



Erosion Potential Analysis



Pennsylvania
Department of
Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

Erosion Potential (EP) Analysis For Chapter 102 Permits

Applicant Name: Mercer Node Property, LLCProject Site Name: Mercer Node DevelopmentDischarge Point (DP) ID: 002☒ During Construction☒ Following Construction☒ An EP Analysis is not required because:☒ Stormwater discharges will be directly to surface waters through an outfall or storm sewer.☐ A new channel will be designed and constructed to convey runoff in accordance with DEP's E&S Manual.☐ A level spreader is proposed and calculations are provided to demonstrate sheet flow below the level spreader.☐ Flow path characteristics will not change and calculations are provided to demonstrate that the 10-year/24-hour storm discharge rate will not increase.

Conveyance Information

Type of Conveyance:

☐ Existing channel/swale or other flow path that will be partially improved☐ Existing channel/swale or other flow path that will not be improved

Distance to Property Boundary: _____ ft

Distance to Surface Water or Storm Sewer: _____ ft

Flow Path Information

The entire flow path is shown on: ☐ E&S ☐ PCSM ☐ Plan Drawings

Plan Drawing No(s): _____

Description of land cover of flow path: _____

☐ Photographs of the flow path are attached.

Critical Section Data:

Peak discharge rate at 10-year/24-hour storm (*attach calculations or model output*): _____ cfs

Slope: _____ % Soil type(s): _____ Soil Erodibility (k) factor: _____

Maximum Allowable Velocity: _____ fps Source: _____

Maximum Allowable Shear: _____ psf Source: _____

Calculated Maximum Velocity: _____ fps (*Attach calculations or model output*)Calculated Maximum Shear: _____ psf (*Attach calculations or model output*)

Source of topographic data for flow path: _____

☐ The flow path will be improved as described below.

Affected Landowners:

☐ Stormwater discharges will not flow off-site.

Landowner Name	Address	Phone No.	Email

☐ Landowner consent has been or will be obtained for stormwater discharges.

Michael E. Archer

6/2/2026

Name of Individual Completing Form

Date

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Project Site Name: Mercer Node Development

Discharge Point (DP) ID: 003

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☒ Following Construction

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