

Module 3 Completion

Michael Wilk PE
Monroe County Conservation District



Applicability

- **Individual Permits**
- **Waters Impaired for:**
 - Siltation
 - Suspended Solids
 - Turbidity
 - Water/Flow Variability
 - Flow Modifications/Alterations
 - Nutrients
- **One Module for Each Surface Water Discharge**



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**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
ANTIDEGRADATION ANALYSIS MODULE 3**

Applicant: _____

Project Site Name: _____

Surface Water Name: _____

Surface Water Use: _____

- General Information Section
- Surface Water Name
 - Existing Use Designation if Surface has an Existing Use. (EMAP)
 - Otherwise Use the Designated Use
 - EV Wetlands to Brodhead Creek "EV to HQ-CWF/MF"



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E&S Non-Discharge Alternative

ANTIDEGRADATION – EROSION AND SEDIMENT CONTROL (E&S) PLAN

- A Non-Discharge Alternative will be utilized for the project that will either **individually or collectively eliminate the net change** in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm **during** earth disturbance activities.

Identify the E&S BMP(s) that will be utilized to achieve the non-discharge alternative:

- | | |
|--|--|
| <input type="checkbox"/> Alternative Siting: Location | <input type="checkbox"/> Limiting Extent & Duration of Disturbance |
| <input type="checkbox"/> Alternative Siting: Configuration | <input type="checkbox"/> Riparian Buffer (150 ft min.) |
| <input type="checkbox"/> Alternative Siting: Location of Discharge | <input type="checkbox"/> Riparian Forest Buffer (150 ft min.) |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Limited Disturbed Area |

- **Are the BMP's listed in these checkboxes truly eliminating (all by themselves) the net change in stormwater during construction? They may contribute but do they truly eliminate?**
- **Need to Consider:**
 - Worst Case Land Cover changes (vegetated/impervious to bare earth)
 - Travel time considerations during construction/ concentrated flows
 - Use of Regulated Release of stormwater during construction-Is the Volume being eliminated?



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E&S Non-Discharge Alternative

Identify the E&S BMP(s) that will be utilized to achieve the non-discharge alternative:

- | | |
|--|--|
| <input type="checkbox"/> Alternative Siting: Location | <input type="checkbox"/> Limiting Extent & Duration of Disturbance |
| <input type="checkbox"/> Alternative Siting: Configuration | <input type="checkbox"/> Riparian Buffer (150 ft min.) |
| <input type="checkbox"/> Alternative Siting: Location of Discharge | <input type="checkbox"/> Riparian Forest Buffer (150 ft min.) |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Limited Disturbed Area |

- **Alternate Siting: Location**-move project to non-special protection location
- **Alternate Siting: Configuration**-layout of project to eliminate impacts to SP waters
- **Alternate Siting: Location of Discharge**: Discharge to Non-Special Protection Waters during construction.
- **Limit Extent/Duration of Disturbance**: Sequencing and Permanent stabilization of sections to eliminate impacts
- **Buffers**: Maintain and protect buffers to filter pollutants. Need to claim as BMP and permanent protection provided.
- **Limited Disturbed Areas**: Project size does not create an impact (Redevelopment Project, No new impervious, adequate separation/dispersal)
- **Other**: Provide justification



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Identify the E&S BMP(s) that will be utilized to achieve the non-discharge alternative:

- | | |
|--|--|
| <input type="checkbox"/> Alternative Siting: Location | <input type="checkbox"/> Limiting Extent & Duration of Disturbance |
| <input type="checkbox"/> Alternative Siting: Configuration | <input type="checkbox"/> Riparian Buffer (150 ft min.) |
| <input type="checkbox"/> Alternative Siting: Location of Discharge | <input type="checkbox"/> Riparian Forest Buffer (150 ft min.) |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Limited Disturbed Area |

Explain how the E&S BMP(s) will individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

- If you are not checking the main box (green)-this section should be blank (you are not *eliminating*).
- Check Green Box-Provide justification (with supporting calculations) how the 2 year storm impacts during construction are being *eliminated*.



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E&S Non-Discharge Alternative

If a Non-Discharge Alternative will not be utilized, explain the rationale for non-selection, including why none of the alternatives are considered environmentally sound and cost-effective.

- Justify why Each of the Checkbox BMP's were not used and why they are not environmentally sound or cost effective. (Green Box is not checked)
- Alternate Siting: Location
- Alternate Siting: Configuration
- Alternate Siting: Location of Discharge:
- Limit Extent/Duration of Disturbance:
- Buffers:
- Limited Disturbed Areas:



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E&S ABACT

- Antidegradation Best Available Combination of Technologies (ABACT) BMP(s) will be utilized** for the project that will either individually or collectively **manage** the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm **during** earth disturbance activities.

Identify the ABACT E&S BMP(s) that will be utilized:

- | | |
|--|--|
| <input type="checkbox"/> Rock Construction Entrance with Wash Rack | <input type="checkbox"/> Rock Construction Entrance with Street Sweeping |
| <input type="checkbox"/> Wheel Wash | <input type="checkbox"/> Pumped Water Filter Bag with Compost Sock Ring |
| <input type="checkbox"/> Pumped Water Filter Bag with Sump Pit | <input type="checkbox"/> Compost Filter Sock |
| <input type="checkbox"/> Compost Filter Berm (HQ Only) | <input type="checkbox"/> Weighted Sediment Filter Tube (HQ Only) |
| <input type="checkbox"/> Silt Fence with Vegetative Filter Strip | <input type="checkbox"/> Super Silt Fence with Vegetative Filter Strip |
| <input type="checkbox"/> Wood Chip Filter Berm (HQ Only) | <input type="checkbox"/> Vegetative Filter Strip (HQ Only) |
| <input type="checkbox"/> Sediment Basin with Perforated Riser (HQ Only) | <input type="checkbox"/> Sediment Basin with Skimmer |
| <input type="checkbox"/> Stone Inlet Protection with Compost Layer (HQ Only) | <input type="checkbox"/> Compost Filter Sock Sediment Trap |
| <input type="checkbox"/> Embankment Sediment Trap with Compost Layer (HQ Only) | <input type="checkbox"/> Embankment Sediment Trap with Compost Sock |
| <input type="checkbox"/> Sediment Trap with Perforated Riser (HQ Only) | <input type="checkbox"/> Sediment Trap with Skimmer |
| <input type="checkbox"/> Erosion Control Blankets within 50 ft of Surface Waters | <input type="checkbox"/> Immediate Stabilization |
| <input type="checkbox"/> Flocculant with PAMs | <input type="checkbox"/> Vegetative Conveyance |
| <input type="checkbox"/> Riparian Buffer (< 150 ft) | <input type="checkbox"/> Riparian Forest Buffer (< 150 ft) |

- If you are not checking the main box (Green box from previous slide- i.e. Project is not *eliminating* net change by NDA), the 2 year storm impacts are being managed by using the BMP's attached in this list.
- Check main box (blue) in this section and ABACT BMP's being utilized on the project.



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E&S ABACT

Approved Alternative: _____

Explain how the E&S BMP(s) will individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during the earth disturbance activities.

- List any Approved Alternative BMPs (must meet ABACT) used on project
- Provide a narrative how ABACT BMP's manage the 2 year net change.
- This is not the same as the PCSM section-How are you managing stormwater during the construction phase of the project.



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PCSM Non-Discharge Alternative

ANTIDEGRADATION – POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN	
<input type="checkbox"/> A Non-Discharge Alternative will be utilized for the project that either individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm <u>after</u> earth disturbance activities.	
Identify the PCSM BMPs that will be used to achieve the non-discharge alternative:	
<input type="checkbox"/> Alternative Siting: Location	<input type="checkbox"/> Low Impact Development
<input type="checkbox"/> Alternative Siting: Configuration	<input type="checkbox"/> Riparian Buffer (150-ft. min.)
<input type="checkbox"/> Alternative Siting: Location of Discharge	<input type="checkbox"/> Riparian Forest Buffer (150-ft. min.)
<input type="checkbox"/> Infiltration	<input type="checkbox"/> Water Reuse
<input type="checkbox"/> Other: _____	

- **Are the BMP's listed in these checkboxes truly eliminating (all by themselves) the net change in stormwater after construction? They may contribute but do they truly eliminate?**
- **Need to Consider:**
 - Infiltration, Water Reuse-Are these BMP's by themselves meeting Q,V and WQ? No other BMP's being claimed? (Trees, WQ Filters, Landscape Restoration, etc.)
 - Note-an MRC does not Eliminate, it *Manages* the Net change



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PCSM Non-Discharge Alternative

Explain how the PCSM BMP(s) will individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

- If not eliminating-This section should be blank
- Otherwise provide justification for NDA BMP's selected

If a **Non-Discharge Alternative will not be utilized**, explain the rationale for non-selection, including why none of the alternatives are considered environmentally sound and cost-effective.

- Justify why Each of the Checkbox BMP's were not used and why they are not environmentally sound or cost effective.
- Alternate Siting-Location
- Alternate Siting-Configuration
- Alternate Siting-Location of Discharge:
- Infiltration
- Low Impact Development
- Buffers
- Water Reuse



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PCSM ABACT

Antidegradation Best Available Combination of Technologies (ABACT) has been selected for the project that will either individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

Identify the ABACT PCSM BMPs that will be utilized:

- | | |
|--|---|
| <input type="checkbox"/> Rain Garden (with Infiltration) | <input type="checkbox"/> Disconnection of Impervious / Roof Area |
| <input type="checkbox"/> Rain Garden (without Infiltration) | <input type="checkbox"/> Pervious Pavement with Infiltration Bed |
| <input type="checkbox"/> Constructed Filter | <input type="checkbox"/> Infiltration Basin |
| <input type="checkbox"/> Vegetated Swale | <input type="checkbox"/> Infiltration Bed |
| <input type="checkbox"/> Vegetated Filter Strip | <input type="checkbox"/> Infiltration Trench |
| <input type="checkbox"/> Constructed Wetland | <input type="checkbox"/> Soil Amendment |
| <input type="checkbox"/> Wet Pond | <input type="checkbox"/> Dry Well / Seepage Pit |
| <input type="checkbox"/> Dry Extended Detention Basin | <input type="checkbox"/> Infiltration Berm / Retentive Grading |
| <input type="checkbox"/> Water Quality Device | <input type="checkbox"/> Protect Sensitive / Special Value Features |
| <input type="checkbox"/> Spray / Drip Irrigation | <input type="checkbox"/> Street Sweeping |
| <input type="checkbox"/> Rain Barrel | <input type="checkbox"/> Green Roof |
| <input type="checkbox"/> Protect / Utilize Natural Flow Pathways (on-site) | |

- If you are not checking the main box (Project is not *eliminating* net change by NDA), the 2 year storm impacts are being managed by using the BMP's attached in this list.
- Check main box in this section (blue) and ABACT BMP's being utilized on the project.



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PCSM ABACT

Approved Alternative: _____

Explain how the PCSM BMP(s) will individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

- List any Approved Alternative BMPs (must meet ABACT) used on project
- Provide a narrative how ABACT BMP's manage the 2 year net change.



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Certification

CERTIFICATION

I certify under penalty of law and subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities) that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Applicant Name (type or print legibly)

Official Title

Applicant Signature

Date Signed

- Note: Applicants Signature Required



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Questions?



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