



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

Applicant: Maiden Creek Associates, L.P.

Project Site Name: Proposed Warehouse Facility

Surface Water Name: Peters Creek

Surface Water Use: EV, MF

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 |

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 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.

Due to the nature of this development, using the E&S BMPs listed above to achieve non-discharge alternatives will not be sufficient to eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/ 24-hour storm. The site exists today as a vacant agricultural lot, so the development activities will generate a significant increase in stormwater volume, rate, and quality and it will need to be mitigated using ABACT BMPs.

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 checked="" type="checkbox"/> Rock Construction Entrance with Wash Rack | <input type="checkbox"/> Rock Construction Entrance with Street Sweeping |
| <input type="checkbox"/> Wheel Wash | <input checked="" type="checkbox"/> Pumped Water Filter Bag with Compost Sock Ring |
| <input checked="" type="checkbox"/> Pumped Water Filter Bag with Sump Pit | <input checked="" 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 checked="" 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 checked="" type="checkbox"/> Immediate Stabilization |
| <input type="checkbox"/> Flocculant with PAMs | <input type="checkbox"/> Vegetative Conveyance |

Riparian Buffer (< 150 ft)

Riparian Forest Buffer (< 150 ft)

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.

The sediment basins constructed in Phase 1 of the E&S plan will capture stormwater on site for the duration of construction. While the sediment basin is being constructed, compost filter sock will manage the rest of the site.

ANTIDEGRADATION – POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN

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 after earth disturbance activities.

Identify the PCSM BMPs that will be used to achieve the non-discharge alternative:

Alternative Siting: Location

Low Impact Development

Alternative Siting: Configuration

Riparian Buffer (150-ft. min.)

Alternative Siting: Location of Discharge

Riparian Forest Buffer (150-ft. min.)

Infiltration

Water Reuse

Other: _____

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 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.

Due to the nature of this development, using the PCSM BMPs listed above to achieve non-discharge alternatives will not be sufficient to eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/ 24-hour storm. The site exists today as a vacant agricultural lot, so the development activities will generate a significant increase in stormwater volume, rate, and quality and it will need to be mitigated using ABACT BMPs. The site is underlain by carbonate geology and karst conditions, thus infiltration is not proposed on site.

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 PSCM BMPs that will be utilized:

Rain Garden (with Infiltration)

Disconnection of Impervious / Roof Area

Rain Garden (without Infiltration)

Pervious Pavement with Infiltration Bed

Constructed Filter

Infiltration Basin

Vegetated Swale

Infiltration Bed

Vegetated Filter Strip

Infiltration Trench

Constructed Wetland

Soil Amendment

Wet Pond

Dry Well / Seepage Pit

Dry Extended Detention Basin

Infiltration Berm / Retentive Grading

Water Quality Device

Protect Sensitive / Special Value Features

Spray / Drip Irrigation

Street Sweeping

- Rain Barrel Green Roof
 Protect / Utilize Natural Flow Pathways (on-site)

Approved Alternative: Dry Extended Detention Basin (MRC)

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.

Three (3) MRC detention basins(aboveground) will manage the post construction stormwater. The MRC basins are designed to temporarily impound a water quality storm event(1.2in/2-hour) for use by vegetation and is filtered through the soil media. The water is released through an underdrain which is sized by using an equivalent impervious area calculation, limiting how fast water can drain through the underdrain. An internal water storage is included in the design for further water quality and evapotranspiration benefits. When the MRC basin is designed to DEP design standards, it may be used to satisfy 25 Pa. Code Section 102.89(g)(2) requirement for the management of all events up to and including the 2-year/24-hour storm.

MRC basins also satisfy the antidegradation Best Available Combination of Technologies (ABACT) regulatory requirements from Chapter 93 and 102 of 25 PA. Code Section 102.89(g)

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.

Maiden Creek Associates, L.P. c/o Steven Wolfson

Applicant Name (type or print legibly)

Member

Official Title

Applicant Signature

Date Signed