



Full Upgrade of Existing Recycling Center Complex

(P802201)

Category	Recycling and Resource Management	Date Last Modified	01/11/23
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Rockville	Status	Under Construction

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	810	7	803	-	-	-	-	-	-	-	-
Construction	26,820	-	11,090	15,730	8,450	7,280	-	-	-	-	-
TOTAL EXPENDITURES	27,630	7	11,893	15,730	8,450	7,280	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Current Revenue: Solid Waste Disposal	810	7	803	-	-	-	-	-	-	-	-
Revenue Bonds	26,820	-	11,090	15,730	8,450	7,280	-	-	-	-	-
TOTAL FUNDING SOURCES	27,630	7	11,893	15,730	8,450	7,280	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 24 Request	7,280	Year First Appropriation	FY22
Cumulative Appropriation	20,350	Last FY's Cost Estimate	20,350
Expenditure / Encumbrances	528		
Unencumbered Balance	19,822		

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 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, MD

ESTIMATED SCHEDULE

The project will begin in Spring FY22 and is scheduled for completion in FY25.

COST CHANGE

Increase reflects machinery and other equipment cost increases.

PROJECT JUSTIFICATION

The current commingled processing system at the Recycling Center (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 June 29, 2021.