



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

Applicant: Relteva, LLC Project Site Name: Relteva Development
Surface Water Name: UNT to Pennypack Creek Surface Water Use: TSF, 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.

The alternative siting BMPs listed above (location, configuration, location of discharge) and limiting extent, duration and area of disturbance are not feasible because the amount of space required for the operation of this warehouse development and the size of the property does not allow for the relocation or reconfiguration of the development, it would not be cost effective to reduce the size of the operation. Infiltration is not feasible due to environmental concerns on-site. Riparian buffers are not feasible because there are no waterbodies or wetlands located on, or in close proximity to, the site.

Antidegradation Best 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 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 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 |

Riparian Buffer (< 150 ft)

Riparian Forest Buffer (< 150 ft)

Approved Alternative: **Alternative Rock Construction Entrance**

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.

During this phase of construction, most of the existing impervious surfaces will be removed and no new impervious is proposed. This will reduce the volume and rate of runoff leaving the site. Water quality will be addressed by utilizing compost filter sock around the perimeter of the site which will keep sediment from leaving 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: **The construction activities permitted under this application are limited to stipping and stockpiling of topsoil and placing fill across the site with the installation of E&S controls. Existing impervious surfaces will be removed, and no new impervious is proposed under this phase. ABACT BMPs will be proposed for the development phase of this project to manage the increase in runoff and treat for water quality.**

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.

The alternative siting BMPs listed above (location, configuration, location of discharge) and low impact development are not feasible because the amount of space required for the operation of this warehouse development and the size of the property does not allow for the relocation or reconfiguration of the development, it would not be cost effective to reduce the size of the operation. Infiltration is not feasible due to environmental concerns on-site. Riparian buffers are not feasible because there are no waterbodies or wetlands located on, or in close proximity to, the site. It is not cost effective to reuse all of the stormwater generated from this development.

Antidegradation Best 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

- | | |
|--|---|
| <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) | |

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.

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