



2664 Riva Road
Annapolis MD 21401
www.aacounty.org/ip
Phone: (410) 222-7790

Mark R. Wedemeyer, Director

April 23rd, 2026

Via email pwvzal23@aacounty.org

Blake Zalar

Anne Arundel County

Department of Public Works

2525 Riva Road, Suite 120

Annapolis, MD 21401

Re- Millersville Landfill and Resource Recovery Facility
Cell 9 Vertical Expansion
CIP# N561401
Grading Permit No. G02013304

Dear Mr. Zalar:

This letter is in response to your request regarding the vertical expansion of Cell 9 at the Millersville Landfill and Resource Recovery Facility and Stormwater Management Concept Plan for this expansion. The property is currently operating under an existing grading permit (#G02013304) issued on September 10th, 2014. The County has reviewed the submission that was prepared by a professional engineer registered in the State of Maryland (Design Professional).

The submission seeks to demonstrate compliance with current stormwater management regulations and design guidelines for the project which is described as vertical expansion of an approximately 100-acre landfill cell with no increase in footprint. Furthermore, the project proposes an impervious capping system over the landfill cell. The project is considered "new development" for the purposes of regulating the stormwater management requirement. The scope of the project generates an Environmental Site Design volume (ESDv) treatment requirement of 18.145 acre-feet and Overbank flood control protection (Qp). The project proposes to meet stormwater management requirements via a wet pond facility.

The Anne Arundel County Practices and Procedures Manual Chapter 6.1.3 defines the ESD to the MEP as:

- A. All Stormwater Management Plans shall demonstrate that environmental site design (ESD) has been implemented to the maximum extent practicable (MEP).
- B. The use of ESD planning techniques and treatment practices shall be exhausted before any structural best management practice (BMP) is implemented.
- C. Structural management practices may be used only if determined to be absolutely necessary.

The design professional has evaluated the ESD design approach methodology for the project and determined that ESD practices described in Chapter 5 of the State Stormwater Management Design Manual are not practicable (see Table 1 of the Concept Plan) or feasible for the site conditions. The County staff concurs with the Design

G02013304
Millersville Landfill and Resource Recovery Facility
Cell 9 Vertical Expansion

Professional that the nature of the landfill use is not aligned with the best management practices defined in Chapter 5 because it is not practicable or feasible to reduce the ~100 acre landfill cell into distinct small drainage areas or to reduce the site imperviousness because an impervious capping system is necessary for environmental protection from the contents of the landfill.

Please consider this as the concurrence with the provided stormwater managing plan and that the design has satisfactorily demonstrated compliance with the ESD to the MEP for the site conditions due to the constraints inherent to the project and outside of the applicant's control.

Based upon staff's review of the information submitted, the summary provided in the attached memo dated April 23rd, 2026, and Maryland Department of Environment (MDE) email acknowledgement that the proposed stormwater approach be appropriately documented, this letter is to provide concurrence with the stormwater management concept plan.

If you have any questions concerning this modification request, please contact Pearce Wroe at 410-804-6366 or via email at pwwroe23@aacounty.org.

Sincerely,

Raghavenderrao Badami, PE
Assistant Director

cc: Pearce Wroe, PE, Engineer, I&P
Robert Murphy, PE, PG, Engineering Manager, Department of Inspections and Permits

Attachments - April 23 2026 memo



Mark R. Wedemeyer, Director

Memorandum

TO: Raghavenderrao Badami, PE., Assistant Director, Department of Inspections and Permits

Cc: Robert Murphy, PE, PG, Engineering Manager, Department of Inspections and Permits

FROM: Pearce Wroe, PE, Engineering Division, Department of Inspections and Permits

SUBJECT: Millersville Landfill and Resource Recovery Facility
Cell 9 Vertical Expansion
CIP# N561401

DATE: April 23rd, 2026

Stormwater Concept Review:

The above-referenced project requests Stormwater Management Concept Approval to support the County's application for a Permit Modification required by the Maryland Department of the Environment (MDE) issued Refuse Disposal Permit Part IV.T. An active grading permit (G02013304) was issued for the site on September 10th, 2014, that includes this project's work area.

Project Information:

The proposed project includes increasing the height and volume of Cell 9 of the Millersville Landfill and Resource Recovery Facility located at 389 Burns Crossing Road, Severn, Maryland. No increase in cell footprint is proposed. The site is an active waste management facility with an open grading permit (G02013304). Stormwater management for the property was designed under earlier stormwater regulations and includes a wet pond (Pond 9-2) that is currently constructed and in use as a sediment control facility. The proposed increase in Cell 9 height and a new cell capping system will impact the hydrology of the subject site for which new stormwater management analysis has been performed. The new stormwater management analysis is consistent with the Anne Arundel County Stormwater Management Practices and Procedures Manual (Manual).

Determination/Recommendation:

Upon review of the applicant's Stormwater Management Concept Submission including a Stormwater Management Concept Plan and Report dated March 2026 (Concept Plan) and prepared by a professional engineer registered in the State of Maryland (Design Professional), I recommend acceptance of the Stormwater Management Concept Phase of this project and concurrence that the project meets the Stormwater Management Concept submission criteria as established in the Manual with consideration of the following comments.

Review Comments:

1. The applicant has provided a Stormwater Management Concept Submission consistent with the contents described in Chapter 3 of the Manual for review and approval of Stormwater Management Concept Plans.
2. The applicant has determined that the project meets the definition of "new development" based on the existing imperviousness of the subject site.

3. The applicant has determined a stormwater management requirement for the revisions to Cell 9 based on the underlying soil hydrologic soil group rating of "A" and an impervious capping system for a roughly 100-acre landfill cell.
4. The applicant has determined, and the County concurs with a target PE value of 2.4 inches.
5. The applicant has determined, and the County concurs with a target ESDv value of 18.145 acre-feet.
6. The applicant has satisfactorily considered ESD treatment methodology for the project and determined that ESD practices described in Chapter 5 of the State Stormwater Management Design Manual are not practicable (see Table 1 of the Concept Plan). The County concurs with the Design Professional that the nature of the landfill use is not aligned with the best management practices defined in Chapter 5 because it is not practicable to reduce the ~100-acre landfill cell into distinct small drainage areas or to reduce the site imperviousness because an impervious capping system is necessary for environmental protection from the contents of the landfill.
7. The applicant has determined, and the County concurs that use of a structural stormwater management facility in the form of an expansion to the existing Pond P-2 is an appropriate stormwater management practice to provide quality and quantity control for the project.
8. This office has communicated the unique characteristics of this project to MDE and received concurrence that the use of a stormwater pond is appropriate for this project (see attached 3/5/2026 email).
9. The Design Professional proposes enlargement of Pond P-2 to provide sufficient water quality storage to capture the calculated ESDv and sufficient extended detention to provide Overbank flood protection.



Pearce Wroe <pwwroe23@aacounty.org>

Question Regarding ESD to the MEP for Landfill Site

Deborah Cappuccitti <deborah.cappuccitti@maryland.gov>

Thu, Mar 5, 2026 at 5:51 PM

To: Pearce Wroe <pwwroe23@aacounty.org>

Cc: amanda.malcolm@maryland.gov, Raghavenderrao Badami <ipbada78@aacounty.org>

OK, that sounds reasonable to us...

I recommend the County document justification for a variance to use ESD for this site, given it's industrial use and lack of feasibility... If you are able to address all swm requirements in the existing ponds, the justification and documentation for that type of variance regarding the use of ESD is what we would want to see if we were reviewing your program.

Hope that helps! Let me know if you need anything further,
Deb

On Thu, Mar 5, 2026 at 2:25 PM Pearce Wroe <pwwroe23@aacounty.org> wrote:

Thanks so much for the quick reply!

Attached is the draft concept report. As a quick SWM summary the site has some Chapt. 3 Ponds already in place and would be able to increase the size of the ponds to account for new ESDv, Q10 and Q100 as needed for the new impervious area.

Thanks again for your help and please let us know if you have any follow up questions or when you would like to circle back.

Regards,

Pearce



H.2 Millersville SWMCP_Draft 01302026 (1).pdf

On Thu, Mar 5, 2026 at 2:07 PM Deborah Cappuccitti <deborah.cappuccitti@maryland.gov> wrote:

Hi Pearce!

Nice to hear from you! Of course, I cannot forget the amount of fun we had working on the City of Gaithersburg's baseline! Anne Arundel County has a good one!

It might help to send the concept report and our staff can take an initial look. My first thought here is that it sounds like this is new development because the synthetic cap no longer allows runoff to filter into the ground—which may not be a bad thing for a landfill. I wonder if there is a case to consider that this qualifies as "in-fill development." So, instead of granting a waiver from water quality perhaps some flexibility for the types of BMPs that are implemented may be considered. Have you considered whether other water quality measures are feasible and if not, does the County have ideas on alternative solutions?

let us know your thoughts on that and we can circle back after we have a chance to take a look further,

Debbie

On Thu, Mar 5, 2026 at 1:02 PM Pearce Wroe <pwwroe23@aacounty.org> wrote:

Hi Debbie,

I don't know if you remember me from our brief encounters when I worked with Maria Warburton at the City of Gaithersburg, but I'm currently working with Anne Arundel County as a reviewer for their Capital Improvement Projects. One project in particular revealed a challenging question about applying ESD to the MEP in compliance with the current Design Manual and we'd like to understand the State's perspective on these types of projects.

Would you or Amanda (Cc'd) or anyone else at MDE have time for a brief discussion about how the State views these types of situations? Below is some background for your reference. I can also forward a draft SWM Concept Report at your request.

The project is a revision to an active Grading Permit for a 500+ acre landfill site. The scope involves increasing the proposed height of a proposed landfill cell and changing the capping system from a soil based cap to a synthetic cap. We interpret the project as "new development," so the ESD to the MEP standard would apply accordingly. We understand from the Design Manual that "*As a minimum, ESD shall be used to address both Rev and WQv requirements*". At face value the nature of a landfill cell - essentially one large (~100 acre) mound using a synthetic capping system (i.e. impervious) - would make it impossible to meet this standard as there is no feasible way to distribute drainage to small ESD practices to meet the Rev or WQv requirements.

I know you all are very busy so we appreciate any time you can spare to help us make sure our interpretations are in alignment with the State's. Please let us know if there is a time that we could call or arrange a virtual meeting for a quick discussion.

Thanks so much!

Pearce



**The Best Place
For All**

Pearce Wroe, PE, CBLP-T

He/Him

Department of Public Works

I&P Engineering Reviewer

Cell number: 410.804.6366



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Deborah J. Cappuccitti, Chief

Stormwater Program Review Division

Water and Science Administration

Maryland Department of the Environment

1800 Washington Boulevard

Baltimore, Maryland 21230

Deborah.cappuccitti@maryland.gov

410-537-3533 (O)

[Website](#) | [Facebook](#) | [Twitter](#)

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Deborah J. Cappuccitti, Chief

Stormwater Program Review Division

Water and Science Administration

Maryland Department of the Environment

1800 Washington Boulevard

Baltimore, Maryland 21230

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