ATTACHMENT 8:
OFF SITE DISCHARGE ANALYSIS

Attachment 8 – Section E.5 -Off Site Discharge Analysis

Pennsylvania Pipeline Project -

South Central Region: Spreads 3, 4, 5

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LIST OF ACRONYMS

ACRONYM	MEANING
BMP	Best Management Practice
E&SC	Erosion and Sediment Control
LOD	Limit of Disturbance
PCSM	Post-Construction Stormwater Management
ROW	Right of way

PENNSYLVANIA PIPELINE PROJECT – OFF-SITE DISCHARGES OF STOMRWATER TO AREAS THAT ARE NOT SURFACE WATERS

The Pennsylvania Pipeline Project involves the installation of two parallel pipelines within a 306-mile, 50-foot-wide right-of-way (ROW) from Houston, Washington County, PA to SPLP's Marcus Hook facility in Delaware County, PA with the purpose of interconnecting with existing SPLP Mariner East pipelines. A 20-inch diameter pipeline would be installed within the ROW from Houston to Marcus Hook (306 miles) and a second, 16-inch diameter pipeline, will also be installed in the same ROW. The second line is proposed to be installed from SPLP's Delmont Station, Westmoreland County, PA to the Marcus Hook facility, paralleling the initial line for approximately 255 miles. Spread 6 (South East Region) of this project are cross through Blair, Huntington, Juniata, Perry, Cumberland, York, Dauphin, Lebanon, Lancaster and Berks Counties, PA.

Throughout the length of the pipeline there are areas which propose to discharge stormwater to off-site areas other than a surface water. All of these discharges will be non-erosive to adjacent property owners and is detailed in the E&SC and PCSM plans per DEP Document No. 3140-FS-DEP4124.

PUMP STATIONS

There are no off-site discharges to areas other than surface water for any of the block valves.

BLOCK VALVES

Arcona Rd – Cumberland County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Charger Highway – Blair County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Happy Hills Rd – Huntington County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Hares Valley Rd – Huntington County - This Pump Station includes two off-site discharges to areas other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharges will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

High Street – Blair County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Montello – Berks County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Schaeffers – Lebannon County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Shade Valley Rd – Huntingdon County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Sinclair – Lebannon County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

Wolf Bridge Rd – Cumberland County - This block valve includes an off-site discharge to an area other than surface water from the underdrain. Both the E&SC and PCSM plans ensure that the discharge will not cause erosion, damage, or a nuisance to off-site properties through the installation outlet protection which meets the

design parameters in PADEP documents 363-2134-008 and 363-0300-002. These measures are detailed in the respective plans.

MAINLINE

There are several locations along the length of the pipeline which have off-site discharges to areas other than surface waters and a list of these locations can be found in table 1. All of these discharges are from waterbars installed throughout the length of the pipeline installation. These water bars are designed in accordance with the PADEP's Erosion and Sediment Pollution Control Program Manual (363-2134-008) and the Pennsylvania Stormwater Best Management Practices manual (363-0300-002) and is a non-erosive discharge. Details of these measures can be found in the E&SC plan.

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
BLAIR		
ES - 3.02	Blair Gap Run	5780+00 and 5785+75
ES - 3.03, 3.04	Blair Gap Run	5810+00 through 5823+00
ES - 3.05	Blair Gap Run	5837+50 through 5845+00
ES-3.06, ES-3.07	Poplar Run	5852+25 through 5880+00
ES 3.09	Poplar Run	5898+00 through 5905+00
ES 3.09, ES-3.10	Blair Gap Run	5905+00 through 5921+76
ES-3.15, ES-3.16	Blair Gap Run	6010+25 through 6024+50
ES-3.17	Blair Gap Run	6037+75
ES-3.19	Blair Gap Run	6070+00 through 6080+25
ES-3.20, ES-3.21	Blair Gap Run	6094+50 through 6015+50
ES-3.22	Blair Gap Run	6027+25
ES-3.23, ES - 3.24	Blair Gap Run	6140+50 through 6155+00 and HDD Pull Back Area
ES- 3.25, ES- 3.26	Beaverdam Branch	6174+50 through 6190+50
ES- 3.27, ES - 3.28	Beaverdam Branch	6204+75 through 6231+00
ES-3.28	Beaverdam Branch	6237+00
ES-3.29	Frankstown Branch Juniata River	6244+25 through 6253+00
ES-3.30, ES- 3.31	Frankstown Branch Juniata River	6258+25 through 6277+25
ES-3.34	Frankstown Branch Juniata River	6327+00 through 6240+50
ES-3.35, ES-3.36	Frankstown Branch Juniata River	6351+00 through 6368+50
ES-3.39, ES- 3.40, ES-3.41	Frankstown Branch Juniata River	6415+00 through 6454+50
ES- 3.41, ES - 3.42	Fransktown Branch Juniata River	6457+50 through 6474+75
ES-3.49, ES-3.50	Fransktown Branch Juniata River	6598+50 through 6605+00
ES-3.53, ES-3.54	Frankstown Branch Juniata River	6666+00 through 6678+00
ES-3.54	Piney Creek	6678+00 through 6678+00
ES-3.58, ES-3.59	Piney Creek	6751+00 through 6772+50
ES-3.62 through ES-3.65	Piney Creek	6807+25 through 3540+75
ES-3.66, ES-3.67	Piney Creek	6886+00 through 6892+00
ES-3.68 through ES- 3.72	Piney Creek	6906+25 through 6985+50
ES-3.73	Piney Creek	6991+50 through 7006+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
HUNTINGDON		
ES - 3.01, ES-3.02	Raystown Branch Juniata River	7007+50 through 7038+50
ES - 3.03, through ES- 3.05	Raystown Branch Juniata River	7054+00 through 7082+00
ES - 3.07	Raystown Branch Juniata River	7115+00 through 7120+75
ES - 3.08, ES-3.09	Raystown Branch Juniata River	7133+00 through 7155+50
ES - 3.10, ES-3.11	Raystown Branch Juniata River	7180+00 through 7191+50
ES - 3.15, ES - 3.16	Raystown Branch Juniata River	7257+50 through 7275+50
ES - 3.24, ES-3.25	Raystown Branch Juniata River	7410+00 through 7431+50
ES - 3.25 through ES-3.27	Juniata River	7433+50 trhough 7461+50
ES-3.30	Juniata River	7517+00 trhough 7519+00
ES - 3.32	Juniata River	7540+75 through 7553+50
ES - 3.34	Juniata River	7575+00 through 7594+50
ES-3.35, ES-3.36	Juniata River	7595+50 through 7604+75
ES-3.38	Juniata River	7639+75 through 7650+50
ES-3.42 through ES-3.44	Juniata River	7705+00 through 7744+00
ES- 3.45	Juniata River	7754+25 through 7766+00
ES-3.46	Juniata River	7772+50 through 7787+00
ES-3.47 through ES-3.50	Juniata River	7795+25 through 7852+00
ES- 3.51, ES-3.52	Juniata River	7861+25 through 7869+25
ES- 3.52 through ES-3.54	Juniata River	7881+00 through 7904+50
ES - 3.60	Juniata River	8006+50 through 8016+50
ES- 3.62, ES 3.63	Juniata River	8037+00 through 8069+75
ES - 3.66	Juniata River	8109+50 through 8118+50
ES- 3.70	Juniata River	8179+00 through 8183+00
ES - 3.71, ES- 3.72	Juniata River	8198+00 thorugh 8204+50
ES - 3.75, ES -3.76	Blacklog Creek	8254+75 through 8281+00
ES - 3.76, ES - 3.77	Tuscarora Creek	8283+00 through 8291+25

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
JUNIATA		
ES-3.01	Tuscarora Creek	8427+00 through 8438+00
ES-3.04, ES -3.05	Tuscarora Creek	8482+75 through8494+50
ES - 3.09, ES - 3.10	Tuscarora Creek	8566+50 through 8583+50
PERRY		
ES - 3.01, ES - 3.02	Horse Valley Run	8584+00 through 8616+00
ES - 3.05, ES-3.06	Horse Valley Run	8649+50 through 8671+00
ES - 3.06, ES -3.07	Sherman Creek	8671+50 through 8698+50
ES - 3.09, ES - 3.10	Sherman Run	8721+50 through 8730+25
ES - 3.11	Sherman Run	8749+50 through 8759+75
ES - 3.13 through ES-3.16	Sherman Run	8782+00 through 8841+00
ES - 3.18 through ES -3.20	Sherman Run	8866+00 through 8901+50
ES-3.20, ES-3.21	Bull Run	8901+50 through 8930+00
ES - 3.24 through ES-3.26	Bull Run	8967+50 throgh 9010+00
ES - 3.27, ES -3.28	Bull Run	9024+00 through 9038+75
ES - 3.28 through 3.30	Laurel Run	9040+00 through9083+00
ES - 3.33	Laurel Run	9122+75 through 9125+50
ES - 3.34, ES- 3.35	Laurel Run	9135+50 through 9154+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
CUMBERLAND		
ES - 4.01, ES- 4.02	Doubling Gap Creek	9154+50 through 9184+50
ES - 4.12	Conodoguinet Creek	9339+00 through 9349+00
ES - 4.14	Conodoguinet Creek	9371+00 through 9382+00
ES - 4.18, ES-4.19	Conodoguinet Creek	9445+75 through 9458+75
ES - 4.21	Conodoguinet Creek	9487+50 through 9492+50
ES - 4.22	Conodoguinet Creek	9507+50
ES - 4.24	Conodoguinet Creek	9541+75
ES - 4.29	Conodoguinet Creek	9626+00 through 9626+00
ES - 4.32	Conodoguinet Creek	9674+75 through 9685+50
ES - 4.34	Conodoguinet Creek	9717+75 through 9720+75
ES-4.41, ES 4.42	Conodoguinet Creek	9835+00 through 9842+00
ES-4.61	Letort Spring Run	10157+00 thorugh 10166+00
ES-4.66	Hogestown Run	10248+75 through 10250+00
ES-4.67	Hogestown Run	10261+50 through 10271+50
ES-4.70	Hogestown Run	10310+50 through 10322+50
ES-4.72	Hogestown Run	10358+50
ES-4.73	Hogestown Run	10367+50 through 10373+25
ES-4.73	Trindle Spring Run	10375+00 through 10376+00
ES-4.74 through ES-4.77	Trindle Spring Run	10396+50 through 10445+25
ES-4.79	Trindle Spring Run	10470+00 through 10481+50
ES-4.81	Trindle Spring Run	10502+50 through 10514+75
ES-4.82	Trindle Spring Run	10524+50 and 10534+00
ES-4.83	Trindle Spring Run	10541+00 through 10546+50
ES-4.84	Trindle Spring Run	10553+00
ES-4.85	Trindle Spring Run	10579+75
ES-4.92	Yellow Breeches Creek	10699+00
ES-4.93, ES-4.94	Yellow Breeches Creek	10724+00 through 10733+75
ES-4.95	Yellow Breeches Creek	10752+25 through 10755+00
ES-4.99	Yellow Breeches Creek	10821+00 through 10825+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
YORK		
ES-4.02, ES 4.03	Yellow Breeches Creek	10875+75 through 10866+00
ES-4.05	Yellow Breeches Creek	10919+50 through 10926+00
ES-4.06	Yellow Breeches Creek	10939+00 through 10940+75
ES-4.08, ES-4.09	Yellow Breeches Creek	10960+00 through 10985+00
ES-4.10	Susquehanna River	10998+25 and 11009+50
ES-4.12	Susquehanna River	11029+00 through 11045+00
ES-4.14	Susquehanna River	11066+75 through 11068+00
ES-4.19	Susquehanna River	HDD Pullback Area
DAUPHIN		
ES-4.10	Susquehanna River	11324+00 and 11325+75
ES-4.18	Lower Swatara Creek	11464+00 and 11469+00
ES-4.20	Lower Swatara Creek	11493+25 through 11495+50
ES-4.21	Lower Swatara Creek	11508+75 through 11515+00
ES-4.22	Lower Swatara Creek	11524+00 through 11535+75
ES-4.27	Lower Swatara Creek	11618+00
ES-4.29	Lower Swatara Creek	11645+00
ES-4.29, ES-4.30	Spring Creek	11648+00 through 11658+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
LEBANON		
ES-1.03, ES-1.04	Spring Creek	11847+25 through 11865+00
ES-1.06	Quitapahilla Creek	11894+25 through 11898+75
ES-1.08	Quitapahilla Creek	11924+00
ES-1.12	Quitapahilla Creek	11980+00 and 11989+00
ES-1.13	Quitapahilla Creek	11999+00 through 12001+75
ES-1.15 through ES 1.17	Quitapahilla Creek	12037+25 through 12059+75
ES-1.18 through ES-1.20	Quitapahilla Creek	12081+00 through 12112+00
ES-1.21	Quitapahilla Creek	12123+75 through 12127+75
ES-1.23	Quitapahilla Creek	12157+50
ES-1.24	Quitapahilla Creek	12172+00 and 12179+50
ES-1.25	Quitapahilla Creek	12189+75 and 12192+50
ES-1.27	Quitapahilla Creek	12219+00
ES-1.28	Quitapahilla Creek	12226+00 through 12237+50
ES-1.29	Quitapahilla Creek	12245+50 through 12255+00
ES-1.30	Quitapahilla Creek	12261+75 through 12269+75
ES-1.31	Quitapahilla Creek	12288+00
ES-1.33	Quitapahilla Creek	12308+75 through 12317+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
ES-1.34	Quitapahilla Creek	1238+00 through 1233+25
ES-1.35	Quitapahilla Creek	1234+00 and 12347+50
ES-1.37	Quitapahilla Creek	12379+75
ES-1.38, ES-1.40	Quitapahilla Creek	12383+50 through 12420+00
ES-1.42	Quitapahilla Creek	12445+00
ES-1.42	Hammer Creek	12451+00
ES-1.43	Hammer Creek	12462+75
ES-1.44	Hammer Creek	12473+25 through 12485+75
ES-1.48 through ES-1.50	Hammer Creek	12541+00 through 12571+75
ES-1.55	Hammer Creek	12645+00 through 12652+00
ES-1.56	Hammer Creek	12662+25 through 12670+75
ES-1.59	Hammer Creek	12706+75 through 12717+25
ES-1.60, ES-1.61	Middle Creek	12723+00 through 12734+75
ES-1.62	Middle Creek	12754+25 through 12756+75
ES-1.63, ES 1.64	Middle Creek	12772+50 through 12788+00
ES-1.66	Middle Creek	12814+25 and 12815+75
LANCASTER		
ES-1.01	Little Cocalico Creek	12864+50 through 12866+00
ES-1.02	Little Cocalico Creek	12880+25 and 12882+25
ES-1.03	Little Cocalico Creek	12887+25 through 12894+25
ES-1.04	Little Cocalico Creek	12902+50 through 12914+00
ES-1.06	Little Cocalico Creek	12944+50
ES-1.18	Little Cocalico Creek	13124+00 through 13128+25
ES-1.19, ES-1.20	Little Cocalico Creek	13139+75 through 13151+25
ES-1.24	Little Cocalico Creek	13223+50

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
BERKS		
ES - 1.02	Little Cocalico Creek	13239+50 through 13253+00
ES - 1.07	Cocoosing Creek	1316+00
ES - 1.08	Cocoosing Creek	13332+00 through 133456+00
ES - 1.11	Cocoosing Creek	13391+00 through 13399+50
ES - 1.13	Cocoosing Creek	13420+50
ES - 1.15, ES-1.16	Cocoosing Creek	13449+50 through 13462+25
ES - 1.18, 1.19	Cocoosing Creek	13475+00 through 13494+25
ES - 1.20	Cocoosing Creek	1307+00 through 13515+00
ES-1.22	Cocoosing Creek	13540+25 through 13544+00
ES-1.24	Little Muddy Creek	13581+00 through 13584+50
ES-1.26	Little Muddy Creek	13601+00 through 13616+00
ES-1.28	Wyomissing Creek	13639+50 through 13644+50
ES-1.29, ES-1.30	Wyomissing Creek	13661+75 through 13674+00
ES-1.32, ES-1.33	Wyomissing Creek	13701+00 through 13722+00
ES-1.34	Wyomissing Creek	13339+00 thorugh 13747+00
ES-1.36, ES-1.37	Wyomissing Creek	13771+00 through 13790+50
ES-1.39	Allegheny Creek	13811+00 thorugh 13833+50
ES-1.40, ES-1.41	Allegheny Creek	13826+00 through 13847+00
ES-1.44	Allegheny Creek	13893+00
ES-1.46, ES- 1.48	Allegheny Creek	13926+75 thorugh 13954+50
ES-1.50	Muddy Creek	13981+75 though 13996+00
ES-1.53	Muddy Creek	14031+50 thorugh 14034+50
1.54	Muddy Creek	14054+00 through 14055+50
ES - 1.54, ES -1.55	Hay Creek	14057+50 through 14062+75
ES-1.56	Hay Creek	14074+25 through 14076+00
ES-1.58	Hay Creek	14107+00 through 14115+00
ES-1.61, ES 1.62	Hay Creek	14150+00 through 14169+50
ES- 1.63	Hay Creek	14187+00 through 1419+00
ES-1.64, ES-1.65	Conestoga River	14198+00 through 14220+00
ES-1.66, ES-1.67	Conestoga River	14231+75 through 14260+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING
ES-1.71, ES -1.73	Conestoga River	14305+00 through 14336+00

Table 1:
Off-Site Discharge to Non Surface Water Locations

E&S SHEET NUMBER	Watershed	E&S PLAN STATIONING