Recycling and Resource Management

PROGRAM DESCRIPTION AND OBJECTIVES

The principal objectives of Montgomery County's Recycling and Resource Management program are to: ensure that the solid waste generated in the county is managed in a safe, environmentally sound manner; encourage the reduction of waste generated by residents and businesses in the county; and recycle as much as feasible of the resources contained in, and extractable from, solid waste. The major elements in the management of solid waste are to:

- continue implementation of the ban on recyclable materials from the refuse waste stream and encourage greater on-site management of grass clippings and yard trim by homeowners;
- operate the mass burn Resource Recovery Facility (RRF) located in Dickerson while exploring alternatives to the RRF;
- provide rail transport of solid waste from the Solid Waste Transfer Station to the RRF; and
- beneficially reuse or recycle at private facilities ash from the RRF and rubble delivered to the Transfer Station at private facilities, transport any non-processible waste, and bypass waste that cannot be handled at the RRF for disposal to a private out-of-County landfill.

HIGHLIGHTS

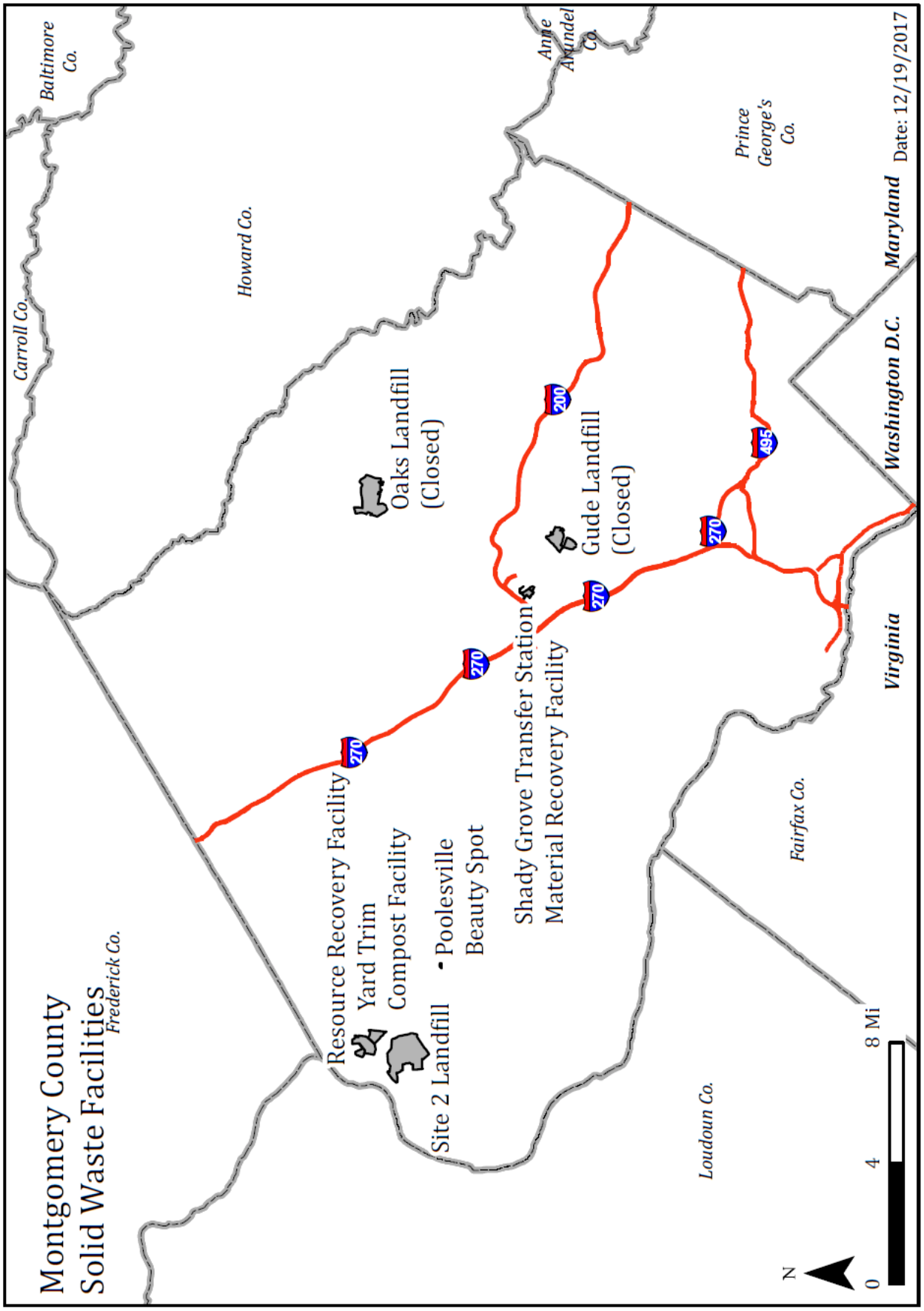
- Create a new project for maintenance and repairs of the Transfer Station in Shady Grove. This project shifts capital-eligible spending from the operating budget to the capital budget to relieve pressure on the Disposal Fund's debt service coverage ratio.
- Continue construction of upgrades to the Recycling Center, which will allow the County to process 100 percent of the material it generates.
- Improve the capture of methane, a powerful greenhouse gas, from the decommissioned Gude Landfill, and install a toupee cap to prevent groundwater contamination.
- Upgrade the leachate plant at the decommissioned Oaks Landfill which has reached the end of its useful life.

PROGRAM CONTACTS

Contact Vicky Wan of the Department of Environmental Protection at 240-777-7722 or Richard H. Harris of the Office of Management and Budget at 240-777-2796 for more information regarding this department's capital budget.

CAPITAL PROGRAM REVIEW

The FY27-32 Capital Improvements Program for Recycling and Resource Management contains five projects funded with $38.4 million over six years, a reduction of $39.5 million, or 50.7 percent, from the FY25-30 Amended CIP, primarily due to construction progressing on multiple projects. The related construction costs moved out of the six-year period.


Montgomery County
Solid Waste Facilities
Frederick Co.
Carroll Co.
Baltimore Co.
Howard Co.
Anne Arundel Co.
Prince George's Co.
Washington D.C.
Maryland
Virginia
Fairfax Co.
Loudoun Co.
Resource Recovery Facility
Yard Trim Compost Facility
Site 2 Landfill
Poolesville Beauty Spot
Shady Grove Transfer Station
Material Recovery Facility
Oaks Landfill (Closed)
Gude Landfill (Closed)
270
200
495
N
0
4
8 Mi
Date: 12/19/2017

Full Upgrade of Existing Recycling Center Complex

(P802201)

Category	Recycling and Resource Management	Date Last Modified	12/12/25
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Rockville	Status	Under Construction

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Planning, Design and Supervision	5,872	1,682	2,550	1,640	1,180	460	-	-	-	-	-
Construction	21,758	-	11,708	10,050	5,550	4,500	-	-	-	-	-
TOTAL EXPENDITURES	27,630	1,682	14,258	11,690	6,730	4,960	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Current Revenue: Solid Waste Disposal	4,372	810	3,262	300	240	60	-	-	-	-	-
Revenue Bonds	23,258	872	10,996	11,390	6,490	4,900	-	-	-	-	-
TOTAL FUNDING SOURCES	27,630	1,682	14,258	11,690	6,730	4,960	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 27 Request	-	Year First Appropriation	FY22
Appropriation FY 28 Request	-	Last FY's Cost Estimate	27,630
Cumulative Appropriation	27,630		
Expenditure / Encumbrances	8,999		
Unencumbered Balance	18,631		

PROJECT DESCRIPTION

This project will update the existing Material Recycling Center (MRF) with state-of-the-art equipment to increase commingled processing capacity to 200 - 240 tons per day (TPD). This includes a minor modification of the existing MRF building to increase storage capacity for both incoming and baled material. Equipment will be substantially replaced because the existing equipment is incompatible with modern recycling processing technology. An updated facility will have higher operation uptime (90 percent rather than the current 83 percent) and produce higher quality product that can receive higher prices in the market.

Features of the renovated facility include removing glass at the beginning of sorting to reduce wear and tear on equipment, improved sorting screens, optical sorting, high-efficiency electric motors, and reduced reliance on labor for sorting. An upgrade to the facility's electrical capacity may be added if it is determined that the current facility cannot handle the load needed after the renovation. This design will allow for the future addition of single stream processing equipment within the existing facility to receive and process

recyclables from other jurisdictions if expansion to a regional concept is supported in an effort to improve the recycling program's cost-benefit ratio.

LOCATION

16103 Frederick Road, Derwood, Maryland 20877

ESTIMATED SCHEDULE

A Facility Condition Assessment (FCA) revealed the need for a design change in the MRF project. Design of the upgrade continues, 30 percent design is expected to be complete in spring 2026. Construction schedules may be updated after 30 percent design is complete.

PROJECT JUSTIFICATION

The current commingled processing system at the MRF was installed in 1991 and upgraded in 2002 to process 10 tons per-hour (TPH) or 80 tons per day (TPD). Due to increased population, expanded material mix, and increased resident participation, the MRF currently receives 130 - 150 TPD of commingled material, almost double the current capacity. To keep up with the incoming volume, the MRF must export 40 - 45 percent of the commingled material received at an annual cost of approximately $1.2 million.

After almost 30 years of operation, the majority of the current system components have operated beyond their useful life, causing frequent downtime and high repair and maintenance costs. Replacement parts are increasingly difficult to source for some equipment. This project's improvements will reduce operating costs, increase revenue from the sale of recyclables, increase processing efficiency, and continue to provide high quality recycling services to the residents and businesses of Montgomery County.

FISCAL NOTE

In FY26, $3,562,000 in Revenue Bonds was switched with Current Revenue: Solid Waste Disposal.

COORDINATION

Maryland Environmental Service, Department of Permitting Services. Special Capital Projects Legislation [Bill No. 23-21E] was adopted by the County Council in June 2021.

Gude Landfill Remediation
(P801801)

Category	Recycling and Resource Management	Date Last Modified	12/30/25
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Upper Rock Creek Watershed	Status	Under Construction

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Planning, Design and Supervision	5,784	4,676	1,018	90	90	-	-	-	-	-	-
Site Improvements and Utilities	129	129	-	-	-	-	-	-	-	-	-
Construction	55,833	47,992	7,183	658	658	-	-	-	-	-	-
TOTAL EXPENDITURES	61,746	52,797	8,201	748	748	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Current Revenue: Solid Waste Disposal	22,700	22,700	-	-	-	-	-	-	-	-	-
Revenue Bonds	39,046	30,097	8,201	748	748	-	-	-	-	-	-
TOTAL FUNDING SOURCES	61,746	52,797	8,201	748	748	-	-	-	-	-	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32
Maintenance		4,311	711	720	720	720	720	720
NET IMPACT		4,311	711	720	720	720	720	720
FULL TIME EQUIVALENT (FTE)			-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 27 Request	-	Year First Appropriation	FY18
Appropriation FY 28 Request	-	Last FY's Cost Estimate	61,746
Cumulative Appropriation	61,746		
Expenditure / Encumbrances	55,200		
Unencumbered Balance	6,546		

PROJECT DESCRIPTION

This project provides for the remediation of low-level environmental contamination at the Gude Landfill. The Maryland Department of the Environment (MDE) approved an Assessment of Corrective Measures (ACM) report for the Gude Landfill in July 2016 which specifically outlines the approved Corrective Measure Alternative (CMA) for this remediation project. The MDE approved CMA

will include toupee capping (regrading and capping the top of the landfill and selected slope areas with a synthetic liner and two feet of soil) and increased gas collection through the installation of additional gas extraction wells. These remediation measures will reduce infiltration of rainwater into the landfill resulting in the generation of less leachate, fewer leachate seeps, and better control of landfill gas migration.

LOCATION

600 E. Gude Drive, Rockville, Maryland

ESTIMATED SCHEDULE

The Gude Landfill Remediation project construction began in January 2023 and is scheduled to be completed in FY27.

PROJECT JUSTIFICATION

The County and MDE entered a consent order in May 2013 which outlined requirements for assessing low-level groundwater contamination, gas migration, and other problems at the Gude Landfill. The consent order included provisions requiring a work plan and schedule to be established for assessing potential risks to human health and the environment, and development of an ACM report and implementation schedule. After consultation with industry experts, community groups, MDE, and County government leadership, the Department of Environmental Protection's (DEP) initial proposal to MDE in 2014 addressed the low-level groundwater contamination at the site with installation of bioremediation wells on the property. MDE's assessment of this bioremediation corrective measure in April 2015 determined that additional corrective measures would need to be included in the bioremediation approach to address all of MDE's requirements. A revised ACM report was submitted to MDE in April 2016 addressing all of MDE's comments and selecting corrective measures consisting of a toupee cap, additional landfill gas collection, and stormwater drainage improvements. The County has been mandated to perform work outlined in the consent order. Moving forward with the remediation of Gude Landfill, as required by MDE, will also address concerns raised by the adjacent community and allow planning for future reuses of the property.

FISCAL NOTE

An FY21 amendment reduced Current Revenue: Solid Waste Disposal by $6,000,000 and increased Revenue Bonds by $6,000,000.

COORDINATION

Northeast Maryland Waste Disposal Authority (NMWDA), Maryland Department of the Environment (MDE), Department of Permitting Services, Department of Health and Human Services, the Maryland-National Capital Park and Planning Commission, the U.S. Army Corps of Engineers, the Gude Landfill Concerned Citizens (GLCC), County social service agencies, and adjacent property owners. Special Capital Projects Legislation [Bill No. 16-19E] was adopted by Council on October 20, 2020.

New Organics Processing Facility
(P802508)

Category	Recycling and Resource Management	Date Last Modified	12/12/25
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Little Monacacy Basin Dickerson-Barnesville	Status	Preliminary Design Stage

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Planning, Design and Supervision	3,000	22	2,378	600	600	-	-	-	-	-	-
Site Improvements and Utilities	7,500	-	3,750	3,750	3,750	-	-	-	-	-	-
Construction	17,000	-	8,500	8,500	8,500	-	-	-	-	-	-
Other	500	-	350	150	150	-	-	-	-	-	-
TOTAL EXPENDITURES	28,000	22	14,978	13,000	13,000	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Current Revenue: Solid Waste Disposal	3,500	22	2,728	750	750	-	-	-	-	-	-
Revenue Bonds	24,500	-	12,250	12,250	12,250	-	-	-	-	-	-
TOTAL FUNDING SOURCES	28,000	22	14,978	13,000	13,000	-	-	-	-	-	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32
Maintenance		755	-	200	132	141	141	141
Energy		60	-	17	10	11	11	11
Program-Other		1,965	-	325	395	415	415	415
NET IMPACT		2,780	-	542	537	567	567	567

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 27 Request	13,000	Year First Appropriation	FY25
Appropriation FY 28 Request	-	Last FY's Cost Estimate	28,000
Cumulative Appropriation	15,000		
Expenditure / Encumbrances	403		
Unencumbered Balance	14,597		

PROJECT DESCRIPTION

Currently the County does not have a facility capable of accepting food scraps and other compostable organics. The existing County

Yard Trim Compost Facility in Dickerson, MD could be modified to comply with MDE permit requirements. Modifications would include the installation of a Covered Aerated Static Pile ("CASP") system, improvements to storm water management structures and systems and the upgrade to the electrical service.

Any significant change in the operation of the Yard Trim Compost Facility would require an amendment of the Agreement of Settlement and Compromise between the County and Sugarloaf Citizens Association.

The construction dollars shown in this project are placeholder dollars based on initial information for modifying the County's Yard Trim Compost Facility to accept food scraps and other compostable organics.

Funding appropriated in FY25 for planning and design may be used to develop potential scopes of work and cost estimates for building an organics processing facility at other locations in Montgomery County as well as to consider modifications needed at the Transfer Station to receive organics for transport to a future organics processing facility.

LOCATION

21210 Martinsburg Road, Dickerson, Maryland 20842

ESTIMATED SCHEDULE

Planning and design will begin in FY25. This project is projected to be completed in FY27.

PROJECT JUSTIFICATION

According to the 2023 Waste Composition Study, compostable organics make up 23 percent of the municipal solid waste (MSW) received at the transfer station. Of the 600,000 tons of MSW received at the transfer station each year, approximately 138,000 tons is compostable organics. Capturing the compostable organics and converting them into a high-quality soil amendment would reduce the total tons of waste processed at the Resource Recovery Facility and emit far less greenhouse gasses than landfilling.

DISCLOSURES

A pedestrian impact analysis will be performed during design or is in progress.

COORDINATION

Maryland Department of the Environment, Department of Permitting Services, Department of Finance, Department of Transportation, Office of the County Attorney, Sugarloaf Citizens Association

Oaks Landfill Leachate Pretreatment Plant Retrofitting

(P802505)

Category	Recycling and Resource Management	Date Last Modified	12/30/25
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Olney and Vicinity	Status	Under Construction

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Construction	5,578	-	3,578	2,000	2,000	-	-	-	-	-	-
TOTAL EXPENDITURES	5,578	-	3,578	2,000	2,000	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Current Revenue: Solid Waste Disposal	5,578	-	3,578	2,000	2,000	-	-	-	-	-	-
TOTAL FUNDING SOURCES	5,578	-	3,578	2,000	2,000	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 27 Request	-	Year First Appropriation	FY25
Appropriation FY 28 Request	-	Last FY's Cost Estimate	5,578
Cumulative Appropriation	5,578		
Expenditure / Encumbrances	-		
Unencumbered Balance	5,578		

PROJECT DESCRIPTION

The Oaks Landfill is approximately 545 acres with a waste disposal footprint of 170 acres. The Oaks Landfill Leachate Pretreatment started operations in 1995, 28 years ago, and has not undergone any renovations or retrofitting since the original construction. It is now in need of new and upgraded pretreatment equipment as the existing equipment is at or beyond their intended useful life. This project includes upgrading the existing facility to install new equipment for processing leachate and untreated stormwater from Countywide stormwater management facilities and address the two per- and polyfluoroalkyl (PFOA/PFOS) concentrations detected in leachate produced by the Oaks Landfill.

LOCATION

6001 Olney-Laytonville Road, Gaithersburg, Maryland 20882

ESTIMATED SCHEDULE

All design work, including permitting, will be completed in FY26. Construction will be completed in FY27.

PROJECT JUSTIFICATION

The Oaks Landfill Leachate Pre-Treatment Plant still uses a 25-year-old processing system which is outdated and operating past its useful life. It also needs to be upgraded and retrofitted with new equipment to improve the wastewater treatment process and to accommodate the additional treatment capacity by expanding the existing oil/grit management facility to support the County's stormwater management maintenance.

This project is needed to protect public health and the environment through the pretreatment of landfill leachate that has the potential to negatively impact groundwater and surface water sources if not managed properly. The County is required to provide for post-closure care and maintenance of landfill facilities and their associated infrastructure, which includes the Leachate Pretreatment Plant.

COORDINATION

Maryland Department of the Environment, WSSC Water, Department of Permitting Services, the Maryland-National Capital Park and Planning Commission.

Shady Grove Processing Facility Improvements
(P802701)

Category	Recycling and Resource Management	Date Last Modified	12/30/25
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Rockville	Status	Planning Stage

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Site Improvements and Utilities	11,000	-	-	11,000	3,000	2,500	2,000	1,500	1,000	1,000	-
TOTAL EXPENDITURES	11,000	-	-	11,000	3,000	2,500	2,000	1,500	1,000	1,000	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Current Revenue: Solid Waste Disposal	11,000	-	-	11,000	3,000	2,500	2,000	1,500	1,000	1,000	-
TOTAL FUNDING SOURCES	11,000	-	-	11,000	3,000	2,500	2,000	1,500	1,000	1,000	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 27 Request	3,000	Year First Appropriation	
Appropriation FY 28 Request	2,500	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

The Shady Grove Processing Facility and Transfer Station was constructed in the 1980s and required significant upgrades to sustain safe and reliable operations. The newly constructed infrastructure is County-owned and County-maintained and requires a comprehensive, site-wide preventative maintenance plan to ensure continued safe and uninterrupted operations.

The County-owned infrastructure includes new scales and scale house, an administrative building, fire detection and fire suppression systems, and all new power infrastructure including new generator. Proper maintenance and upkeep of these assets are essential to operational continuity and facility safety.

PROJECT JUSTIFICATION

The Shady Grove Processing Facility and Transfer Station processes significant volumes of municipal waste daily. Facility operations

rely on both operational equipment and County-owned infrastructure to support safe and effective waste processing. The County-owned infrastructure requires dedicated capital investment and ongoing maintenance to ensure continued functionality and safety.

This capital project focuses mainly on the County-owned infrastructure at the Transfer Station, including the scales, scale house, administrative building, power infrastructure, fire detection and suppression systems.

FISCAL NOTE

This project shifts capital-eligible expenditures from the operating budget into the capital budget to properly locate facility maintenance expenditures.

DISCLOSURES

A pedestrian impact analysis will be performed during design or is in progress. Expenditures will continue indefinitely.

COORDINATION

Department of Permitting Services