



DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES EROSION AND SEDIMENT CONTROL (E&S) MODULE 1

Applicant: **Mercer Node Property, LLC**

Project Site Name: **Mercer Node Development**

E&S PLAN INFORMATION

1. Describe the existing topographic features of the project site and the immediate surrounding area.

The existing site consists of mostly concrete and other impervious surfaces. The project area drains to four discharge points located at the north and south ends of the project site as well as two existing storm sewers. One existing storm sewer is located in Clark Street and the is along the southwest edge of the property. The receiving watercourse is Shenango River.

2. a. Complete the following table for soils present at the project site or attach a separate table.

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Site-Specific Limitation	Hydric
UaC	Udorthents, loamy, 0 to 15 percent slopes	6.07	C	41.3	☒	☐
Ur	Urban land	8.62	Not Rated	58.7	☐	☐
					☐	☐
					☐	☐

- b. If there are any site-specific soil limitations identified in the table above, discuss how the E&S Plan was designed to address those limitations.

Cutbanks cave - Cut slopes shall be excavated with appropriate layback banks to prevent cave ins. Stockpiles to be places away from cut slopes.

Corrosive to concrete/steel - Concrete or steel will not be used as E&S BMP materials.

Droughty - For droughty soils, contractor to refer to table 11.3 "plant tolerances of soil limitation factors" from the E&S manual to select appropriate vegetation. Erosion control blanket should also be considered in soil conditions that make revegetation difficult. When installed properly, erosion control blankets can help hold soil particles in place and retain soil moisture, promoting seed germination.

Easily erodible - Compost filter socks and immediate stabilization will be used to minimize erosion.

Low strength/landslide prone - cut slopes shall be excavated with appropriate layback banks to prevent cave-ins. Stockpiles shall be located at a sufficient distance away from cut slopes. Stockpiles shall have a maximum side slope no steeper that 3h:1v.

Slow percolation - Infiltration and overland flows across permeable surfaces will be avoided during construction in accordance with the Phase 1 ESA. Storm sewers will be used to convey water from the site.

Poor source of topsoil - Topsoil will not be required for revegetation on site, due to contaminated soils. The project site will be capped with impervious pavement.

Frost action - The contractor shall provide a coarse textured subgrade or base material to reduce the frost action potential and enhance soil strength in frost prone areas.

- c. If hydric soils are present, is a wetland determination attached to this module? ☒ Yes ☐ No ☐ N/A

If No, explain: _____

- d. If wetlands are found to be present, are a wetland delineation report and plan drawings showing the wetland boundary attached to this module? ☒ Yes ☐ No ☐ N/A

- e. Was environmental due diligence conducted for on-site soils to be disturbed? ☒ Yes ☐ No

- f. If on-site soils are known to be contaminated, 1) identify the pollutants exceeding Act 2 standards, 2) identify the extent of soil contamination on an E&S Plan Drawing that is attached to this module, and 3) describe the methods that will be used to avoid or minimize disturbance of the contaminated soils in the space provided below or separate sheet.

As stated in the Phase 1 ESA, the following contaminants were present in groundwater and soil at levels that exceed the applicable PADEP groundwater and soil medium specific compounds: VOCs, SVOCs, PCBs, dioxins, metals, sulfate, and nitrate. To avoid and minimize disturbance of the contaminated soils, contaminated media removed for reuse, treatment or disposal shall be managed in accordance with the Solid Waste Management Act (35 P. S. § § 6018.101—6018.1003), The Clean Streams Law (35 P. S. § § 691.1—691.1001), the act of July 13, 1988 (P. L. 525, No. 93) (35 P. S. § § 6019.1—6019.6), known as the Infectious and Chemotherapeutic Waste Law, the Air Pollution Control Act (35 P. S. § § 4001—4015) and the regulations thereunder. Infiltration will not be utilized during construction or in the PCSM plan. No greenspaces will be part of this project site and the disturbed area will be capped with impervious materials.

3. Describe the characteristics of the earth disturbance activity, including the past (at least 50 years ago), present (within the past five (5) years) and proposed land uses and the proposed alteration to the project site.

The present land use consists of a mostly unused paved surfaces which used to be the site of many large industrial buildings. The land use has remained the same in the past five years as it is current day. Historical aerial photographs and topographic maps indicate that the project site included several large buildings which were likely part of Sharon's coal mining, iron, or steel industry.

4. Describe the volume and rate of runoff from the project site and its upstream watershed area.

The runoff from the project site during construction will be directed to storm sewers or perimeter E&S BMPs. Refer to the E&S calculations for additional details.

5. Check boxes to indicate all BMPs that will be installed or implemented, indicate the number of BMPs on the project site, and describe any deviations from the E&S Manual.

E&S BMPs	No. BMPs	Deviation(s) from E&S Manual
☐ Rock Construction Entrance		
☐ Rock Construction Entrance with Wash Rack		
☐ Rumble Pad		
☒ Wheel Wash	1 (Phase 1) 3 (Phase 2 &3)	
☐ Temporary/Permanent Access Roads		
☐ Waterbar		
☐ Broad-based Dip		
☐ Open-top Culvert		
☐ Water Deflector		
☐ Roadside Ditch		
☐ Ditch Relief Culvert		
☐ Turnout		
☐ Compost Sock Sediment Trap		
☐ Temporary/Permanent Stream Crossing		
☐ Temporary/Permanent Wetland Crossing		
☐ Turbidity Barrier (Silt Curtain)		
☒ Dewatering Work Areas	As Needed	The designated environmental representative must be present during all dewatering activities and dewatering to be completed per the approved COA, environmental covenant and materials management plan.
☐ Pumped Water Filter Bag		
☐ Sump Pit		
☒ Concrete Washout	2 (Phase 2 & 3)	
☒ Compost Filter Sock	31 (Phase 1) 29 (Phase 2 &3)	
☐ Compost Filter Berm		
☒ Weighted Sediment Filter Tube		
☐ Silt Fence (Filter Fabric Fence)		
☐ Reinforced Silt Fence		
☐ Super Silt Fence		

E&S BMPs	No. BMPs	Deviation(s) from E&S Manual
☐ Sediment Filter Log (Fiber Log)		
☐ Wood Chip Filter Berm		
☐ Straw Bale Barrier		
☐ Rock Filter		
☐ Vegetative Filter Strip		
☒ Inlet Filter Bag	38	
☐ Stone Inlet Protection		
☐ Runoff Conveyance (Channel)		
☐ Bench		
☐ Top-of-Slope Berm		
☐ Temporary Slope Pipe		
☐ Sediment Basin		
☐ Sediment Trap		
☐ Riprap Apron		
☐ Flow Transition Mat		
☐ Stilling Basin (Plunge Pool)		
☐ Stilling Well		
☐ Energy Dissipater		
☐ Drop Structure		
☐ Earthen Level Spreader		
☐ Structural Level Spreader		
☐ Surface Roughening		
☐ Vegetative Stabilization		
☐ Erosion Control Blanket		
☐ Soil Binders		
☐ Sodding		
☐ Cellular Confinement Systems		
☐ Alternative:		
☐ Alternative:		

6.	☒	E&S Plan Drawings have been developed for the project and are attached to the NOI/application.
7.	☒	All applicable Standard E&S Worksheets from Appendix B of the E&S Manual, or other calculations equivalent to Appendix B Worksheets, have been completed and are attached to the NOI/application.
8.	☒	Supporting E&S BMP calculations are attached to the NOI/application.
9.	☒	A complete sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities, that ensures the proper functioning of all BMPs is provided on the E&S Plan Drawings.
10.	☒	A cut/fill balance sheet with soil volumes identified is attached.
11.	☒	BMPs will be inspected on a weekly basis and after measurable storm events (i.e., at least 0.25 inch).
12.	☐	The following information relating to <u>temporary stabilization</u> measures is identified on the E&S Plan Drawings: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, and 8) liming rate.
13.	☐	The following information relating to <u>permanent stabilization</u> measures is identified on the E&S Plan Drawings: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, 8) liming rate, 9) anchor material, 10) anchoring method, 11) rate of anchor material application, 12) topsoil placement depth, and 13) seeding season dates.
14.	☒	The procedures that will be taken to ensure that recycling or disposal of materials associated with or from the project site will be conducted properly is described on the E&S Plan Drawings.
15.	☒	The E&S Plan has been planned, designed, and will be implemented to be consistent with the PCSM Plan.
16.	☐	The project includes existing and/or proposed riparian forest buffers as shown on the E&S / PCSM Plan Drawings.
17.	☒	Construction dewatering is expected and BMPs for treating this water are shown on E&S Plan Drawings.
18.	Identify the presence of any naturally occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities below. If such formations or conditions exist, identify BMPs on the E&S Plan Drawings that will be implemented to avoid or minimize potential pollution. (Enter "N/A" if not applicable). As stated in the Phase 1 ESA, the following contaminants were present in groundwater and soil at levels that exceed the applicable PADEP groundwater and soil medium specific compounds: VOCs, SVOCs, PCBs, dioxins, metals, sulfate, and nitrate. To avoid and minimize disturbance of the contaminated soils, contaminated media removed for reuse, treatment or disposal shall be managed in accordance with the Solid Waste Management Act (35 P. S. § 6018.101—6018.1003), The Clean Streams Law (35 P. S. § 691.1—691.1001), the act of July 13, 1988 (P. L. 525, No. 93) (35 P. S. § 6019.1—6019.6), known as the Infectious and Chemotherapeutic Waste Law, the Air Pollution Control Act (35 P. S. § 4001—4015) and the regulations thereunder. Infiltration will not be utilized during construction or in the PCSM plan. No greenspaces will be part of this project site and the disturbed area will be capped with impervious materials. The Erosion and Sediment control plan will be implemented to meet ABACT requirements including the use of extended rock construction entrances and compost filter socks. The Erosion and Sediment Control BMPs and site activities to comply and be consistent with the site specific COA, Materials Management Plan and Environmental Covenant.	
19.	Identify whether the potential exists for thermal impacts to surface waters from the earth disturbance activity below. If such potential exists, identify BMPs on the E&S Plan Drawings that will be implemented to avoid, minimize, or mitigate potential thermal impacts. No thermal impacts to surface waters are expected as a result of this project.	

E&S PLAN DEVELOPER			
☒ I am trained and experienced in E&S control methods.		☒ I am a licensed professional.	
No. years of experience preparing E&S Plans: <u>31</u>		☐ I am a certified E&S professional.	
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		06/04/26	
<u>E&S Plan Developer Signature</u>		<u>Date</u>	