county, such as encouraging waste reduction and additional recycling of materials, and the collection and disposal of waste. The E/RRF will be the primary disposal facility for waste generated in the county through FY 2024. A complete review of the solid waste initiatives approved in the SWMP can be viewed at [www.fairfaxcounty.gov/dpwes/swmp](http://www.fairfaxcounty.gov/dpwes/swmp) and are summarized in the overall solid waste management discussion in the budget.

Since the SWMP is an integrated plan for the management of waste, an increased emphasis on recycling of new materials curbside may have an impact on the amount of waste disposed at the E/RRF. However, increased recycling is needed long-term so that the remaining capacity at the E/RRF can be maintained for waste that requires disposal during the next 20 years.

Since the strategy identified in the SWMP is to continue using the E/RRF as the primary disposal facility for waste generated in the county, the Service Agreement with Covanta, that describes the operations of the E/RRF, needs to be extended past its current expiration in FY 2011. Negotiations with Covanta are required to begin 5 years before the end of the agreement. Meetings, studies, and negotiations will require additional support from independent engineering and legal firms throughout the next few years, thus increasing the contractor support costs.

Agency accomplishments, new initiatives and performance measures are displayed at a program-wide level. Please refer to the Solid Waste Management Program Overview in Volume 2 of the FY 2006 Adopted Budget Plan for those items.

### Budget and Staff Resources

Agency Summary					
Category	FY 2004 Actual	FY 2005 Adopted Budget Plan	FY 2005 Revised Budget Plan	FY 2006 Advertised Budget Plan	FY 2006 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	9/9	9/9	9/9	9/9	9/9
Expenditures:					
Personnel Services	\$503,332	\$593,967	\$593,967	\$631,030	\$631,030
Operating Expenses	33,635,974	32,083,367	33,656,038	35,783,638	35,783,638
Capital Equipment	19,343	99,000	99,000	0	0
<b>Total Expenditures</b>	<b>\$34,158,649</b>	<b>\$32,776,334</b>	<b>\$34,349,005</b>	<b>\$36,414,668</b>	<b>\$36,414,668</b>

# Fund 112

## Energy/Resource Recovery Facility

Position Summary					
1	Management Analyst III	1	Engineering Technician II	1	Administrative Assistant II
1	Management Analyst II	1	Heavy Equipment Operator	4	Weighmasters
<b>TOTAL POSITIONS</b>					
9 Positions / 9.0 Staff Years					

### FY 2006 Funding Adjustments

The following funding adjustments from the FY 2005 Revised Budget Plan are necessary to support the FY 2006 program:

- ◆ **Employee Compensation**

An increase of \$37,063 in Personnel Services is associated with salary adjustments necessary to support the County's compensation program.

**\$37,063**
- ◆ **Contractor Compensation**

A net decrease of \$1,172,180 in Operating Expenses is primarily associated with \$3,695,894 for increased anticipated contractor compensation paid to Covanta and other consultants for the operation of the E/RRF, offset by a decrease of \$4,868,074 reflecting one-time encumbered carryover and the FY 2005 tax liability noted below. It should be noted that the FY 2006 tax liability will be included once the exact amount is known.

**(\$1,172,180)**
- ◆ **Department of Vehicle Services Charges**

An increase of \$4,377 for Department of Vehicle Services charges is based on anticipated vehicle maintenance requirements.

**\$4,377**

### Board of Supervisors' Adjustments

*The following funding adjustments reflect all changes to the FY 2006 Advertised Budget Plan, as approved by the Board of Supervisors on April 25, 2005:*

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

### Changes to FY 2005 Adopted Budget Plan

*The following funding adjustments reflect all approved changes in the FY 2005 Revised Budget Plan since passage of the FY 2005 Adopted Budget Plan. Included are all adjustments made as part of the FY 2004 Carryover Review and all other approved changes through December 31, 2004:*

- ◆ **Carryover Adjustments**

As part of the FY 2004 Carryover Review, encumbered carryover of \$2,853,585 in Operating Expenses was included. In addition, the Board of Supervisors approved an administrative adjustment that increased Operating Expenses by \$2,014,489 and the General Fund Transfer by \$2,014,489 for a tax liability associated with the transfer of property from the federal government to Fairfax County.

**\$4,868,074**

## Fund 112

### Energy/Resource Recovery Facility

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*The following funding adjustments reflect all approved changes to the FY 2005 Revised Budget Plan from January 1, 2005 through April 18, 2005. Included are all adjustments made as part of the FY 2005 Third Quarter Review:*

- ◆ **Third Quarter Adjustments** **(\$3,295,403)**

A decrease of \$3,295,403 is primarily due to \$1,531,699 in savings associated with a five day operational maintenance outage that was planned in October 2004 that will result in a reduced amount of waste being processed in FY 2005. The remaining savings of \$1,763,704 reflects an adjustment to remove a lump sum payment to Covanta for real estate taxes incurred when the District of Columbia transferred ownership of the land the E/RRF stands on to Fairfax County. In FY 2005, the payment is now incorporated into the tipping fee being paid by the County so the budgeted amount for a lump payment is no longer required.

# Fund 112

## Energy/Resource Recovery Facility

### FUND STATEMENT

Fund Type G10, Special Revenue Funds

Fund 112, Energy/Resource Recovery Facility (E/RRF)

	FY 2004 Actual	FY 2005 Adopted Budget Plan	FY 2005 Revised Budget Plan	FY 2006 Advertised Budget Plan	FY 2006 Adopted Budget Plan
<b>Beginning Balance</b>	<b>\$15,383,969</b>	<b>\$12,838,443</b>	<b>\$16,437,760</b>	<b>\$16,328,694</b>	<b>\$18,819,065</b>
Revenue:					
Disposal Revenue:					
County of Fairfax <sup>1</sup>	\$24,883,954	\$26,605,312	\$30,468,440	\$30,429,201	\$30,429,201
District of Columbia <sup>2</sup>	3,918,130	5,152,997	800,000	1,815,000	1,815,000
Waste Exchange Agreement <sup>3</sup>	1,965,982	1,714,752	1,964,836	1,821,369	1,821,369
Wastewater Services <sup>4</sup>	106,370	148,512	100,000	111,600	111,600
Non-Fairfax Waste <sup>5</sup>	1,948,926	1,476,000	841,120	1,785,960	1,785,960
Supplemental Waste <sup>6</sup>	99,051	183,820	103,872	194,760	194,760
Subtotal Revenue	\$32,922,413	\$35,281,393	\$34,278,268	\$36,157,890	\$36,157,890
Other Revenue:					
Interest on Investments	\$119,015	\$139,460	\$250,000	\$286,705	\$286,705
Miscellaneous <sup>7</sup>	407,308	100,000	187,553	100,000	100,000
Subtotal Other Revenue	\$526,323	\$239,460	\$437,553	\$386,705	\$386,705
Total Revenue	\$33,448,736	\$35,520,853	\$34,715,821	\$36,544,595	\$36,544,595
Transfers In:					
General Fund (001) <sup>8</sup>	\$1,763,704	\$0	\$2,014,489	\$0	\$0
Total Transfers In	\$1,763,704	\$0	\$2,014,489	\$0	\$0
<b>Total Available</b>	<b>\$50,596,409</b>	<b>\$48,359,296</b>	<b>\$53,168,070</b>	<b>\$52,873,289</b>	<b>\$55,363,660</b>
Expenditures:					
Personnel Services	\$503,332	\$593,967	\$593,967	\$631,030	\$631,030
Operating Expenses <sup>9</sup>	33,635,974	32,083,367	33,656,038	35,783,638	35,783,638
Capital Equipment	19,343	99,000	99,000	0	0
Total Expenditures	\$34,158,649	\$32,776,334	\$34,349,005	\$36,414,668	\$36,414,668
<b>Total Disbursements</b>	<b>\$34,158,649</b>	<b>\$32,776,334</b>	<b>\$34,349,005</b>	<b>\$36,414,668</b>	<b>\$36,414,668</b>
<b>Ending Balance</b>	<b>\$16,437,760</b>	<b>\$15,582,962</b>	<b>\$18,819,065</b>	<b>\$16,458,621</b>	<b>\$18,948,992</b>
Tipping Fee Reserve	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
Rate Stabilization Reserve <sup>10</sup>	8,951,851	8,317,769	11,852,128	9,230,398	11,720,769
Operations and Maintenance Reserve <sup>11</sup>	5,985,909	5,765,193	5,466,937	5,728,223	5,728,223
<b>Unreserved Ending Balance</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Disposal Rate/Ton	\$30/ton	\$32/ton	\$32/ton	\$33/ton	\$33/ton

# Fund 112

## Energy/Resource Recovery Facility

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<sup>1</sup> The fee for the I-95 Energy/Resource Recovery Facility was \$30 per ton for FY 2004 and \$32 per ton in FY 2005. In FY 2006, the fee is projected to be \$33 per ton.

<sup>2</sup> Based upon an anticipated contract with the District of Columbia government for residential waste only.

<sup>3</sup> Prince William County waste is received at the E/RRF as a result of the Interjurisdictional Solid Waste Facility Use Agreement.

<sup>4</sup> Wastewater Services includes the disposal of grit and screenings and other wastewater-related material from the Alexandria Sanitation Authority (ASA).

<sup>5</sup> Non-Fairfax Waste is waste from other jurisdictions that is disposed by haulers with contracts with the County.

<sup>6</sup> Supplemental Waste is being tracked separately from Spot Waste beginning and is the basic fee to dispose of this waste. Additional fees that are paid above the basic fee are split between Covanta and the County and are reflected as Miscellaneous Revenue since tip fees vary depending upon the material types and market conditions. The Supplemental program has been under review by the Virginia Department of Environmental Quality which has resulted in decreased disposal.

<sup>7</sup> Miscellaneous Revenue is generated by the excess amount that Covanta charges to dispose of Supplemental Waste.

<sup>8</sup> Covanta Fairfax, Inc. now incurs an annual tax assessment, due to the transfer of the property in July 2003 from the federal government to Fairfax County. The tax expense is considered a pass through cost by the Covanta/Fairfax County contract and the General Fund will offset the tax liability by returning the amount paid by Covanta to Fund 112.

<sup>9</sup> In order to account for revenues and expenditures in the proper fiscal year, an audit adjustment in the amount of \$1,763,704 has been reflected as an increase to FY 2004 expenditures to record the amount due to COVANTA for reimbursement of real estate taxes. This audit adjustment has been included in the FY 2004 Comprehensive Annual Financial Report (CAFR). Details of the FY 2004 audit adjustment were included in the FY 2005 Third Quarter Package.

<sup>10</sup> The Rate Stabilization Reserve is used to buffer against sharp increases in tip fees annually. Potentially steep increases could result from issues such as tax changes regarding energy sales, power deregulation, and state or EPA environmental fees.

<sup>11</sup> The Operations and Maintenance Reserve is necessary for ongoing improvements and enhancements to the E/RRF including emissions control efforts. Planned work for FY 2006 includes a Cooling Water System Project. Future projects will include additional retrofits to the air pollution control systems. Additional reductions in nitrogen oxides are expected from regulatory authorities. The reserve will fund the initial capital expenditures of the improvement fund and absorb the associated operating and maintenance costs.