December 17, 2020

Mr. Harvey Johnson, Programs and Project Management, Planning
U.S. Army Corps of Engineers, Baltimore District
2 Hopkins Plaza, 10th Floor
Baltimore, MD 21203-1715

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: **MD20201106-0959**
Applicant: U.S. Army Corps of Engineers, Baltimore District
Project Description: Draft Environmental Impact Statement (EIS) and Draft Finding of No Practicable Alternative (FONPA): Proposed Action Includes Construction and Operation of a Replacement Currency Production Facility at the Beltsville Agricultural Research Center (BARC), Prince George's County, MD
Project Address: BARC Central Farm, 200 Building Cluster, Odell Road, Powder Mill Road, Poultry Road, Beltsville, MD 20705
Project Location: Prince George's County
Recommendation: **Consistent with Qualifying Comments and Contingent Upon Certain Actions**

Dear Mr. Johnson:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.02.04-.07, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation.

Review comments were requested from the Maryland Departments of Agriculture, General Services, Natural Resources, Transportation, and the Environment; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning, including the Maryland Historical Trust. The Maryland Department of Agriculture did not have comments.

The Maryland Departments of General Services, and Natural Resources; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning found this project to be consistent with their plans, programs, and objectives.

The Maryland Department of Planning provided the following comments:

> "The Draft Environmental Impact Statement is for the Bureau of Engraving and Printing, Currency Production Facility preferred location within the Beltsville Agricultural Research Center. This facility will replace the existing facility located in downtown Washington D.C., which has been deemed obsolete. The project will ultimately transition approximately 1600 personnel to the Prince George's County location. This is consistent with Plan Prince George's 2035 General Plan in regard to establishing an

> Innovation Corridor to include the Beltsville Agricultural Research Center. 'This area has the highest concentrations of economic activity in our four targeted industry clusters and has the greatest potential to catalyze future job growth, research, and innovation in the near- to mid-term. This area is also well positioned to capitalize on the synergies that derive from businesses, research institutions, and incubators locating in close proximity to one another and on existing and planned transportation investment, such as the Purple Line.' (http://planpgc2035.org/202/Innovation-Corridor)."

The Maryland National Capital Parks and Planning Commission - Prince George's County (M-NCPPC) provided the following comments:

> "The U.S. Army Corps of Engineers, Baltimore District on behalf the U.S. Department of Treasury requests Clearinghouse review and endorsement of the BARC proposal for the construction of a new currency facility. As this is a Federally owned and operated property, the project is not subject to the county's local building and grading regulations. Additionally, M-NCPPC does not have regulatory jurisdiction over activities, development or otherwise, within the boundary of the property. Staff defers to Maryland Department of the Environment and U.S. Army Corps of Engineers to ensure that all state and federal regulations are being followed and meets the regulatory standards of the Clean Water Act."

Prince George's County provided the following comments:

> "A review of floodplain maps derived from the County's watershed studies and the FEMA [Federal Emergency Management Agency] flood insurance study reveals no delineated floodplain on the subject site. However, this review also revealed defined drainage courses for which a floodplain may exist but has yet to be determined. It's recommended that the site developer submit the project development plan to the County's Department of Permitting, Inspection and Enforcement (DPIE) for review and guidance on permit requirements."

The Maryland Department of Transportation (MDOT) found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

- "Powder Mill Road is a popular route for cycling. As proposed, the Replacement Currency Production Facility does not appear to inordinately effect cyclist safety.
- The addition of bus stops (with a shelter) near the proposed printing facility should be considered for the provision of alternative modal choices for staff commuting to and from the facility.
- Because the peak hours studied of the proposed facility do not overlap with local peak-hours, proposed mitigation may be insufficient to address future build-year local peak-hour congestion.
- The site of the proposed facility is located just east of the Powder Mill Road intersection at MD 201 (Kenilworth Avenue), which is located within the limits of the MD 201 Extended/US 1 Corridor (I-95/I-495 to North of Muirkirk Road) Planning Study, a study of capacity improvements in the MD 201 and US 1 corridors. This study remains on hold pending identification to complete planning. For additional information concerning potential impacts from proposed alternatives, please contact Barry Kiedrowski, P.E., MDOT SHA [State Highway Administration] Project Management Chief, at 410-545-8769 or via email at bkeidrowski@mdot.maryland.gov.
- Comment from OE: Based on a review of the included information, the nearest identifiable asset, Powder Mill Road, lies within the proposed construction area, although MDOT SHA maintenance of Powder Mill Road ends at the Edmonston Road intersection, approximately 3,000-feet west of the proposed limits of disturbance. A traffic study included in the DEIS, however, identifies significant impacts to traffic congestion at eight intersections (Edmonston Road and Sunnyside Avenue/Beaver Dam Road, Powder Mill Road and Odell Road; Powder Mille Road and Soil Conservation

Road/Baltimore Washington Parkway NB/SB [northbound/southbound] and Springfield Road) that fail current level of service requirements under peak conditions. No public transport services link directly to this site. Additional coordination with MDOT SHA is recommended to review changing traffic patterns, volumes and interchange needs once formal plans are developed."

The Maryland Historical Trust stated that their finding of consistency is contingent upon the applicant's completion of the review process required under Section 106 of the National Historic Preservation Act, as follows:

"The Bureau of Engraving and Printing and the Corps of Engineers are continuing consultation with the Maryland Historical Trust and other consulting parties to complete the project's historic preservation review pursuant to Section 106 of the National Historic Preservation Act and resolve the undertaking's adverse effects on historic properties and negotiate a Memorandum of Agreement, prior to finalizing the EIS."

The Maryland Department of the Environment (MDE) stated that their finding of consistency is contingent upon the applicant taking the actions summarized below.

1. "Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
2. If the proposed project involves demolition – Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.
3. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.
4. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.
5. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.
6. Borrow areas used to provide clean earth back fill material may require a surface mine permit. Disposal of excess cut material at a surface mine may require site approval. Contact the Mining Program at (410) 537-3557 for further details.
7. Additional comments from the Water and Science Administration were emailed to Sylvia Mosser [enclosed]."

The State Application Identifier Number <u>must</u> be placed on any correspondence pertaining to this project.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at sylvia.mosser@maryland.gov.

Thank you for your cooperation with the MIRC process.

Sincerely,

Myra Barnes, Lead Clearinghouse Coordinator

MB:SM
Enclosures—MDE Additional Comments
cc:

Tony Redman - DNR	Tanja Rucci - DGS	Ivy Thompson - MNCPPCP
Amanda Redmiles - MDE	Denise Burrell - MDA	Joseph Griffiths - MDPL
Ian Beam - MDOT	Kathleen Herbert - PGEO	Beth Cole - MHT

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Construction Stormwater Antidegradation Checklist – Version 1.1

This checklist is intended to be used as guidance for evaluating any portion of your construction site that is located with a watershed that is identified by the Department[1] or the EPA, as a Tier II for antidegradation purposes. This Checklist [2]is acceptable for use in documenting your antidegradation review and ensuring protection of Tier II resources during construction. This form, or other appropriate written evaluation, may be uploaded with your NOI or provided to the Industrial Stormwater Permits Division at the Maryland Department of the Environment. The information provided to the Department addresssing the antidegredation review shall be clearly marked on the erosion and sediment control (E&SC) plan and approved by the appropriate approval authority pursuant to COMAR 26.17.01.

Project Name: _____

General Permit Number (MD):_____ **OR, if not available,**

County or State ESC Plan Identifier: _____

County:_____ **Site Map #**_____ **Parcel #**_____

Applicant Signature: _____ **Date Complete:** _____

Do all Tier II watersheds impacted by the proposed activity have assimilative capacity[(1)]? If the proposed activity is to a stream segment which doesn't have assimilative capacity, you will need to consult with the Department's Tier II staff on available options and list the findings here. Comments: _____ _____ _____ _____	**Yes/No**
Were any waivers granted by the Approval Authority for stormwater controls for this project? For projects in Tier II watersheds, waivers need to be fully justified in light of the potential to impact water quality. A waiver that was granted that could lead to degradation would require modeling or other evidence that the lack of stormwater controls will not impact the receiving waters.	**Yes/No**
Verify whether you will meet the following minimum Stabilization Criteria. After initial soil disturbance or redisturbance, permanent (2011 ESC Handbook Section B-4-5) or temporary (2011 ESC Handbook Section B-4-4) stabilization is required within: i. Three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and ii. Seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.	**Yes/No**

[1] Use the interactive Tier II webmap located at: https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/HighQualityWatersMap.aspx to assist you. On the map, Tier II watersheds colored orange have NO assimilative capacity.

[2] Alternative forms may be approved by the Department, if they contain the information in this checklist.

Verify Increased Inspection Frequency for activity within Tier II Watershed. For any portion of the site that discharges to a water that is identified by the Department as Tier II for antidegradation purposes, more frequent inspections are beneficial. Will you inspect at least once every four (4) calendar days?	**Yes/No**
Verify Piles are located outside the Stream Protection Zone. For stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil (2011 ESC Handbook Section B-4-8), locate the piles outside of any Stream Protection Zones.	**Yes/No**
Were there any E&SC exemptions to the requirements for Protections in the Stream Protection Zone below? Note: The list of potential exemptions are listed at the end of this checklist. If exemptions were applicable make sure to include them in the plan. Comments: _____ _____ _____	**Yes/No**
Have you Verified your Stream Protection Zone Considerations below? All additional controls selected in Compliance Alternative 2, to meet the Stream Protection Zone Considerations below shall be clearly marked on the erosion and sediment control (E&SC) plan and approved by the appropriate approval authority pursuant to COMAR 26.17.01. You are required to document in your E&SC plan where the natural buffer width that is retained (where you are implementing alternative 1 below) and you must document the reduced width of the buffer you will be retaining and document the additional erosion and sediment controls you will use (where you will be implementing alternative 2 below). Comments: _____ _____ _____	**Yes/No**
<u>Stream Protection Zone Alternative 1</u>: Provide and maintain an undisturbed natural buffer within the Stream Protection Zone (an average of 100 feet from edge of stream). Comments: _____ _____ _____	**Yes/No**
<u>Stream Protection Zone Alternative 2</u>: Provide and maintain an undisturbed natural buffer that is less than an average of 100 feet and is supplemented by additional erosion and sediment controls. The acceptable additional erosion and sediment controls include, but are not limited to, those listed in the 2011 ESC Handbook. Those controls are accelerated stabilization, redundant controls, upgraded controls, passive or active chemical treatment, or a reduction in the size of the grading unit. These options are provided below, which are the controls that must be considered and, once selected, implemented when construction activity occurs within these Stream Protection Zones. The local approval authorities may provide additional options that provide similar protection. Check each that apply below. Comments: _____ _____ _____ _____	**Yes/No**

□ ***a: Accelerated Stabilization Requirements***

Earth disturbance must be stabilized as soon as possible and as dictated by the approved plan (e.g., seed and mulch, soil stabilization matting, rip rap, sod, pavement):

- At a minimum, all perimeter controls (e.g., earth dikes, sediment traps) and slopes steeper than 3:1 require stabilization within three calendar days and all other disturbed areas within seven calendar days
- Accelerated stabilization (e.g., same day stabilization) may be required based on site characteristics or as specified by the approval authority

Comments: _____

_____

□ ***b: Redundant Controls***

Runoff must pass through two sediment control devices in series. The following are examples of possible combinations:

- When dewatering sump areas or sediment traps or basins, discharge sediment laden water first to a portable sediment tank and then a filter bag
- Install parallel rows of a perimeter filtering control or a combination thereof of silt fence, super silt fence, and filter logs (e.g., two rows of parallel silt fence or a row of filter log parallel to a row of super silt fence)

Comments: _____

_____

□ ***c: Upgrade Controls***

The following are examples of possible upgrades:

- Upgrade from silt fence to super silt fence
- Upgrade from temporary stone outlet structure to temporary gabion outlet structure
- Upgrade all sediment traps and basins to control additional storage volume; increase the required storage volume from 3,600 cubic feet/acre to 5,400 cubic feet/acre
- Upgrade standard inlet protection type A to type B and at grade inlet protection to gabion inlet protection

Comments: _____

_____

□ ***d: Passive or Active Chemical Treatment***

The use of chemical additives requires permit coverage and considerations related to potential aquatic toxicity. https://mdewwp.page.link/ChemAddReview.

Comments: _____

_____

□ ***e: Reduction in the Size of the Grading Unit***

- Require grading unit limitations to 10 acres of earth disturbance inside the Stream Protection Zone
- Require grading unit limitations to 20 acres for any earth disturbance that is adjacent to and contiguous with earth disturbances inside the Stream Protection Zone

Comments: _____
_____

□ ***f: Prerogative of Approval Authorities***

The additional controls described above for projects in Stream Protection Zones are examples of accelerated stabilization, redundant controls, upgraded controls, passive or active chemical treatment, or a reduction in the size of the grading unit. Approval authorities may use these examples as a guide when approving projects, but may also apply further erosion and sediment control measures based on local site conditions and best professional judgement.

Comments: _____
_____

Exemptions to the requirements for Protections in the Stream Protection Zone:

- The following disturbances within the Stream Protection Zone are exempt from the requirements this guidance:- Construction approved under a CWA Section 404 permit; or- Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).

- If there is no discharge of stormwater to Waters of this State through the area between the disturbed portions of the site and receiving waters, you are not required to comply with the requirements in this guidance. This includes situations where you have implemented controls measures, such as a berm or other barrier, which will prevent such discharges.

- Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this guidance.

  Where some natural buffer exists but portions of the area within the Stream Protection Zone are occupied by preexisting development disturbances, you <u>are</u> required to comply with the requirements in this guidance. Clarity about how to implement the compliance alternatives for these situations is provided upon request from the Department.

- For “linear construction sites” , you are not required to comply with this requirement if site constraints (e.g., limited right-of-way) make it infeasible to implement one of the above compliance alternatives, provided that, to the extent feasible, you limit disturbances within Stream Protection Zone. You must also document in the Checklist your rationale for why it is infeasible for you to implement one of the above compliance alternatives, and describe any buffer width retained and supplemental erosion and sediment controls installed.

Draft Environmental Impact Statement (EIS) and Draft Finding of No Practicable Alternative (FONPA): Proposed Action Includes Construction and Operation of a Replacement Currency Production Facility at the Beltsville Agricultural Research Center (BARC), Prince George's County, MD

Maryland Department of the Environment – WSA/IWPP/EASP

REVIEW FINDING: R2 Contingent Upon Certain Actions (MD2020 1106-0959)

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland's anti-degradation policy.

Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called "anti-degradation policies." This policy states that "proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." Satisfactory completion of the Tier II Antidegradation Review is required to receive numerous State permits, such as those for wastewater treatment, nontidal wetlands disturbance, waterways construction, and coverage under the general construction permit.

The Tier II review is applicable to all portions of the whole and complete project within the Tier II watershed of Beaverdam Creek 2. The review is, at a minimum, a two-step alternatives analysis process. The initial analysis considers if the activity can avoid any impacts to Tier II waters (alternative site or potentially by strategic design). The second analysis considers minimization alternatives to limit associated water quality degradation. This includes BMP considerations for erosion and sediment controls, mitigation for net loss of vital resources such as forest cover, and justification for unavoidable impacts. Under certain circumstances, MDE may require a third analysis which justifies the project based on social or economic rationale.

MDE is revising the overall Tier II review procedures by creating or updating forms to assist with the no-discharge alternatives analysis, minimization analysis, temporary impacts, and social and economic justification. Completion of these forms is required for permitting and other approvals.

Tier II No-Discharge Analysis Form V1.2:[1]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

2. For land disturbing projects that result in permanent land use change, this 'no discharge' analysis specifically evaluates the reasonability of other sites or alternate routes which could be developed to meet the project purpose, but are located *outside* of the Tier II watershed. Reasonability considerations, as applicable, may take into account property availability, site constraints, natural resource concerns, size, accessibility, and cost to make the property suitable for the project.

3. This analysis shall be performed regardless of whether or not the applicant has ownership or lease agreements to a preferred property or route.

Tier II Minimization Alternative Analysis Form V1.1:[2]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

2. This form helps to ensure that water quality impacts due to the proposed project are comprehensively identified, minimized, mitigated, and justified.

3. To demonstrate that appropriate minimization practices have been considered and implemented, applicants must identify any minimization practices used when developing the project, calculate major Tier II resource impacts, consider alternatives for impacts, and adequately justify unavoidable impacts. Further water quality impact minimization such as mitigation or out-of-kind offsets may be required.

Construction Stormwater Antidegradation Checklist - Version 1.1 :[3]

1. This form replaces the Tier II checklist, *Enhanced Best Management Practices for Tier II Waters*, distributed in the past.

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[1] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_NoDischargeAnalysis_Form_1.2.pdf
[2] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Minimization_Form_1.1.pdf
[3] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/AntiDegradation%20Checklist%20V1.1.pdf

2. To complete the checklist, applicants are required to coordinate with the County or appropriate approval authority when developing construction plans and stormwater management plans.

3. Applicants are required to provide this form when seeking a NOI/DOI for coverage under the general construction permit. Other forms and documentation materials shall also be uploaded to the general construction permit site at this time.

Beaverdam Creek 2, which is located within the vicinity of the Project, has been designated as a Tier II stream. The Project is within the Catchment (watershed) of the segment. (See attached map).

Currently, there is assimilative capacity in this watershed; therefore at this time, no detailed social and economic justification is needed.

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at: http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm
and policy implementation procedures are located at
http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm

Planners should also note as described in the Code of Maryland Regulations (COMAR) 26.08.02.04-1(C), "Compilation and Maintenance of the List of High Quality Waters", states that "When the water quality of a water body is better than that required by water quality standards to support the existing and designated uses, the Department shall list the water body as a Tier II water body. *All readily available information may be considered to determine a listing. The Department shall compile and maintain a public list of the waters identified as Tier II waters*."

The public list is available in PDF from the following MDE website:
http://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf.

The interactive Tier II webmap is located at the following website:
(https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html).

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

ADDITIONAL COMMENTS

Stormwater

Planners should consider all Maryland Stormwater Management Controls and during Site Design the planner should consider all Environmental Site Design to the Maximum Extent Practicable and “Green Building” Alternatives. Designs that reduce impervious surface and BMPs that increase runoff infiltration are highly encouraged.

Further Information:
http://www.mde.state.md.us/programs/water/StormwaterManagementProgram/Pages/swm2007.aspx

Environmental Site Design (Chapter 5):
http://www.mde.state.md.us/programs/water/StormwaterManagementProgram/Documents/www.mde.state.md.us/assets/document/Design%20Manual%20Chapter%205%2003%2024%202009.pdf

Redevelopment Regulations:
http://www.dsd.state.md.us/comar/comarhtml/26/26.17.02.05.htm

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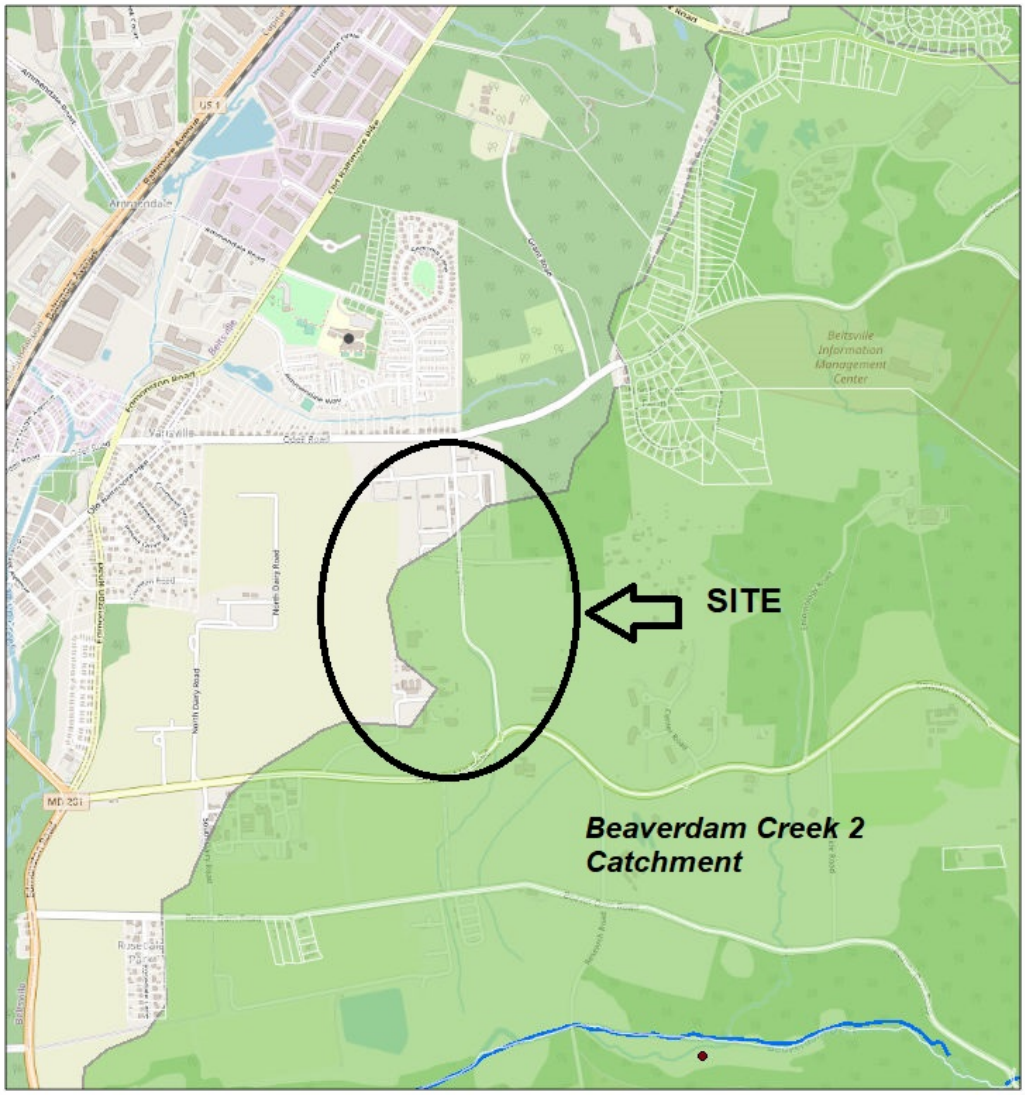
SITE
Beaverdam Creek 2
Catchment
Beltsville
Information
Management
Center
Annandale
Beltsville
Powder Mill Road
Cherry Hill Road
North Dairy Road
Cedar Road
Edmonston Road
Baltimore Avenue
Fort Randolph Road
Cedar Road
Cedar Road
Beaverdam Road
Cedar Road
Beaverdam Road
Cedar Road
Beaverdam Road
Cedar Road
Beaverdam Road
Cherry Hill Road
Cherry Hill Road
Cherry Hill

Maryland Department of the Environment

Antidegradation Review Report Form

Alternatives Analysis – Minimization Alternatives

Purpose

This form is designed to help applicants assemble a complete Tier II Review report. This form specifically addresses calculating Tier II resource impacts, and evaluating alternatives that minimize water quality degradation from unavoidable impacts to Tier II watersheds and streams. This analysis is applicable to all areas of the **whole and complete project** within a Tier II watershed.

The Department will use this information to determine whether or not the applicant evaluated all reasonable alternatives to minimize water quality degradation. MDE may provide additional comments, conditions, or requirements, during the course of the review.

Fill in all that apply:

1. **Project Name:** _____
2. **County ESC Plan Identifier:** _____
3. **Nontidal Wetlands & Waterways Construction Tracking Number: 20206_ _ _ _**
4. **General Permit Number:** _____
5. **Other Application Type and Number:** _____

_____

Applicant Signature: _____ **Date Complete:** _____

Background

Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

To demonstrate that appropriate minimization practices have been considered and implemented, applicants must identify any minimization practices used when developing the project, calculate major Tier II resource impacts, consider alternatives for impacts, and adequately justify unavoidable impacts. Further water quality impact minimization such as mitigation or out-of-kind offsets may be required.

Additionally, applicants are required to coordinate with the County or appropriate approval authority when developing construction plans, and incorporate additional practices as indicated by the guidance provided in the *Construction Stormwater Antidegradation Checklist*. This checklist, as well as the other portions of the Tier II Review Report are required prior to receiving many permits and authorizations from MDE.

Instructions and Notes

1. Review all of the information in this document carefully. Prepare a report to address all of the analysis required by this document. Submit all Tier II analysis and documentation together.

2. Do not leave any response blank. Please mark "N/A" for any questions or sections that are not applicable until you reach the end of the document.

3. Provide sufficient supporting documentation for narratives.

4. The level of analysis necessary, and amount of documentation that may be needed to determine if impacts have been adequately addressed, is dependent upon project size, scope, and scale of relative impacts to Tier II resources. Please develop responses accordingly.

5. Reports/responses shall be submitted in electronic format, as well as paper. Full plans are not required unless requested over the course of the review.

6. Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606.

Minimization Alternative Analysis Final Documentation Checklist

- ☐ Signature & Date MDE Tier II Alternatives Analysis – Minimization Alternative form (page 1)
- ☐ Resource Impact Analysis (**Complete the analysis for each Tier II watershed affected**)
  - ☐ Tier II Stream Buffer Impacts
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Stream Buffer Exhibit
  - ☐ Forest Cover Impacts
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Forest Cover Exhibit
  - ☐ Impervious Cover
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Impervious Cover Exhibit
  - ☐ Mitigation & Other Potential Requirements
    - Plans
    - Signature & Date (Page 8)
- ☐ Construction Stormwater Antidegradation Checklist

Tier II Resource Impacts
Sufficient riparian buffers, ample watershed forest cover, and lower levels of impervious cover are essential to maintaining high quality waters. This project may permanently reduce riparian buffers and forest cover, or increase impervious cover within Tier II watersheds leading to a decrease in water quality. Depending upon project specific impacts, MDE may require monitoring, additional BMPs, expanded buffers in Table 1, and other studies prior to approval. This analysis is applicable to all areas of the **whole and complete project** within a Tier II watershed. MDE will use the following information to determine **permanent** impacts to Tier II watershed resources. Complete the analysis for <u>each</u> Tier II watershed the proposed project may impact.

A. Tier II Stream Buffers
1. Instructions: **a. If no stream buffer impacts are proposed (within 100' of stream), mark this section N/A and proceed to Section B, Forest Cover.** **b. Insert the Tier II watershed name at the top of each box.** **c. "Impacted" stream segments are those disrupted by road crossings, other infrastructure, construction (ex. sewer lines), or otherwise buried** **d. Calculate buffer averages for 2(f) below on a stream segment-by-segment basis.** **e. Explain in detail alternatives considered, and any actions taken**

A. Tier II Stream Buffers - - Tier II Watershed: _____		
2. Calculation of Permanent Riparian Buffer Impacts to State Regulated Waters	**Linear Feet +/-**	
	LEFT Bank	**Right Bank**
a. Combined length of on-site stream segments:		
b. Combined length of <u>EXISTING</u>, pre-development, impacted stream segments:		
c. Combined length of <u>PROPOSED</u>, post-development, impacted stream segments:		
d. Total post-development <u>impacted</u> stream segments 2(b) + 2(c)=		
e. Total post-development <u>unimpacted</u> stream segments 2(a) - 2(d) =		
f. Combined length of streams, post-development, with an average 100' buffer, based on the value in 2(e):		
g. Potential Tier II Buffer Impacts 2(e) - 2(f) =		

A. Tier II Stream Buffers - - Tier II Watershed: _____

3. Buffer Impact Minimization:

Evaluate on-site alternatives for buffer impacts for segments identified in 2(g). Examples include minimizing ROW, narrowing paths, alternate routes for walkways, roads, crossings, etc. to avoid buffer impacts.

4. Buffer Impact Mitigation:

Mitigation or offsets can occur both on and off-site. On-site, the intent is to achieve a 100' average stream buffer width.

Per segment, locate areas where impacts to the 100' buffer are unavoidable. Include those impacts in the mitigation/offset alternatives analysis. Conditions under section D shall apply.

a) Evaluate on-site alternatives to identify areas where buffers could be expanded beyond the minimum 100' to offset areas of unavoidable buffer width constraints.
b) If there are no on-site areas, evaluate off-site areas, within the Tier II watershed, where buffers could be improved, expanded, or established.

5. Buffer Impact Justification:

If there are any remaining unavoidable impacts, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.

6. Buffer Exhibit

Prepare a Tier II Buffer Exhibit for on-site streams. Dependent upon the number of segments, multiple sheets (8 ½" by 11") may be used. On an overview, label each segment (a, b, c…) and provide a tabular summary, per bank-segment (e.g., left bank of segment a), of average buffer width.

In addition to on-site streams, the exhibit shall display the following information:

- 100- foot riparian buffer. (symbolize with a line)
- Areas where the post-construction stream buffer are +/- 100 feet. (symbolize with shading, hatches, or dots, etc.)
- On-site areas where buffers could be maintained at a distance of greater than a 100' if there are unavoidable constraints in some locations. (symbolize with shading, hatches, or dots, etc.)

Table 1: Expanded Tier II Riparian Buffer

Adjusted Average Optimal Buffer Width Key (in Feet)				
	Slopes (%)			
Soils	0-5%	5-15%	15-25%	>25%
ab	100	130	160	190
c	120	150	180	210
d	140	170	200	230

B. Tier II Forest Cover
1. Instructions: **a. If there is no net forest cover loss within the impacted Tier II watershed, mark this section N/A and proceed to Section C, Impervious Cover.** **b. Insert the Tier II watershed name at the top of each box.** **c. "Potential Constraints" include forest loss due to ROW, property boundaries, regulatory requirements, etc.** **d. Explain in detail alternatives considered, and any actions taken**

B. Tier II Forest Cover - - Tier II Watershed: _____	
2. **Calculation of Permanent Forest Cover Impacts**	**Acres +/-**
a. Total on-site forest cover, EXISTING:	
b. Total on-site forest cover, POST-PROJECT:	
c. Total off-site reforestation or restoration, IN the Tier II Watershed listed above:	
d. Permanent forest loss due to potential constraints:	
e. Total forest cover retained in Tier II Watershed 2(b) + 2(c) =	
f. Total forest cover loss in Tier II Watershed 2(e) – 2(a) =	

B. Tier II Forest Cover - - Tier II Watershed: _____
3. Forest Cover Loss Minimization
If 2(d) is greater than 0, or if 2(f) is a negative value, evaluate on-site alternatives for forest cover impact minimization. Examples include minimizing ROW, alternate routes for roads, crossings, etc. to avoid forest cover impacts.
4. Forest Cover Loss Mitigation
To achieve no net negative impact as a result of the proposed activity, the applicant shall consider alternatives to mitigate impacts 'in-kind', for forest cover loss, to the maximum extent economically feasible. Provide additional information regarding the value in 2(c). Once those options are exhausted, applicants shall evaluate out-of-kind alternatives within the Tier II watershed that will help offset water quality impacts. These out-of-kind alternatives include impervious cover disconnection or retrofits, stream restoration, buffer enhancement, etc.
5. Forest Cover Loss Justification
If there are any remaining unavoidable impacts to forest cover, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.
6. Forest Cover Exhibit
On an 8 ½" by 11" sheet(s), prepare an on-site Tier II Forest Cover Exhibit. Using varying symbology, show a basic site layout relative to 2(a), 2(b), and 2(d) above. Prepare a separate exhibit regarding any off-site reforestation, or out-of-kind mitigation opportunities in accordance with Section D.

C. Impervious Cover
1. Instructions: **a. If ESD is used to treat all new, on-site, post-construction stormwater, mark this section N/A and proceed to Section D, Mitigation and Other Potential Requirements.** **b. Insert the Tier II watershed name at the top of each box.** **c. Explain in detail alternatives considered, and any actions taken.**

C. Tier II Impervious Cover - - Tier II Watershed: _____	
2. Calculation of Impervious Cover Increase	**Acres +/-**
a. Total additional (new) impervious cover, POST-PROJECT:	
b. Total additional (new) impervious cover treated with ESD practices, POST PROJECT:	
c. Total impervious cover not treated with ESD practices, POST-PROJECT: *2(a) – 2(b) =*	

C. Tier II Impervious Cover - - Tier II Watershed: _____
3. Impervious Cover Minimization
If 2(c) is greater than 0, evaluate on-site alternatives for impervious cover impact minimization by identifying additional areas where ESD stormwater management practices can be utilized.
4. Impervious Cover Offsets
Add the area-acres of remaining unavoidable impervious cover increases (not treated with ESD) to the total targeted for mitigation under Section B(4). Increases such as these can be mitigated with forest cover restoration/afforestation, or through off-site mitigation alternatives such as impervious cover disconnection or retrofits, stream restoration, buffer enhancement, etc.
5. Impervious Cover Justification
If there is any remaining unavoidable addition of impervious surface acreage (not treated with ESD) and which is not offset, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.
6. Impervious Cover Exhibit
On an 8 ½" by 11" sheet(s), prepare an on-site Tier II Impervious Cover Exhibit. Using varying symbology, show a basic site layout relative to 2(a), 2(b), and 2(c) above. Prepare a separate exhibit regarding any off-site reforestation, or out-of-kind mitigation opportunities in accordance with Section D.

D. Tier II Mitigation and Other Potential Requirements
1. If mitigation is necessary: **a. In-kind mitigation shall occur at a target ratio of 1:1.** **b. In order to satisfy the requirements of the Antidegradation Review, an applicant must demonstrate that they have conducted a robust alternatives analysis, <u>including mitigation</u> as a means for additional minimization of unavoidable impact to Tier II resources.** **c. MDE strongly recommends pre-application meetings.** **d. Regardless of application status, prepare preliminary analysis, including:** **i. Preliminary site search for potential properties** **ii. Basic exploration of out-of-kind possibilities, such as restoration, impervious cover retrofit or removal, etc.** **e. Mitigation is required for unavoidable net forest cover loss.** **f. The greater the net loss, the higher the restoration target.**

D. Tier II Mitigation and Other Potential Requirements
2. Mitigation Plan Components
a. <u>Statement of unavoidable impacts to Tier II waters</u>. This is total loss calculated in Section A (2)h, Section A(2)i, Section B (2)f, and Section C (2)c. Identify values specifically associates with stream buffers, forest cover, and impervious cover. Tabular totals shall be broken according to resource type and Tier II watershed impacted. The accompanying narrative shall include a summary of why impacts are considered unavoidable. b. <u>Preferred mitigation alternatives analysis within the impacted Tier II watershed</u>. The order of mitigation alternatives is as follows: i. In-kind, on-site ii. In-kind, off-site iii. Out-of-kind, on-site iv. Out-of-kind, off-site c. <u>Mitigation site alternative analysis</u>. Establish site search criteria. All locations must be located within the affected Tier II watershed identified for each unavoidable impact calculated in 2(a). Tabular totals shall include the amount of mitigation/offset selected alternatives achieve. Include maps of each mitigation property. d. <u>Protection Mechanism</u>. Explain the plan proposed to ensure that all areas identified for mitigation shall be protected in perpetuity. Permittees shall be required to provide documentation in the form of covenants, landowner agreements, deed details, etc. as well as financial assurances. This shall be provided no more than 60 days after completion. e. <u>Site Description</u>. Provide site address, name of property if known, map and parcel number, and centroid coordinates in latitude/longitude. Include maps of each mitigation property. Maps shall include natural resources (i.e. existing forest cover, streams, wetlands, etc.), roads, railways, and any other important identifying features. Maps shall include natural resources (i.e. existing forest cover, streams, wetlands, etc.), roads, railways, and any other important identifying features. f. <u>Planting plan</u>: Reforestation shall incorporate optimum vegetation selection guidance provided in the *State Forest Conservation Technical Manual, 3rd edition, 1997 by Maryland Department of Natural Resources*.

D. Tier II Mitigation and Other Potential Requirements
2. Mitigation Plan Components, Continued
g. Monitoring Reports. Properties shall be monitored for a minimum of five years to ensure site success. Reports shall provide visuals of establishment progress, as well as narrative descriptions. Include any issues encountered, overcome, and potential changes that may be necessary to meet objectives.

D. Tier II Mitigation and Other Potential Requirements
3. Other Potential Requirements
a. pH Monitoring and Corrective Action Plan. Often associated with in-stream grout activities. b. Compaction Management Plan. Often associated with linear activities, such as pipelines. c. Water Quality Monitoring and Corrective Action Plan. Associated with projects with in-stream impacts. d. Biological Monitoring. Project requirement for complex projects with direct or significant impacts. e. Hydraulic Analysis. Projects may include direct or significant near-stream disturbances, such as grading, vegetative removal, watershed boundary changes, etc. f. Other requirements. To address unique impacts specific to the activity or site. g. Social and Economic Justification. Depending upon the scope of impacts to Tier II resources and streams, applicants may be required to provide additional documentation to justify the permitting of an activity that will degrade Tier II streams, on an socio-economic basis.

Applicant Signature: _____ Date: _____

Provide a hardcopy responses to:

Maryland Department of the Environment
Environmental Assessment and Standards Program
Antidegradation Implementation Coordinator
ATTN: Angel D. Valdez
1800 Washington Blvd
Baltimore, Maryland 21230

Provide an electronic response, by CD to the address above, or a way to download the response from secure cloud-based site, email: to Angel Valdez at angel.valdez@maryland.gov.

Maryland Department of the Environment

Antidegradation Review Report Form

Alternatives Analysis - No Discharge Alternative

Purpose

This form is designed to help applicants assemble a complete Tier II Review report. This form specifically addresses evaluating alternatives that avoid impacts to Tier II watersheds and streams. It is strongly recommended that applicants complete this analysis as early in the project planning stages as possible, during initial property site search and screening analysis of purchase and feasibility alternatives.

The Department will use this information to determine whether or not an adequate alternatives analysis was conducted, and to help determine if a reasonable alternative to the proposed activity is available. MDE may provide additional comments during the course of the review.

Fill in all that apply:

1. **Project Name:** _____
2. **County ESC Plan Identifier:** _____
3. **Nontidal Wetlands & Waterways Construction Tracking Number: 20206_ _ _ _**
4. **General Permit Number:** _____
5. **Other Application Type and Number:** _____

_____

Applicant Signature: _____ **Date Complete:** _____

Background

Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

For land disturbing projects that result in permanent land use change, this 'no discharge' analysis specifically evaluates the reasonability of other sites or alternate routes which could be developed to meet the project purpose, but are located *outside* of the Tier II watershed. Reasonability considerations, as applicable, may take into account property availability, site constraints, natural resource concerns, size, accessibility, and cost to make the property suitable for the project. This analysis shall be performed regardless of whether or not the applicant has ownership or lease agreements to a preferred property or route.

Information from this analysis may be used to inform minimization analysis.

Instructions and Notes

1. Complete the analysis for each Tier II watershed impacted.
2. Review the information in this document carefully. Prepare a report to address all of the analyses required by this document. Submit all Tier II analysis and documentation at one time.
3. To help improve review efficiency and avoid delays, do not leave any response blank. Please use "N/A" for any questions or sections that are not applicable.
4. Provide sufficient supporting documentation for narratives.
5. The level of analysis necessary, and amount of documentation that may be needed to make a decision is dependent upon project size, scope, and scale of relative impacts to Tier II resources. Please develop responses accordingly.
6. Reports/responses shall be submitted in electronic format, as well as paper. Full plans are not required unless requested over the course of the review.
7. Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606.

No Discharge Alternative Analysis Final Documentation Checklist

- ☐ Signed & Dated MDE Tier II Alternatives Analysis – No Discharge Alternative form (page 1)
- ☐ Qualifying Exemptions with supporting documentation
- ☐ General Project Purpose Statement with relevant definitions
- ☐ Alternative Site Reasonability Analysis
  - ☐ Results of initial site search
  - ☐ Map of alternatives relative to preferred site and Tier II streams/catchment
  - ☐ Alternative Sites Summary Analysis Table Supplementary Information (per site)
  - ☐ Detailed Narrative of Alternate Analysis Outcome
- ☐ Alternative Route Reasonability Analysis
  - ☐ Results of initial site search
  - ☐ Map of all alternatives relative to preferred route and Tier II streams/catchment
  - ☐ Alternative Sites Summary Analysis Table Supplementary Information (per site)
  - ☐ Detailed Narrative of Alternate Analysis Outcome
- ☐ Narrative rationale for final decision of reasonableness

Qualifying Exemptions

For the purposes of the no discharge analysis for land disturbing activities, extenuating circumstances may apply to projects that are developed to address a specific need, may be linked to special funding, or linked to a specific location. Supporting documentation is required before consideration. Please read the following examples and determine whether or not a given situation is applicable.

The applicant must get concurrence from MDE as to the applicability of any special circumstances prior to completing the no discharge alternatives analysis. It is at the Department's discretion to determine whether a special circumstance applies, and whether or not this applicability means that there is not a reasonable alternative that avoids the Tier II watershed.

If none of the special circumstances apply, check "**Not Applicable**".

☐ **Not Applicable**

☐ **Situation 1:** Project is linked to unique or special incentives for State, County, or Municipality

Example: County needs for 1000 units of low-income senior housing in legislative district 7. Documentation must include the request for proposals (RFP) or similar missive to meet the housing need, and unique benefits or incentives lost if the project is moved outside of legislative district 7.

Example: Project is located in a State Designated Priority Funding Area, State Designated Enterprise Zone, or similar area targeted by the State for economic growth, business development, or investment.

☐ **Situation 2:** Project has location specific limitations

Example: College campus extension. Education capital funding limits development to sites that are within 5 miles of the main campus. Documentation should include the RFP or similar documentation.

Example: Project is taking place in an existing right of way, or using an area that is currently operational. Such projects include replacing transmission lines, expanding operations on a working farm or business center.

☐ **Situation 3:** Military project (or similar) with restrictions due to national security, etc.

Example: Construct a new runway and hangar for Air Force 1. The military may identify a certain location or base where this construction shall occur due to existing facilities, support personnel, and security concerns.

☐ **Situation 4:** Project has little to no resource impacts.

Example: Repair or replacement of existing structures, road resurfacing, bridge maintenance using scaffolding, General Waterways Construction Permits, habitat restoration, rehabilitation, and stabilization.

☐ **Situation 5:** Project is a "Grandfathered" development, that meets the specifications within Chapter 1.2, in the *Maryland Model Stormwater Management Ordinance, June 2009 & April 2010*

Administrative waivers, extension documentation, etc. are required documentation.

Note -This exemption does not apply to linear projects like roads or pipelines. Grandfathered projects are not exempt from the minimization alternatives analysis.

General Project Purpose Statement

1. Define the overall project purpose and site selection criteria. To result in a fair and meaningful analysis for the antidegradation review the site selection criteria must fall into the following parameters:
    a. The statement must not be so narrowly constructed as to limit the results to one site with no other possible alternatives, or
    b. Likewise, the statement cannot be too broadly written creating too many alternatives to effectively consider.

2. Example Statements
    a. Too Narrow: To develop a high density residential housing complex consisting of 1000 living units on a 200 acre site adjacent to the Mall of Maryland. –- The likelihood that there are multiple properties other than the desired alternative available are unlikely, and this eliminates the possibility of properties outside of the Tier II watershed.
    b. Too Broad: To develop a residential housing complex in Charles County. –- This will yield hundreds of results, creating a burdensome and unrealistic amount of work to evaluate each alternative.**
    c. Reasonable: To develop a residential housing complex near a major shopping center in Northern Charles County. –- This will reduce the number of available properties to a more manageable amount, while still meeting the overall purpose of providing housing near a retail center in a target geographic area. The applicant can further refine the statement by defining "near", "major shopping center", and "Northern Charles County".

3. The applicant must craft a statement that yields at least 3 available alternative properties for further evaluation.

4. The level of detail for the alternative analysis process should appropriately match the complexity of the project taking into consideration factors such as resource impacts to Tier II watersheds in terms of impervious cover, forest cover loss, riparian buffer impacts, public comment, etc. For example, the amount of documentation provided for 3 alternatives to place a single dwelling on one acre is expected to be significantly less than the documentation expected for a 300 acre mixed-use development.

    **Based on comments received during the review or other mitigating circumstances, the Department may require the applicant to evaluate additional alternatives, or provide a more in-depth analysis.

Table 1: Alternative Site Evaluation Summary Analysis Table			
Evaluate each criteria listed in the left hand column for each alternative site. Populate each box with the appropriate conditions, i.e. either yes/no, or by listing one or more of the options provided (a, b, c…), such as types of utilities available at a given site.			
	Site 1	**Site 2**	**Site 3**
Availability: a. Owned by applicant b. For sale c. Special, please explain (example: remediation required)			
Sizing appropriate: a. As is b. Purchase of adjoining property/ROW required			
Accessible Utilities: a. Electric b. Water c. Sewer d. Site access (existing road/bridge, etc.). e. None			
Development Resources: a. Existing SWM b. Existing buildings/structures c. Site cleared			
Zoning: a. Appropriate b. Waiver required			
Resource Impacts: a. Streams b. Forest c. Wetlands/wetlands buffer d. 100-yr flood plain			
Cost to Acquire is Reasonable: Yes or No			

Alternative Sites Summary Analysis Table Supplementary Information:

1. Explanation of site search criteria and rationale.
    a. Relate project requirements to the criteria in Table 1.
    b. Include any additional critical criteria not identified in the above table.

2. Results of initial site search.
    a. List the available sites for consideration before the applicant chose 3 for further evaluation.
    b. Include a brief narrative description of each site.
    c. Include a table listing basic site address, lot size, parcel and map.
    d. Include an overview map showing sites and their relative location to the preferred property.
    e. If available, include Real Property Search Data (From Maryland Department of Assessments and Taxation (http://sdat.dat.maryland.gov/RealProperty/Pages/default.aspx), or MLS (Multiple Listing Service) information.

3. Expand upon the responses in Table 1.
    a. Include a narrative that clearly explains how the applicant determined the final 3 sites for further consideration in Table 1.
    b. Provide basic information about each site, i.e. land use, land cover, unique features, on-site resources such as streams, wetlands, relevant geology and/or hydrology, etc.
    c. Discuss specific resource impacts.
        i. Include a table that further breaks down the resource impacts associated with the 3 alternative sites.
        ii. Include a narrative that further details whether resources could be avoided. For example, an on-site stream that will most likely be crossed to accommodate site access would make that site less favorable when compared to another option.

4. Justify final site decision.

Table 1: Alternative Route Evaluation Summary Analysis Table (use for linear projects such as roads, utility lines, etc)			
Evaluate each criteria listed in the left hand column for each alternative site. Populate each box with the appropriate conditions, i.e. either yes/no, or by listing one or more of the options provided (a, b, c…), such as types of utilities available at a given site.			
	Site 1	**Site 2**	**Site 3**
Availability: a. ROW Owned by applicant b. ROW can be acquired or leased c. Other, please explain			
Accessible Utilities (i.e. where connecting infrastructure is required): a. Electric b. Water c. Sewer or pipeline d. Site access (existing road/bridge, etc.). e. None			
Zoning: a. Appropriate b. Waiver required			
Resource Impacts: a. Streams b. Forest c. Wetlands/wetlands buffer d. 100-yr flood plain			
Cost to Acquire is Reasonable: Yes or No			

Alternative Route Summary Analysis Table Supplementary Information:

1. Explanation of route search criteria and rationale.
    a. Relate project requirements to the criteria in Table 1.
    b. Include any additional critical criteria not identified in the above table. For example, if the purpose of the project is to improve public safety, documentation must be provided to support this claim. For a new road this may include data on accidents, visibility issues, or geometric design issues that can complicate travel.

2. Results of initial route search.
    a. List the available routes for consideration before the applicant chose 3 for further evaluation.
    b. Include a brief narrative description of each route.
    c. Include a table listing route start and end addresses, parcel and map, land use (i.e. residential neighborhood, commercial district, etc.)
    d. Include an overview map showing results and their relative location within the impacted Tier II watershed.

3. Expand upon the responses in Table 1.
    a. Include a narrative that clearly explains how the applicant determined the final 3 sites for further consideration in Table 1.
    b. Provide basic information about each site, i.e. land use, land cover, unique features, on-site resources such as streams, wetlands, etc.
    c. Discuss specific resource impacts.
        i. Include a table that further breaks down the resource impacts associated with the 3 alternative routes. For example identify the number of streams on-site, potential forest loss for site clearing, etc.
        ii. Include a narrative that further details whether resources could be avoided. For example, an on-site stream that will most likely be crossed to accommodate site access would make that site less favorable when compared to another option. Note: In making a final decision, MDE may take into consideration whether or not the project can avoid the impact by going over it (i.e. bridge) or under it (i.e. drilling). Consider this in the resource impact evaluation. The method of crossing may be a special permit condition.

4. Justify final route decision.

Provide a hardcopy responses to:

Maryland Department of the Environment
Environmental Assessment and Standards Program
Antidegradation Implementation Coordinator
ATTN: Angel D. Valdez
1800 Washington Blvd
Baltimore, Maryland 21230

Provide an electronic response, by CD to the address above, or a way to download the response from secure cloud-based site, email: to Angel Valdez at angel.valdez@maryland.gov.