



# Full Upgrade of Existing Recycling Center Complex

(P802201)

Category	Recycling and Resource Management	Date Last Modified	04/26/24
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Rockville	Status	Under Construction

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	3,380	160	820	2,400	760	1,180	460	-	-	-	-
Construction	24,250	-	6,442	17,808	7,758	5,550	4,500	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>27,630</b>	<b>160</b>	<b>7,262</b>	<b>20,208</b>	<b>8,518</b>	<b>6,730</b>	<b>4,960</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Solid Waste Disposal	810	160	650	-	-	-	-	-	-	-	-
Revenue Bonds	26,820	-	6,612	20,208	8,518	6,730	4,960	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>27,630</b>	<b>160</b>	<b>7,262</b>	<b>20,208</b>	<b>8,518</b>	<b>6,730</b>	<b>4,960</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	-	Year First Appropriation	FY22
Appropriation FY 26 Request	-	Last FY's Cost Estimate	27,630
Cumulative Appropriation	27,630		
Expenditure / Encumbrances	527		
Unencumbered Balance	27,103		

## 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% rather than the current 83%) 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

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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

## ESTIMATED SCHEDULE

A Facility Condition Assessment (FCA) revealed the need for a design change in the MRF project. Design of the upgrade continues in FY25. 30% design completion is expected to be completed in the fall. Equipment arrival and fabrication, as well as permitting will need to be complete prior to construction.

## 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% 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 County.

## FISCAL NOTE

The Solid Waste Enterprise Fund is self-supporting through user fees, and revenue from the Solid Waste Enterprise Fund will be the source of repayment of the Solid Waste Revenue Bonds.

## COORDINATION

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