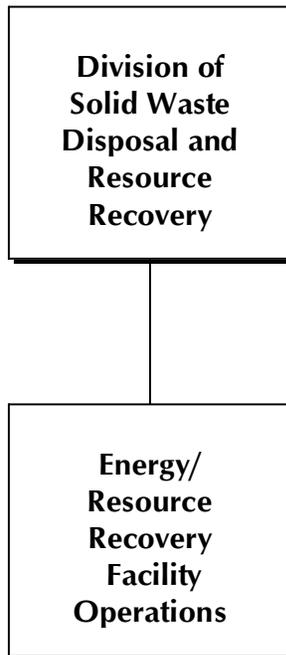


Fund 112

Energy/Resource Recovery Facility



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; by reducing the greenhouse gas emissions both by not landfilling waste and by generating renewal energy; and by managing the operational contract in the best interests of the citizens.

Focus

Fund 112 provides for the management of the contract for the I-95 Energy/Resource Recovery Facility (E/RRF), owned and



Aerial view of the I-95 Energy/Resource Recovery Facility

operated by Covanta Fairfax, Inc. (CFI). Under the terms of the Service Agreement, the County delivers municipal solid waste (MSW) for which it pays a disposal fee to CFI. The E/RRF currently produces over 80 megawatts of electricity, enough to power about 75,000 homes. Pursuant to an agreement between Dominion Virginia Power and CFI signed in 1987 and amended in 1996, Dominion Virginia Power began purchasing electricity from CFI at a lower rate starting in May 2005. As a result, CFI may receive lower electricity revenues until the end of the power purchase agreement in 2015.

Fund 112

Energy/Resource Recovery Facility

The E/RRF is rated for 1,095,000 tons of solid waste, but has the flexibility to operate above that level. For the second year, in FY 2007 Fairfax County generated all of the waste required to meet the County's commitment under the Service Agreement. The County also accepts additional MSW from other regional jurisdictions through the Supplemental Waste program. Refuse is exchanged with Prince William County under a mutually beneficial agreement. These efforts continue to maximize revenues through providing additional MSW to keep disposal rates low for County customers.

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 from the sale of electricity, recycled ferrous and nonferrous metals, and supplemental waste are used to offset the cost of the disposal fee paid to CFI. 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, cost-effectively and with the least environmental consequences.

Careful management of the Service Agreement with CFI has allowed the County to hold down disposal fee charges from Fund 112 to other solid waste funds and other users. The rate is proposed to be reduced from \$33 to \$32 per ton for FY 2009. Funding from the Rate Stabilization Reserve is used, if necessary, to supplement any difference between this revenue and the actual payments to CFI.

The June 2007 annual stack test indicated that the overall air emissions reductions from the E/RRF, resulting from the Clean Air Act retrofits in 2000, remained well below permit limits:

| Energy/Resource Recovery Facility Emissions Results | | |
|--|---------------------|-----------------------------|
| June, 2007 | | |
| Parameter | Permit Limit | Average E/RRF Result |
| Sulfur Dioxide (SO ₂) | 29 ppm | 3.75 ppm |
| Carbon Monoxide (CO) | 100 ppm | 6.5 ppm |
| Nitrogen Oxides (NO _x) | 205 ppm | 194.75 ppm |
| Hydrochloric Acid (HCL) | 29 ppm | 10.64 ppm |
| Particulate Matter (PM) | 27 mg/dscm | 4.66 mg/dscm |
| Mercury (Hg) | 0.080 mg/dscm | 0.00688mg/dscm |

ppm = parts per million

mg = milligram

ng = nanogram

Dscm = dry standard cubic meter

The E/RRF has helped reduce the overall Fairfax County waste system carbon emissions by about one ton of carbon for every ton of waste processed. This calculation includes the reduction in overall carbon dioxide generated by the waste management system, due to emission reductions that are realized by not transporting waste to a landfill, the actual carbon dioxide that would be generated at the landfill as well as the carbon dioxide that would be emitted to produce electricity using a fossil fuel.

CFI and the County continue to investigate the costs and technical feasibility of innovative projects. One of these could result in the E/RRF providing emergency backup power to the Griffith Water Treatment Plant and the Noman Cole Wastewater Treatment Plant in the event that electricity is not available through regular distribution from Dominion Virginia Power. Another project could allow the E/RRF to use the tertiary water from the Noman Cole Wastewater Treatment Plant as the cooling water at the E/RRF, saving millions of gallons of potable water. The County is always exploring new technology to ensure that the E/RRF continues to provide the required environmental service of waste processing while having the least environmental impact possible.

Fund 112

Energy/Resource Recovery Facility

The ash conditioning system that was added to the E/RRF in FY 2005 is providing the anticipated ash stabilization for ash that is placed in the I-95 Landfill. Ash tests, performed by an independent laboratory, Life Science Laboratories, Inc. of East Syracuse, NY, during the period February 7-15, 2007, characterized the ash from the E/RRF as non-hazardous waste.

Fairfax County and Covanta Fairfax, Inc. continue to discuss a Service Agreement amendment that will provide for continued use of the E/RRF beyond the timeframe of the existing agreement, as recommended in the County's Solid Waste Management Plan.

Execution of the Solid Waste Management Plan initiatives has increased recycling and removed additional amounts of cardboard, paper and metals from the waste stream. Future increased recycling is needed so that the capacity at the E/RRF can be maintained for waste that cannot be easily recycled. Continued operation of the Household Hazardous Waste and Conditionally Exempt Small Quality Generator programs has removed materials with hazardous properties from the waste stream of the E/RRF.

Agency accomplishments, new initiatives and performance measures for Solid Waste are displayed at a program-wide level. Please refer to the Solid Waste Management Program Overview in Volume 2 of the [FY 2009 Advertised Budget Plan](#) for those items.

Budget and Staff Resources

| Agency Summary | | | | |
|----------------------------------|---------------------|-----------------------------------|-----------------------------------|--------------------------------------|
| Category | FY 2007 Actual | FY 2008 Adopted Budget Plan | FY 2008 Revised Budget Plan | FY 2009 Advertised Budget Plan |
| Authorized Positions/Staff Years | | | | |
| Regular | 9/ 9 | 9/ 9 | 9/ 9 | 9/ 9 |
| Expenditures: | | | | |
| Personnel Services | \$610,135 | \$666,197 | \$666,197 | \$690,357 |
| Operating Expenses | 33,996,379 | 39,907,419 | 39,907,419 | 36,717,183 |
| Capital Equipment | 12,827 | 0 | 0 | 400,000 |
| Total Expenditures | \$34,619,341 | \$40,573,616 | \$40,573,616 | \$37,807,540 |

| Position Summary | | | | |
|--------------------------------------|-------------------------------|----------------|--|--|
| 1 Management Analyst III | 1 Heavy Equipment Operator | 3 Weighmasters | | |
| 1 Management Analyst II | 1 Administrative Assistant IV | | | |
| 1 Engineering Technician II | 1 Administrative Assistant II | | | |
| TOTAL POSITIONS | | | | |
| 9 Positions / 9.0 Staff Years | | | | |

Fund 112

Energy/Resource Recovery Facility

FY 2009 Funding Adjustments

The following funding adjustments from the FY 2008 Revised Budget Plan are necessary to support the FY 2009 program:

- ◆ **Employee Compensation** **\$24,160**
An increase of \$24,160 in Personnel Services is associated with salary adjustments necessary to support the County's compensation program. As a result of budget constraints, compensation adjustments for County employees have been reduced. For FY 2009, employee increases as part of the pay for performance system have been discounted by 50 percent and the impact of the lower pay for performance funding is reflected above.

- ◆ **Contractor Compensation** **(\$3,700,147)**
A net decrease of \$3,700,147 in Contractor Compensation for the operation of the E/RRF, based on contractor-projected tipping fees for FY 2008 and FY 2009 that permit a \$2.2 million decrease from the current budget level, as well as an accounting change to defer the budgeting of \$1.5 million in anticipated tax liability costs of the facility to the *FY 2008 Carryover Review*, when the actual tax liability will be known and supported by a General Fund Transfer.

- ◆ **Other Contractor Compensation** **\$400,000**
An increase of \$400,000 in other Contractor Compensation is associated with the Supplemental Power Plan Study as part of the E/RRF's emergency preparedness program to establish a self-contained startup capability for its operations as well as to supply power to the Griffith Water Plant, should Dominion Virginia Power be unable to do so.

- ◆ **Other Operating Adjustments** **\$109,911**
An increase of \$109,911 in Operating Expenses is associated with a \$27,000 increase in repair and maintenance based on previous years experience, a \$72,000 increase for environmental tests conducted by the Health Department based on prior year actuals, and a \$10,911 net increase in other miscellaneous operating costs.

- ◆ **Capital Equipment** **\$400,000**
An amount of \$400,000 is included for the one-time purchase and installation of four replacement scales based on an independent consultant's analysis which found that the practical service life of the scales had been reached.

Changes to FY 2008 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2008 Revised Budget Plan since passage of the FY 2008 Adopted Budget Plan. Included are all adjustments made as part of the FY 2007 Carryover Review and all other approved changes through December 31, 2007:

- ◆ As part of the 2007 Carryover Review the Board of Supervisors approved the General Fund Transfer of \$1,491,162 to offset Covanta's tax liability to Fairfax County.

Fund 112

Energy/Resource Recovery Facility

FUND STATEMENT

Fund Type G10, Special Revenue Funds Fund 112, Energy/Resource Recovery Facility (E/RRF)

| | FY 2007 Actual | FY 2008 Adopted Budget Plan | FY 2008 Revised Budget Plan | FY 2009 Advertised Budget Plan |
|---|---------------------|-----------------------------------|-----------------------------------|--------------------------------------|
| Beginning Balance | \$20,694,378 | \$19,154,087 | \$26,087,297 | \$23,781,704 |
| Revenue: | | | | |
| Disposal Revenue | \$37,425,135 | \$35,979,498 | \$35,979,498 | \$35,129,254 |
| Other Revenue: | | | | |
| Interest on Investments | 1,117,018 | 697,363 | 697,363 | 762,989 |
| Miscellaneous ¹ | 104,470 | 100,000 | 100,000 | 150,000 |
| Subtotal Other Revenue | \$1,221,488 | \$797,363 | \$797,363 | \$912,989 |
| Total Revenue ² | \$38,646,623 | \$36,776,861 | \$36,776,861 | \$36,042,243 |
| Transfers In: | | | | |
| General Fund (001) ³ | \$1,365,637 | \$0 | \$1,491,162 | \$0 |
| Total Transfers In | \$1,365,637 | \$0 | \$1,491,162 | \$0 |
| Total Available | \$60,706,638 | \$55,930,948 | \$64,355,320 | \$59,823,947 |
| Expenditures: | | | | |
| Personnel Services | \$610,135 | \$666,197 | \$666,197 | \$690,357 |
| Operating Expenses ⁴ | 33,996,379 | 39,907,419 | 39,907,419 | 36,717,183 |
| Capital Equipment | 12,827 | 0 | 0 | 400,000 |
| Total Expenditures ² | \$34,619,341 | \$40,573,616 | \$40,573,616 | \$37,807,540 |
| Total Disbursements | \$34,619,341 | \$40,573,616 | \$40,573,616 | \$37,807,540 |
| Ending Balance | \$26,087,297 | \$15,357,332 | \$23,781,704 | \$22,016,407 |
| Tipping Fee Reserve | \$1,500,000 | \$1,500,000 | \$1,500,000 | \$1,500,000 |
| Rate Stabilization Reserve ⁵ | 14,019,239 | 8,525,166 | 10,232,099 | 9,867,252 |
| Operations and Maintenance Reserve ⁶ | 10,568,058 | 5,332,166 | 12,049,605 | 10,649,155 |
| Unreserved Ending Balance | \$0 | \$0 | \$0 | \$0 |
| Disposal Rate/Ton | \$33/Ton | \$33/Ton | \$33/Ton | \$32/Ton |

Fund 112

Energy/Resource Recovery Facility

¹ Miscellaneous Revenue is generated by the excess amount that Covanta Fairfax, Inc. (CFI) charges for the disposal of Supplemental Waste.

² In order to account for revenues and expenditures in the proper fiscal year, total audit adjustments of \$3,078,808 have been made to revenues, and audit adjustments of (\$335,058) have been made to expenditures, resulting in a net increase of \$3,413,866 to fund balance. An audit adjustment in the amount of \$6,362 has been included as an increase to reflect the actual interest on investments, an audit adjustment in the amount of \$3,072,446 has been included as an increase to properly reflect disposal revenue accruals and an audit adjustment in the amount of \$335,058 has been included to reflect an expenditure credit for reimbursement of fees due. These audit adjustments have been included in the FY 2007 Comprehensive Annual Financial Report (CAFR). Details of the FY 2007 audit adjustments will be included in the FY 2008 Third Quarter Package.

³ The General Fund Transfer offsets Covanta's tax liability to Fairfax County. This expenditure and the offsetting General Fund Transfer support will be funded for FY 2009 as part of the *FY 2008 Carryover Review*.

⁴ The contract fee to CFI has not escalated as earlier anticipated. The FY 2009 contractor compensation amount is estimated to be greater than the FY 2007 actual but lower than the FY 2008 estimate. In addition, the FY 2009 budget does not yet include an estimated \$1.5 million for the Covanta tax liability expenditure. This expenditure will be funded for FY 2009 as part of the *FY 2008 Carryover Review*.

⁵ The Rate Stabilization Reserve is used to buffer against sharp annual changes in tip fees. Potentially sharp changes could result from issues such as tax changes regarding energy sales, power deregulation, state or EPA environmental fees, and/or contract changes.

⁶ The Operations and Maintenance Reserve is maintained for ongoing improvements and enhancements to the E/RRF including