

Fund 40170: I-95 Refuse Disposal

Mission

The Fairfax County Solid Waste Management Program (SWMP) is dedicated to keeping Fairfax County clean by preventing pollution and other contamination associated with the improper disposal of refuse. This is achieved by providing environmentally sound and economically viable management of refuse and recyclables through the operation of the I-95 Landfill Complex in Lorton, Virginia. The primary activity performed is the landfilling of ash generated from the combustion of waste at the energy from waste facility - Covanta Fairfax, LLC - in Lorton, Virginia. The following activities are conducted at this location:

- The Covanta combustion process generates ash, which is landfilled on site by County employees. Ash from a similar Covanta facility serving the City of Alexandria and Arlington County, and the Noman Cole Plant, are disposed of at the I-95 Ash Landfill.
- Brush is ground into mulch for reuse.
- Leaves and grass are transported to composting facilities in Prince William and Loudoun Counties where they are processed into a soil amendment.
- Landfill gas generated at the closed landfill generates methane captured and processed for power production.
- Staff and equipment from the I-95 facility are used to respond to emergencies by providing debris removal during emergencies and disasters, including snow and ice control in winter months.
- Other programs conducted at the I-95 facility include operation of a Recycling and Disposal Center (RDC) for residents and small businesses, Household Hazardous Waste, and recycling of electronics, motor oil, antifreeze, cooking oil, latex paint, automotive batteries, and scrap metal.
- The SWMP manages environmental control programs for the closed portion of the landfill as required by federal and state regulations. Systems to control landfill gas and groundwater and stormwater impacts attributed to waste disposal are operated and maintained by County staff.

Focus

The County has operated the I-95 Landfill Complex for more than 25 years. It was previously owned and operated by the District of Columbia from 1970 to 1995. It has not accepted municipal waste since December 1995 and only accepts ash generated by the combustion of waste.

The ash landfill was designed in four phases and meets federal and state standards for the construction of new landfills, which requires a double liner with a leachate collection system for the prevention of groundwater degradation. Phases I and II have reached capacity and have been covered with an intermediate cover system. Phase III is currently being used for ash disposal and has at least five years of capacity remaining. Phase IV has not yet been constructed.

Covanta's suite of pollution control equipment includes a dolomitic lime system that chemically treats the ash to reduce the potential of mobilizing metals that may leach from the ash after landfilling. The ash is tested twice per year using the Toxicity Characteristic Leaching Procedure (TCLP), as specified in federal regulations. During FY 2017, analysis of the ash by a certified laboratory found

Fund 40170: I-95 Refuse Disposal



the ash to be non-hazardous, demonstrating that all parameters analyzed are within the limits for all regulated constituents.

This facility is responsible for the management of the closed portion of the municipal solid waste landfill including landfill gas control, groundwater monitoring and remediation, storm water management and leachate control. These activities ensure compliance with the facility's state-issued permit (SWP103) and applicable environmental regulations administered by the Virginia Department of Environmental Quality (VDEQ).

The ash disposal fee is based on the rate set in advance by formal contract with Covanta and for FY 2024 the rate is \$29.70 per ton to fund the ash disposal operation. Covanta Fairfax, LLC. pays SWMP \$1.84 per ton to transport ash debris from the energy to waste facility to the landfill. The landfill's Post-Closure Reserve is required for a 30-year period after the ash landfill is closed as mandated by federal and state regulations. The FY 2024 Post-Closure Reserve is projected to be \$30.9 million or 68.9 percent of the required \$44.9 million. Increased maintenance needs require additional funding to ensure the landfill remains in compliance with its many permits.

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 2024 Advertised Budget Plan for those items.

Organizational Chart



Budget and Staff Resources

Category	FY 2022 Actual	FY 2023 Adopted	FY 2023 Revised	FY 2024 Advertised
FUNDING				
Expenditures:				
Personnel Services	\$4,008,837	\$4,618,714	\$4,618,714	\$4,847,941
Operating Expenses	2,362,567	2,590,885	2,600,980	3,084,384
Capital Equipment	468,162	1,600,000	2,167,688	1,838,000
Capital Projects	895,012	1,450,000	9,796,513	2,410,000
Total Expenditures	\$7,734,578	\$10,259,599	\$19,183,895	\$12,180,325
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	44 / 44	44 / 44	44 / 44	44 / 44

FY 2024 Funding Adjustments

The following funding adjustments from the FY 2023 Adopted Budget Plan are necessary to support the FY 2024 program:

Employee Compensation **\$235,785**

An increase of \$235,785 in Personnel Services includes \$83,707 for a 2.00 percent market rate adjustment (MRA) for all employees and \$62,249 for performance-based and longevity increases for non-uniformed merit employees, both effective July 2023. The remaining increase of \$89,829 is included to support employee retention and recruitment efforts that will reduce pay compression and align the County's pay structures with the market based on benchmark data.

Other Post-Employment Benefits **(\$6,558)**

A decrease of \$6,558 in Personnel Services reflects required adjustments associated with providing Other Post-Employment Benefits (OPEBs) to retirees, including the Retiree Health Benefits Subsidy. For more information on Other Post-Employment Benefits, please refer to Fund 73030, OPEB Trust, in Volume 2 of the FY 2024 Advertised Budget Plan.

Operating Expenditures **\$493,499**

An increase of \$493,499 in Operating Expenses is primarily due to an increase in fuel costs and safety and emergency services.

Capital Equipment **\$238,000**

Funding of \$1,838,000 in Capital Equipment reflects an increase of \$238,000 over the FY 2023 Adopted Budget Plan. Of this amount, \$550,000 is for the replacement of one track loader, \$550,000 for one material handler, \$410,000 is for two dump trucks, \$140,000 is for one Vibromax roller, \$130,000 for two crew cab pick-up trucks, and \$58,000 for one bush hog. These items have exceeded their useful life and are required to be replaced based on the overall age and condition of the equipment.

Capital Projects **\$960,000**

An increase of \$960,000 in Capital Project reflects additional funding required in FY 2024 to support capital improvement and environmental compliance projects at the I-95 Landfill Complex.

Changes to FY 2023 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2023 Revised Budget Plan since passage of the FY 2023 Adopted Budget Plan. Included are all adjustments made as part of the FY 2022 Carryover Review and all other approved changes through December 31, 2022:

Carryover Adjustments **\$8,924,296**

As part of the *FY 2022 Carryover Review*, the Board of Supervisors approved funding of \$8,924,296, including \$577,783 in encumbered and \$8,346,513 in unexpected Capital Projects.

Position Detail

The FY 2024 Advertised Budget Plan includes the following positions:

I-95 REFUSE DISPOSAL – 44 Positions			
1	Engineer V	1	Trade Supervisor
1	PW Environmental Services Manager	1	Lead Refuse Operator
3	PW Environmental Services Specialists	9	Heavy Equipment Operators
1	Constr/Mnt Project Manager II	2	Motor Equipment Operators
1	Senior Engineer III	1	Welder I
1	Engineering Technician III	1	Maintenance Supervisor
3	Engineering Technicians II	1	Senior Maintenance Worker
1	Engineering Technician I	5	Maintenance Workers
1	Safety Analyst	1	Equipment Repairer
1	Management Analyst III	1	Administrative Assistant IV
1	Financial Specialist II	2	Administrative Assistants III
3	Asst. Refuse Superintendents	1	Administrative Assistant II

A Fund Statement and a Summary of Capital Projects are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., a contingency or planning project).

Fund 40170: I-95 Refuse Disposal

FUND STATEMENT

Category	FY 2022 Actual	FY 2023 Adopted Budget Plan	FY 2023 Revised Budget Plan	FY 2024 Advertised Budget Plan
Beginning Balance	\$42,310,268	\$35,105,094	\$46,705,755	\$38,165,434
Revenue:				
Interest on Investments	\$35,778	\$230,222	\$230,222	\$69,440
Refuse Disposal Revenue	12,060,455	10,514,352	10,514,352	11,642,321
Sale of Equipment	219,832	108,000	108,000	219,045
Total Revenue	\$12,316,065	\$10,852,574	\$10,852,574	\$11,930,806
Total Available	\$54,626,333	\$45,957,668	\$57,558,329	\$50,096,240
Expenditures:				
Personnel Services	\$4,008,837	\$4,618,714	\$4,618,714	\$4,847,941
Operating Expenses	2,362,567	2,590,885	2,600,980	3,084,384
Capital Equipment	468,162	1,600,000	2,167,688	1,838,000
Capital Projects	895,012	1,450,000	9,796,513	2,410,000
Total Expenditures	\$7,734,578	\$10,259,599	\$19,183,895	\$12,180,325
Transfers Out:				
General Fund (10001) ¹	\$186,000	\$209,000	\$209,000	\$209,000
Total Transfers Out	\$186,000	\$209,000	\$209,000	\$209,000
Total Disbursements	\$7,920,578	\$10,468,599	\$19,392,895	\$12,389,325
Ending Balance²	\$46,705,755	\$35,489,069	\$38,165,434	\$37,706,915
Reserves:				
Environmental Reserve ³	\$3,736,460	\$2,839,126	\$3,053,235	\$3,016,553
Capital Equipment Reserve ⁴	4,670,576	3,548,906	3,816,543	3,770,692
Post-Closure Reserve ⁵	38,298,719	29,101,037	31,295,656	30,919,670
Unreserved Ending Balance	\$0	\$0	\$0	\$0

¹ In FY 2023, there was an increase from \$186,000 to \$209,000 in the amount transferred to the General Fund to partially offset central support services supported by the General Fund, which benefit Fund 40170. These indirect costs include support services such as Human Resources, Purchasing, Budget and other administrative services.

² Ending balance fluctuations are a result of operating and revenue requirements that change annually. Funding is carried forward each fiscal year to provide flexibility given the uncertainty of market conditions and expenditure requirements.

³ The Environmental Reserve assures that the County has funds to implement, or at least start to implement, unplanned actions to protect the environment or meet regulatory requirements. Specific examples of future environmental projects are likely to include: Landfill Gas Control Projects, Stormwater Management, Wastewater (Leachate) Management, and Groundwater protective measures.

⁴ The Capital Equipment Reserve provides for the timely replacement of equipment required to operate the I-95 Ashfill. Funds are transferred from Ash Disposal Revenue to equipment reserve as are proceeds from the sale of equipment. The reserve requirement is based on a replacement schedule composed of yearly payments to the reserve, which are based on the useful life of the equipment and vehicles.

⁵ The Post-Closure Reserve is required for a 30-year period after the ashfill closes and is mandated by federal and state regulations. The projected reserve of \$30.9 million for FY 2024 represents 68.9 percent of the estimated requirement of \$44,864,134 and is not sufficient to cover all identified costs. Additional funds will be set aside in future years.

Fund 40170: I-95 Refuse Disposal

SUMMARY OF CAPITAL PROJECTS

Project	Total Project Estimate	FY 2022 Actual Expenditures	FY 2023 Revised Budget	FY 2024 Advertised Budget Plan
I-95 Landfill Closure (SW-000019)	\$2,440,098	\$34,878.37	\$2,252,569.88	\$0
I-95 Landfill Environmental Compliance (SW-000016)	1,969,536	97,419.47	726,944.72	410,000
I-95 Landfill Leachate Facility (SW-000018)	5,010,478	181,790.25	778,536.75	0
I-95 Landfill Lot B Redesign (SW-000020)	1,750,000	8,069.35	1,544,704.75	0
I-95 Landfill New Service Road (SW-000027)	1,500,000	36,726.92	1,236,868.18	0
I-95 Methane Gas Recovery (SW-000014)	3,559,232	436,565.78	935,817.94	0
I-95 Operations Building Renovation (SW-000015)	2,498,952	99,562.00	321,070.55	2,000,000
I-95 Transfer/Materials Recovery Fac. (SW-000022)	2,000,000	0.00	2,000,000.00	0
Total	\$20,728,296	\$895,012.14	\$9,796,512.77	\$2,410,000