

T&E COMMITTEE #1
October 21, 2020

Worksession

MEMORANDUM

October 16, 2020

TO: Transportation and Environment Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Worksession:** Special Appropriation to the FY21 Capital Budget and Amendment to the FY21-26 Capital Improvements Program (CIP), Montgomery County Government – Department of Environmental Protection (DEP)
- Transfer Station Fire Detection and Suppression System (No. 802101), \$4,700,000 (source of funds: Current Revenue – Solid Waste Disposal Fund)
FY09-14 Capital Improvements Program (CIP): Solid Waste Services

Meeting Participants Include:

- Patty Bubar, Deputy Director, Department of Environmental Protection (DEP)
- Jeff Camera, Manager, Recycling and Resource Management, DEP
- Jamie Foster, Senior Engineer, Recycling and Resource Management, DEP
- Richard Harris, Fiscal and Policy Analyst, Office of Management and Budget

On September 21, 2020, the County Council received a request from the County Executive for an FY21 Capital Budget special appropriation for \$4.7 million and amendment to the FY21-26 CIP for \$6.0 million to fund a new project for the replacement of the fire detection and suppression system at the County's Solid Waste Transfer Station. A public hearing was held on October 13, 2020.

Justification

According to DEP, the transfer station experiences approximately 16 fires on average per year. The most common fires are associated with batteries in the tipping floor and pit areas.

The current fire detection and suppression system is over 30 years old and cannot provide sufficient water capacity or pressure nor can it provide non-water-based suppression as is needed for many fires that occur (such as those involving batteries). Water trucks and portable fire

extinguishers are needed to supplement the current system. Also, the existing detection system is not fully functional and the fire alarms in the administrative buildings only work intermittently.

DEP has taken steps to address safety issues at the Transfer Station (see later discussion) and to reduce the likelihood and mitigate the severity of fires at the Transfer Station. However, fires continue to occur, the current fire detection and suppression system is beyond its useful life and does not meet fire code requirements. The Department of Permitting Services issued a notice of violation in February 2020.

Scope of Work

DEP initially looked at retrofitting the current system, but those plans were determined to not meet fire code requirements per a review by the County's insurance provider (FM Global) for this facility. Based on that feedback, and in consultation with Risk Management, DEP developed plans for a new system which have been submitted to the Department of Permitting Services.

Based on the current design plans, the new system will include:

- A new fire alarm system with three fire alarm panels (one in the pump house, one in the maintenance facility, and one in room 110 of the transfer station).
- All six zones in the Tipping floor and pit areas will have valves replaced, a new dry pipe system installed, and new sprinklers installed. This will enable fire suppression with water as well as with a nitrogen-based system.
- The existing wet pipe riser that supplies the sprinkler system will be replaced and relocated, and installation of a new pre-action system to protect the existing IT server rooms in the County office suite.
- A new Nitrogen Generator System will be installed to supply the dry pipe zones within the Transfer Station.
- A new diesel fire pump, self-contained pump house, and a 200,000 gallon above ground water storage tank will be installed.
- Two new hose reel stations and two new remotely operated monitor nozzles will be installed.

The project will be done in phases and after regular business hours in order to minimize impacts on the Transfer Station's operations.

Safety Issues at the Transfer Station

Fires at the Transfer Station are one element of a broader safety challenge at the Transfer Station given the range of activities and volume of business at the site. In July 2019, after the on-site death of a contractor, DEP established a Safety Working Group to improve coordination and cooperation among DEP staff, Risk Management, and the Transfer Station contractors (Maryland Environmental Service (MES) and Covanta). This group meets weekly and looks comprehensively at operations on the site.

Some areas that have been addressed by the Safety Working Group include communication protocols, job hazard analyses/risk mitigation, and improved signage and traffic queuing. The intergovernmental agreements with MES and Covanta have also been revised to enhance safety provisions.

Regarding reducing and minimizing the severity of fires, DEP is planning a major education and outreach campaign to discourage County residents and businesses from disposing of any batteries in the regular trash. Instead, batteries should be dropped off at the County’s household hazardous waste drop-off facility or at other private battery drop-off sites. As noted earlier, batteries are a major cause and/or contributing factor to the number and severity of fires experienced at the Transfer Station. According to DEP, this is a nationwide issue as batteries of all types have become more ubiquitous in consumer products. DEP’s latest guidance on battery disposal (from its website) is attached on ©8-9.

Expenditures and Funding

Project	Six-Year						
	Total	FY21	FY22	FY23	FY24	FY25	FY26
Transfer Station Fire Detection and Suppression System	6,000	4,700	1,123	177			

The total project cost is \$6.0 million. The construction cost estimate was developed using the engineering design plans established to address the notice of violation, FM Global requirements, and current fire code.

The County Executive has noted that this project is to be funded from an accrual of current revenue in the Solid Waste Disposal Fund previously reserved for the Gude Landfill Remediation Project. The Gude project will have FY23 funding switched from Solid Waste Disposal Fund Current Revenue to Bonds.

Council Staff Recommendation

Council Staff recommends approval of this project as transmitted by the County Executive.

Attachments

- September 21, 2020 Transmittal from the County Executive
 - Transmittal Letter ©1-2
 - Draft Resolution ©3-4
 - Gude Landfill Remediation Project Description Form ©5-6
 - Transfer Station Fire Detection and Suppression System Project Description Form ©7
 - DEP website guidance on battery disposal in Montgomery County ©8-9



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Marc Elrich
County Executive

MEMORANDUM

September 21, 2020

TO: Sidney Katz, President, County Council

FROM: Marc Elrich, County Executive 

SUBJECT: Amendment to the FY21-26 Capital Improvements Program and Supplemental Appropriation #2-S21-CMCG-1 to the FY21 Capital Budget
Montgomery County Government
Department of Environmental Protection
Transfer Station Fire Detection and Suppression System (No. 802101), \$4,700,000

I am recommending a supplemental appropriation to the FY21 Capital Budget and amendment to the FY 21-26 Capital Improvements Program in the amount of \$4,700,000 for Transfer Station Fire Detection and Suppression System (No. 802101). Appropriation for this project will fund fire detection and suppression system improvements to support safe operating conditions at the transfer station, located in the Gaithersburg area.

This increase is needed because the current fire detection and suppression system is beyond its useful life, and fires have occurred on the tipping floor. The Department of Permitting Services issued a Notice of Violation (NOV) in February 2020 as well. Though the Department of Environmental Protection has taken several steps to reduce the likelihood of fires at the Transfer Station, the detection and suppression system must still be replaced to fully address the violation. The recommended amendment is consistent with the criteria for amending the CIP because it addresses an urgent safety concern.

It should be noted that the funds for this project are from an accrual that was created for the Gude Landfill Remediation (No. 801801) project. The Gude Landfill Remediation project, which was approved in the FY21-26 CIP with \$28.7 million in Current Revenue: Solid Waste Disposal and \$33.0 million in Revenue Bonds, will be changed to show a funding switch reflecting \$22.7 million in Current Revenue: Solid Waste Disposal funding and \$39.0 million in Revenue Bond funding. A revised Gude Landfill Remediation PDF showing this funding switch is included for your reference.

I recommend that the County Council approve this supplemental appropriation and amendment to the FY21-26 Capital Improvements Program in the amount of \$4,700,000 and specify the source of funds as Current Revenue: Solid Waste Disposal.

Sidney Katz, President, County Council
September 21, 2020
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I also request that the Council act on Bill 16-19E, Special Projects Legislation for the Gude Landfill Remediation project. This bill is currently pending and is a necessary step prior to construction.

I appreciate your prompt consideration of this action.

ME:rh

Attachment: Amendment to the FY21-26 Capital Improvements Program and Supplemental Appropriation #2-S21-CMCG-1

c: Richard S. Madaleno, Acting Chief Administrative Officer
Adriana Hochberg, Assistant Chief Administrative Officer
Adam Ortiz, Department of Environmental Protection
Patrice Bubar, Department of Environmental Protection
Anthony Skinner, Department of Environmental Protection
Mary Beck, Office of Management and Budget
Richard H. Harris, Office of Management and Budget

Resolution: _____
Introduced: _____
Adopted: _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Amendment to the FY21-26 Capital Improvements Program and Supplemental Appropriation #2-S21-CMCG-1 to the FY21 Capital Budget
Montgomery County Government
Department of Environmental Protection
Transfer Station Fire Detection and Suppression System (No. 802101),
\$4,700,000

Background

1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
2. Section 302 of the Montgomery County Charter provides that the Council may amend an approved capital improvements program at any time by an affirmative vote of no fewer than six members of the Council.
3. The County Executive recommends the following capital project appropriation increases:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u> Current Revenue: Solid Waste Disposal
Transfer Station Fire Detection and Suppression System	802101	Construction	\$4,700,000	

4. This increase is needed because the current fire detection and suppression system is beyond its useful life, and fires have occurred on the tipping floor. The Department of Permitting Services issued a Notice of Violation (NOV) in February 2020 as well. Though the Department of Environmental Protection has taken several steps to reduce the likelihood of fires at the Transfer Station, the detection and suppression system must still be replaced to fully address the violation. The recommended amendment is consistent with the criteria for amending the CIP because it addresses an urgent safety concern.
5. The County Executive recommends an amendment to the FY21-26 Capital Improvements Program and a supplemental appropriation in the amount of \$4,700,000 for Transfer Station Fire Detection and Suppression System (No. 802101) and specifies that the source of funds will be Current Revenue: Solid Waste Disposal.
6. Notice of public hearing was given and a public hearing was held.

Action

The County Council for Montgomery County, Maryland, approves the following action:

The FY21-26 Capital Improvements Program of the Montgomery County Government is amended as reflected on the attached project description form and a supplemental appropriation is approved as follows:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Transfer Station Fire Detection and Suppression System	802101	Construction	\$4,700,000	Current Revenue: Solid Waste Disposal

This is a correct copy of Council action.

Selena Mendy Singleton, Esq., Clerk of the Council



Gude Landfill Remediation

(P801801)

Category Recycling and Resource Management **Date Last Modified** 01/03/20
SubCategory Recycling and Resource Management **Administering Agency** Environmental Protection
Planning Area Upper Rock Creek Watershed **Status** Ongoing

	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
EXPENDITURE SCHEDULE (\$000s)											
Planning, Design and Supervision	6,955	1,363	707	4,795	456	771	932	905	877	854	90
Construction	54,791	-	-	54,133	-	17,558	10,561	11,200	9,810	5,004	658
TOTAL EXPENDITURES	61,746	1,363	707	58,928	456	18,329	11,493	12,105	10,687	5,858	748

	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
FUNDING SCHEDULE (\$000s)											
Current Revenue: Solid Waste Disposal	28,700	1,363	707	26,630	456	18,329	7,845	-	-	-	-
Revenue Bonds	33,046	-	-	32,298	-	-	3,648	12,105	10,687	5,858	748
TOTAL FUNDING SOURCES	61,746	1,363	707	58,928	456	18,329	11,493	12,105	10,687	5,858	748

				Year First Appropriation		FY18	
				Last FY's Cost Estimate		28,700	
Appropriation FY 21 Request	-	-	-	-	-	-	-
Appropriation FY 22 Request	-	10,955	-	-	-	-	-
Cumulative Appropriation	-	9,900	-	-	-	-	-
Expenditure / Encumbrances	-	1,796	-	-	-	-	-
Unencumbered Balance	-	8,104	-	-	-	-	-

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 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 will begin in FY22 and is scheduled to be completed in FY27.

COST CHANGE

Costs increased due to updated estimates from a Maryland Department of the Environment-approved scope. A delay in construction is also reflected as DEP considers phasing to reduce costs. New 60% design documents based on the phasing and an updated cost estimate are expected in early 2020. The scope, design, and cost are subject to final MDE review, and continued cost refinements are expected.

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 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

The source of the additional funding will likely be Solid Waste (Disposal Fund) Revenue Bonds. Discussions are under way with Finance and the Office of Management and Budget pursuant to this option, but it may change if another financing method is more advantageous. *A FY21 funding switch reduced CR: Solid Waste Disposal by \$6,000,000 and increased Revenue Bonds by \$6,000,000.*

DISCLOSURES

A pedestrian impact analysis has been completed for this project.

COORDINATION

Northeast Maryland Waste Disposal Authority (NMWDA), Maryland Department of the Environment (MDE), Department of Permitting Services, 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.

Transfer Station Fire Detection and Suppression System (P802101)

Category	Recycling and Resource Management	Date Last Modified	08/19/20
SubCategory	Recycling and Resource Management	Administering Agency	Environmental Protection
Planning Area	Gaithersburg and Vicinity	Status	Final Design Stage

	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
EXPENDITURE SCHEDULE (\$000s)											
Construction	6,000	-	-	6,000	4,700	1,123	177	-	-	-	-
TOTAL EXPENDITURES	6,000	-	-	6,000	4,700	1,123	177	-	-	-	-

FUNDING SCHEDULE (\$000s)											
Current Revenue: Solid Waste Disposal	6,000	-	-	6,000	4,700	1,123	177	-	-	-	-
TOTAL FUNDING SOURCES	6,000	-	-	6,000	4,700	1,123	177	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)			
Appropriation FY 21 Request	-	Year First Appropriation	-
Appropriation FY 22 Request	-	Last FY's Cost Estimate	-
Supplemental Appropriation Request	4,700		
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the comprehensive design and installation of new fire detection and suppression systems at the Shady Grove Processing and Transfer Facility to replace the existing detection and suppression systems that are beyond their useful life. The project will also address other fire code deficiencies and violations as identified by the County's Fire Department and Department of Permitting Services (DPS). The construction project will span about two years.

LOCATION

16101 Frederick Road, Derwood, Maryland

ESTIMATED SCHEDULE

The construction for the new fire detection and suppression systems will begin in FY21 and is scheduled to be completed in FY23.

PROJECT JUSTIFICATION

On February 13, 2020, the Department of Environmental Protection (DEP) received a Notice of Violation (Case No. 418905) from the County's Department of Permitting Services (DPS). This Notice of Violation cited a NFPA1-System Restore Violation for Case No. 418905. The Department is currently working through the Northeast Waste Disposal Authority with contractors to complete a design for the fire detection and suppression systems to address the Notice of Violation and the concerns posed by the County's insurance provider (FM Global). Therefore, this project completion is essential to mitigate fires that may occur, and to eliminate health and safety concerns associated with having a deficient fire detection and suppression systems for solid waste operations.

FISCAL NOTE

Design of this project was funded in the operating budget.
FY21 supplemental in Current Revenue: Solid Waste Disposal for the amount of \$4,700,000.

COORDINATION

Northeast Maryland Waste Disposal Authority (NMWDA), Maryland Department of the Environment (MDE), Department of Permitting Services, FM Global, Covanta Energy, and County social service agencies, and adjacent property owners.

OPERATING STATUS:

- Recycling/trash collection - normal schedule.
- Transfer Station recycling/trash drop-offs - normal hours.
- Be in the know - Sign up for service updates and reminders.

ALERT: Household Hazardous Waste (HHW) drop-off at the Shady Grove Transfer Station - All materials, including batteries and fluorescent tubes, must be placed on the table for site personnel to handle and process. View our household hazardous waste guide for more information.

COVID-19 Updates: Visit DEP Programs and Services Updates for the latest information.

How to recycle / dispose batteries

Search for another material

Batteries need special disposal

Effective 7/7/20 the household hazardous waste station accepts all batteries, including alkaline batteries, for disposal.

Do not dispose of batteries in your regular trash.

- dry cell and alkaline batteries
- Lithium batteries
- lithium-ion batteries
- nickel-cadmium batteries
- lead acid (vehicle) batteries
- uninterruptible power supplies (personal & network)
- tool batteries

Where can I take batteries for special disposal?

Button, and small and large rechargeable batteries

If the batteries are from your	take them to this place
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If the batteries are from your	take them to this place
home	<p>Household Hazardous Waste dropoff at the Shady Grove Processing Facility and Transfer Station. Or, use the Call2Recycle drop-off locator to find participating retailers.</p> <p>Bring batteries from your home at no charge.</p> <p>We do not limit the number of batteries you may drop off.</p>
business or organization (Small Quantity Generators only)	<p>Ecowise drop-off at the Shady Grove Processing Facility and Transfer Station; the Ecowise fee schedule applies. Or, use the Call2Recycle drop-off locator to find participating retailers.</p>

The safest methods of transporting these batteries are to protect terminals by

- placing each battery individually into a plastic bag, or
- taping the ends with masking tape or another non-metallic tape.

When carrying small batteries in your pocket, do not mix them with coins and house keys.

Lead acid/vehicle batteries

We accept lead acid or vehicle batteries from residents at no charge at our Household Hazardous Waste dropoff at the Shady Grove Processing Facility and Transfer Station. For businesses and organizations we accept batteries for a small fee thru the county Ecowise Program on Wednesdays 1:00 pm to 5:00 pm also at the Shady Grove Processing Facility and Transfer Station near the Household Hazardous Waste drop-off location. Businesses and organizations can register using Ecowise Online Application.

Locations accepted
<ul style="list-style-type: none"> • Transfer Station

Material type
<ul style="list-style-type: none"> • Other

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