

PA DEP – Permits Section – Erosion & Sediment Control Permit

RECORD OF DECISION

E&S Permit Application No.: ESG0300015002

Applicant: Sunoco Logistics, L.P. Project Name: Pennsylvania Pipeline Project (aka Mariner East II)

Watershed: See Attached Tables EV HQ Non-SP CD Reviewer: Multiple CD Reviewers

Phased Project? YES NO Project Area: 1692 acres Disturbed Area: 1692 acres

E&S Plan components: Reviewed and approved by: CD DEP

Blair County Conservation District performed the technical E&S review for the portion of the project located in Huntingdon County.

Berks, Blair, Cumberland, Dauphin, Juniata, Lancaster, Lebanon, Perry & York County Conservation Districts have performed a technical review of the Erosion and Sediment Control (E&S) Plans for this project. This review resulted in technical review comments which DEP shared with the applicant.

Upon technical review of the response documents from the applicant, some remaining issues with the proposed E&S plans were identified by the County Conservation Districts (CCD's) as inadequately addressed. These issues were elevated to the Program Management and Bureau for consideration. The Program Management and Bureau reviewed the concerns raised by the CCDs; deficiencies were identified that would preclude the DEP from issuing the permit without further information from the applicant. The applicant then provided the additional information addressing the final deficiencies that were identified.

A table of documents reviewed as part of this submittal follows:

Blair County

Item	Description	Dated
ES-0.01 to ES-0.24	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.25 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-3.01 to ES-3.73	Erosion and Sediment Control and Site Restoration Plan	November 2016
ES-3.74 to ES-3.76	Access Road-Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06, ES-0.22 & ES-0.24	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/28/2017
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/6/2017
ES-0.21	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-3.44 & ES-3.52	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017

ES-3.46 & ES-3.47	revised Erosion and Sediment Control and Site Restoration Plan	2/1/2017
ES-3.67	revised Erosion and Sediment Control and Site Restoration Plan	11/28/2016
Narrative	Erosion and Sediment Control Plan	February 2017

Berks County

Item	Description	Dated
ES-0.01 to ES-0.23	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.24 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-5.01 to ES-5.73	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.03, ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.02	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	11/30/216
ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06, ES-0.19, ES-0.21 & ES-0.23	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/217
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-5.01, ES-5.09, ES-5.38, ES-5.65 & ES-5.70	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
ES-5.04, ES-5.30,	revised Erosion and Sediment Control and Site Restoration Plan	2/1/2017
ES-5.37	revised Erosion and Sediment Control and Site Restoration Plan	2/4/2017
ES5.69	revised Erosion and Sediment Control and Site Restoration Plan	11/21/2016
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017
Drawings	Erosion and Sediment Control Plan (Beckersville)	revised 10/18/2016
Cover Sheet	revised Erosion and Sediment Control Plan (Beckersville)	2/6/17
ES3 & CONSTDET9	revised Erosion and Sediment Control Plan (Beckersville)	2/4/17
Narrative	Erosion and Sediment Control Plan (Beckersville)	revised 10/18/2016

Cumberland County

Item	Description	Dated
ES-0.01 to ES-0.24	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.25 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-4.01 to ES-4.101	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017

ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20, ES-0.22 & ES-0.24	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.21	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-4.15, ES-4.16, ES-4.54 & ES-4.59	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
ES-4.36	revised Erosion and Sediment Control and Site Restoration Plan	11/28/2016
ES-4.37	revised Erosion and Sediment Control and Site Restoration Plan	12/2/2016
ES-4.50	revised Erosion and Sediment Control and Site Restoration Plan	12/1/2016
ES-4.51	revised Erosion and Sediment Control and Site Restoration Plan	11/14/2016
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017

Dauphin County

Item	Description	Dated
ES-0.01 to ES-0.23	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.24	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-4.01 to ES-4.39	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.03, ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.05, ES-0.21 & ES-0.23	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.09 & ES-0.20	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.19	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	11/30/2016
ES-4.01, ES-4.02, ES-4.03, ES-4.04	revised Erosion and Sediment Control and Site Restoration Plan	2/4/2017
ES-4.08	revised Erosion and Sediment Control and Site Restoration Plan	2/3/2017
ES-4.19	revised Erosion and Sediment Control and Site Restoration Plan	2/1/2017
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017
Drawings	revised Erosion and Sediment Control Plan (Middletown)	revised 2/6/2017
Narrative	Erosion and Sediment Control Plan (Middletown)	revised 2/6/2017

Huntingdon County

Item	Description	Dated
ES-0.01 to ES-0.24	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.25 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-3.01 to ES-3.85	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.02	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	11/30/2016

ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20, ES-0.22 & ES-0.24	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.21	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-3.31, ES-3.39, ES-3.40, ES-3.46, ES-3.55, ES-3.74, ES-3.80 & ES-3.82	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
ES-3.36, ES-3.37, ES-3.61 & ES-3.81	revised Erosion and Sediment Control and Site Restoration Plan	2/2/2017
ES-3.45	revised Erosion and Sediment Control and Site Restoration Plan	11/21/2016
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017
Drawings	Erosion and Sediment Control Plan (Mt. Union)	11/30/2016
C-2	revised Erosion and Sediment Control Plan (Mt. Union)	11/28/2016
Narrative	Erosion and Sediment Control Plan (Mt. Union)	November 2016

Juniata County

Item	Description	Dated
ES-0.01 to ES-0.24	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.25	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-3.01 to ES-3.10	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.02, ES-0.07, ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	received 2/7/2017
ES-0.04	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20, ES-0.22 & ES-0.24	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.21	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-3.05	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
ES-3.07 & ES-3.08	revised Erosion and Sediment Control and Site Restoration Plan	2/2/2017
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017

Lancaster County

Item	Description	Dated
ES-0.01 to ES-0.23	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.24	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016

ES-1.01 to ES-1.25	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06, ES-0.19, ES-0.21 & ES-0.23	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-1.23	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017

Lebanon County

Item	Description	Dated
ES-0.01 to ES-0.23	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.24 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-5.01 to ES-5.69	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.03, ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.05, ES-0.19, ES-0.21 & ES-0.23	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.09	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	12/1/2016
ES-5.24, ES-5.25, ES-5.26, ES-5.31, ES-5.33, ES-5.34, ES-5.35, ES-5.40, ES-5.41 & ES-5.42	revised Erosion and Sediment Control and Site Restoration Plan	2/4/2017
ES-5.32, ES-5.36 & ES-5.38	revised Erosion and Sediment Control and Site Restoration Plan	2/5/2017
ES-5.50	revised Erosion and Sediment Control and Site Restoration Plan	2/6/2017
P-A1-A	Pennsylvania Pipeline Project Stream S-A25 Existing Conditions/Erosion & Sedimentation Control Plans	11/28/2016
P-A1-B	Pennsylvania Pipeline Project Stream S-A25 Restoration Plan	11/28/2016
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017

Perry County

Item	Description	Dated
ES-0.01 to ES-0.24	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.25 to ES-0.26	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-3.01 to ES-3.35	Erosion and Sediment Control and Site Restoration Plan	November 2016

	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.04 & ES-0.08	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.10	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.20, ES-0.22 & ES-0.24	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.21	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	11/29/2016
ES-3.17 & ES-3.22	revised Erosion and Sediment Control and Site Restoration Plan	2/3/2017
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017
Drawings	Erosion and Sediment Control Plan (Doylesburg)	revised 11/30/2016
C-4	revised Erosion and Sediment Control Plan (Doylesburg)	2/6/17
Narrative	Erosion and Sediment Control Plan (Doylesburg)	November 2016

York County

Item	Description	Dated
ES-0.01 to ES-0.22	Erosion and Sediment Control and Site Restoration Plan Notes and Details	November 2016
ES-0.23	Erosion and Sediment Control and Site Restoration Plan Key Plan	November 2016
ES-4.01 to ES-4.21	Erosion and Sediment Control and Site Restoration Plan	November 2016
	the accompanying site specific Erosion and Sedimentation Control Plans and Restoration Plans	11/30/16
ES-0.03	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.07	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/30/2017
ES-0.05	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-0.06	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/1/2017
ES-0.09 & ES-0.19	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	2/5/2017
ES-0.18, ES-0.20 & ES-0.22	revised Erosion and Sediment Control and Site Restoration Plan Notes and Details	1/29/2017
ES-4.19	revised Erosion and Sediment Control and Site Restoration Plan	12/2/2016
ES-4.20	revised Erosion and Sediment Control and Site Restoration Plan	2/6/2017
ES-4.21	revised Erosion and Sediment Control and Site Restoration Plan	2/4/2017
Narrative	Erosion and Sediment Control Plan (Spreads 3, 4, 5)	February 2017

Based upon a technical review of the E&S Plan submission from the conservation districts, the responses from the applicant together with specific permit conditions, the Department finds the E&S Plans for this project to be technically adequate and satisfies all applicable E&S requirements of Chapter 102, including §§102.4(b)(5)(ii) to §102.4(b)(5)(xv), §102.4(b)(4), §102.4(b)(5)(i), §102.4(b)(6), and Chapter 93.

PCSM Plan components:

Adequate

- Written Narrative
- Plan Drawings
- Identification/location of PCSM BMPs
- Operation & Maintenance Procedures
- Supporting calculations, if required

- o Does BMP selection and location appear reasonable? YES NO Explain: _____
- o Hydrologic Method(s): SCS Method
- o Was on-site testing done for soil permeability if infiltration is proposed?
YES NO N/A Explain: _____
- o Does volume of stormwater to be managed equal or exceed net change in volume of runoff (pre to post-construction)?
YES NO N/A Explain: The net change in stormwater runoff volume has been managed through extended detention and/or volume reduction
- o Has justification been provided if BMP's will not manage net increase in 2-yr/24-hr runoff volume?
YES NO N/A Explain: _____
- o Are infiltration practices maximized, with respect to site constraints?
YES NO N/A Explain: _____
- o Stormwater Consistency: Act 167 Plan approved and consistency letter provided ; **OR**
(Select One) PCSM Plan Meets design criteria of 25 Pa. Code Chapter 102.8(g)(2) and (3); **OR**
 Alternative Design Standard used per 25 Pa. Code Chapter 102.8(g)(2)(iv) and 102.8(g)(3)(iii)
If Alternative Design Standard, has applicant provided adequate demonstration of compliance with Sections 102.8(g)(2)(iv) and 102.8(g)(3)(iii)?

Valley Forge Road Block Valve

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.69 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0</u>	<u>0.14</u>	<u>+0.14</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>396</u>	<u>980</u>	<u>+584</u>
Volume of runoff reduction (cu ft)		<u>734</u>	<u>246</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.28</u>	<u>0.21</u>	<u>-0.07</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>2.14</u>	<u>1.83</u>	<u>-0.31</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>5.44</u>	<u>5.17</u>	<u>-0.27</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>7.28</u>	<u>7.22</u>	<u>-0.06</u>

Watershed Analysis: (AKA Water Quality Analysis)

- Adequate Site Analysis: YES NO N/A Details: _____
- Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Charger Highway Block Valve (POI DA1)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.66 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0</u>	<u>0.14</u>	<u>+0.14</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>1625</u>	<u>2236</u>	<u>+611</u>
Volume of runoff reduction (cu ft)		<u>840</u>	<u>1396</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>1.35</u>	<u>1.15</u>	<u>-0.20</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>3.03</u>	<u>2.82</u>	<u>-0.21</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>5.33</u>	<u>5.26</u>	<u>-0.07</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>6.51</u>	<u>6.37</u>	<u>-0.14</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Charger Highway Block Valve (POI DA2)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.66 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0</u>	<u>0.02</u>	<u>+0.02</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>201</u>	<u>282</u>	<u>+81</u>
Volume of runoff reduction (cu ft)		<u>130</u>	<u>152</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.13</u>	<u>0.11</u>	<u>-0.02</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>0.30</u>	<u>0.27</u>	<u>-0.03</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>0.55</u>	<u>0.53</u>	<u>-0.02</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>0.67</u>	<u>0.59</u>	<u>-0.08</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Shade Valley Road Block Valve (POI DA1)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.74 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0.07</u>	<u>0.21</u>	<u>+0.14</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>1555</u>	<u>2235</u>	<u>+680</u>
Volume of runoff reduction (cu ft)		<u>778</u>	<u>1457</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>1.21</u>	<u>1.00</u>	<u>-0.21</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>3.04</u>	<u>2.57</u>	<u>-0.47</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>5.78</u>	<u>4.96</u>	<u>-0.82</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>7.34</u>	<u>6.43</u>	<u>-0.91</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Shade Valley Road Block Valve (POI DA2)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.74 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0.21</u>	<u>0.38</u>	<u>+0.17</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>3295</u>	<u>4244</u>	<u>+949</u>
Volume of runoff reduction (cu ft)		<u>1642</u>	<u>2602</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>2.27</u>	<u>2.14</u>	<u>-0.13</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>5.93</u>	<u>5.26</u>	<u>-0.67</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>11.50</u>	<u>10.32</u>	<u>-1.18</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>14.68</u>	<u>13.55</u>	<u>-1.13</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Creek Road Block Valve

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.82 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0</u>	<u>0.14</u>	<u>+0.14</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>2788</u>	<u>3396</u>	<u>+608</u>
Volume of runoff reduction (cu ft)		<u>1215</u>	<u>2181</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>2.51</u>	<u>2.28</u>	<u>-0.23</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>5.20</u>	<u>4.95</u>	<u>-0.25</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>9.51</u>	<u>9.31</u>	<u>-0.20</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>12.05</u>	<u>11.69</u>	<u>-0.36</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Gates Road Block Valve

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.97 inches

	Pre-development	Post-development	Net Change
Impervious Area (acre)	<u>0</u>	<u>0.13</u>	<u>+0.13</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>854</u>	<u>1467</u>	<u>+613</u>
Volume of runoff reduction (cu ft)		<u>811</u>	<u>656</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.47</u>	<u>0.36</u>	<u>-0.11</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>2.57</u>	<u>1.97</u>	<u>-0.60</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>6.38</u>	<u>5.37</u>	<u>-1.01</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>8.60</u>	<u>7.51</u>	<u>-1.09</u>

Watershed Analysis: (AKA Anti-Degradation Review & Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____
 Adequate E & S Plan for Antidegradation Analysis: YES NO N/A Details: Siltation impaired
 Adequate PCSM Plan for Antidegradation Analysis: YES NO N/A Details: Siltation impaired

Mount Union Block Valve Station

UNT to Aughwick Creek (Designated Use: TSF)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.8 inches

	Pre-development	Post-development	Net Change
Impervious Area (acre)	<u>0</u>	<u>0.63</u>	<u>+0.63</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>661</u>	<u>5894</u>	<u>+5233</u>
Volume of runoff reduction (cu ft)		<u>5968</u>	<u>0</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.18</u>	<u>0.00</u>	<u>-0.18</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>0.70</u>	<u>0.12</u>	<u>-0.56</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>1.60</u>	<u>0.57</u>	<u>-1.03</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>2.13</u>	<u>0.85</u>	<u>-1.28</u>

Watershed Analysis: (AKA Water Quality Analysis)

Adequate Site Analysis: YES NO N/A Details: _____
 Adequate Thermal Impact Analysis: YES NO N/A Details: _____

Doylesburg Pump Station

Shermans Creek (Designated Use: HQ-CWF)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.7 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0.16</u>	<u>0.39</u>	<u>+0.23</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>17425</u>	<u>19900</u>	<u>+2475</u>
Volume of runoff reduction (cu ft)		<u>4962</u>	<u>14938</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>4.18</u>	<u>3.97</u>	<u>-0.21</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>10.86</u>	<u>10.21</u>	<u>-0.65</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>21.99</u>	<u>20.52</u>	<u>-1.47</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>28.59</u>	<u>26.96</u>	<u>-1.63</u>

Watershed Analysis: (AKA Anti-Degradation Review & Water Quality Analysis)

Adequate Site Analysis:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	Details: _____
Adequate Thermal Impact Analysis:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	Details: _____
Adequate E & S Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	Details: <u>HQ</u>
Adequate PCSM Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	Details: <u>HQ</u>

Middletown Pump Station

Two (2) UNTs to Swatara Creek (Designated Use: WWF)

Wetlands

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 2.91 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
POI DA1 – North UNT			
Impervious Area (acre)	<u>0</u>	<u>1.35</u>	<u>+1.35</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>5936</u>	<u>19529</u>	<u>+13593</u>
Volume of runoff reduction (cu ft)		<u>14593</u>	<u>4936</u>
POI DA2 – South UNT			
Impervious Area (acre)	<u>0</u>	<u>0.26</u>	<u>+0.26</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>916</u>	<u>3478</u>	<u>+2562</u>
Volume of runoff reduction (cu ft)		<u>3267</u>	<u>211</u>
POI DA3 – Wetland UNT			
Impervious Area (acre)	<u>0</u>	<u>0.52</u>	<u>+0.52</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>1256</u>	<u>6119</u>	<u>+4863</u>
Volume of runoff reduction (cu ft)		<u>4982</u>	<u>1137</u>

POI DA1 – North UNT

Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.92</u>	<u>0.16</u>	<u>-0.76</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>4.98</u>	<u>0.62</u>	<u>-4.36</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>13.02</u>	<u>1.59</u>	<u>-11.43</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>18.01</u>	<u>2.59</u>	<u>-15.42</u>

POI DA2 – South UNT

Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.19</u>	<u>0.14</u>	<u>-0.05</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>0.99</u>	<u>0.97</u>	<u>-0.02</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>2.58</u>	<u>2.45</u>	<u>-0.13</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>3.57</u>	<u>3.08</u>	<u>-0.49</u>

POI DA3 – Wetland UNT

Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>0.09</u>	<u>0.00</u>	<u>-0.09</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>0.49</u>	<u>0.00</u>	<u>-0.49</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>1.27</u>	<u>0.22</u>	<u>-1.05</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>1.76</u>	<u>1.08</u>	<u>-0.68</u>

Watershed Analysis: (AKA Anti-Degradation Review & Water Quality Analysis)

Adequate Site Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: _____
Adequate Thermal Impact Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: _____
Adequate E & S Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: <u>Siltation impaired</u>
Adequate PCSM Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: <u>Siltation impaired</u>

Beckersville Pump Station

Two (2) UNTs to Muddy Creek (Designated Use: HQ-TSF)

Summary of the PCSM Plan:

Design Storm: 2-year (24-hr) Rainfall: 3.21 inches

	<u>Pre-development</u>	<u>Post-development</u>	<u>Net Change</u>
Impervious Area (acre)	<u>0.61</u>	<u>1.02</u>	<u>+0.41</u>
Volume of runoff w/o planned BMPs (cu ft)	<u>12119</u>	<u>19098</u>	<u>+6979</u>
Volume of runoff reduction (cu ft)		<u>8930</u>	<u>10168</u>
Peak discharge rate – 2-yr/24-hour storm(cfs)	<u>1.62</u>	<u>0.14</u>	<u>-1.48</u>
Peak discharge rate – 10-yr/24-hour storm(cfs)	<u>6.12</u>	<u>0.56</u>	<u>-5.56</u>
Peak discharge rate – 50-yr/24-hour storm(cfs)	<u>11.20</u>	<u>1.07</u>	<u>-10.13</u>
Peak discharge rate – 100-yr/24-hour storm(cfs)	<u>14.45</u>	<u>1.39</u>	<u>-13.06</u>

Watershed Analysis: (AKA Anti-Degradation Review & Water Quality Analysis)

Adequate Site Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: _____
Adequate Thermal Impact Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: _____
Adequate E & S Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: <u>HQ</u>
Adequate PCSM Plan for Antidegradation Analysis:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>	Details: <u>HQ</u>

Grass Block Valve Sites

The following sites were designed as "grass block valve sites";

Juniata Valley Road, Raystown Road, Seven Points Loop, Happy Hills Road, Hares Valley Road, Wolf Bridge Road, West Trindle Road, Arcona Road, North Union Street, Schaeffer Road, Sinclair Road, Hopeland Road, Montello, Wyomissing Road, & Morgantown Road.

While the naming convention chosen is 'grass' these sites will be in a meadow condition in the post construction condition. These sites were designed and analyzed as site restoration, in accordance with 25 Pa. Code § 102.8(n).

The West Trindle Road, Arcona Road, & Sinclair Road block valve sites discharge to siltation impaired surface waters.

Adequate E & S Plan for Antidegradation Analysis: YES NO N/A Details: _____

Adequate PCSM Plan for Antidegradation Analysis: YES NO N/A Details: _____

The Wyomissing Road & Morgantown Road block valve site discharges to a special protection surface water.

Adequate E & S Plan for Antidegradation Analysis: YES NO N/A Details: HQ (Wyomissing)
/ EV (Morgantown)

Adequate PCSM Plan for Antidegradation Analysis: YES NO N/A Details: HQ (Wyomissing)
/ EV (Morgantown)

Co-Located Block Valve Sites

The following sites were designed as co-located block valve sites;

Blue Mountain, Plainfield, Old York Road, White Haven Lane, Cornwall, & Blainsport

These sites are located at sites that are in an existing gravel condition (i.e. there will be no increase in impervious area). These sites are still considered a construction activity and not a site restoration activity. However, these sites are for the construction of utility infrastructure and the site will be returned to existing conditions; therefore, these sites meet the exception for 25 Pa. Code §§ 102.8(g)(2)(i) & 102.8(g)(2)(ii). Because there is no change in the proposed conditions from the existing conditions; there will be no net change in the post construction runoff from these sites.

Adequate Site Analysis: YES NO N/A Details: _____

Adequate Thermal Impact Analysis: YES NO N/A Details: _____

The Cornwall block valve site discharges to a siltation impaired surface water.

Adequate E & S Plan for Antidegradation Analysis: YES NO N/A Details: _____

Adequate PCSM Plan for Antidegradation Analysis: YES NO N/A Details: _____

The Blue Mountain & Plainfield block valve sites discharge to special protection surface waters.

Adequate E & S Plan for Antidegradation Analysis: YES NO N/A Details: HQ

Adequate PCSM Plan for Antidegradation Analysis: YES NO N/A Details: HQ

Comments:

Project Description: Sunoco Pipeline, LP proposes to construct and operate the Pennsylvania Pipeline Project that would expand existing pipeline systems to provide natural gas liquid. The project involves the installation of approximately two parallel pipelines with a 306.8 mile, 50-ft. wide right of way from Houston, Washington County, PA to Sunoco's Marcus Hook facility in Delaware County, PA.

The area covered by this particular permit application is the approximately 162 miles in the South-central Region of DEP; through Blair, Huntingdon, Juniata, Perry, Cumberland, York, Dauphin, Lebanon, Lancaster & Berks Counties. In addition to the mainline construction the project proposes twenty-nine (29) block valve sites and four (4) pump stations.

Other Permits:

- Water Obstruction & Encroachment Permits under 25 Pa. Code Chapter 105.
- PAG-10.

TMDL or Impairment:

- For discharges to siltation impaired watersheds, an antidegradation analysis was performed. This antidegradation analysis utilized nondischarge alternatives and where nondischarge alternatives were demonstrated to not exist for the Project, ABACT BMPs were utilized.

Potentially Pollution Causing Materials:

Has the project site been investigated to identify naturally occurring geologic formations or soil types that may cause pollution when disturbed? YES NO

Have naturally occurring geologic formations or soil types that may cause pollution when disturbed been identified? YES NO

Have BMPs been utilized to avoid or minimize the potential pollution? YES NO

Riparian Buffer/Equivalency/Offsetting: The proposed activity does not require an NPDES Permit for Stormwater Discharges Associated with Construction Activity; therefore, Act 162 does not apply.

The Applicant requested a waiver of the requirement to implement riparian / riparian forest buffers, in accordance with 25 Pa. Code § 102.14(d)(2). Where the proposed pipeline crosses a perennial or intermittent river, stream, or creek, or lake, pond or reservoir with a Designated Use of High Quality or Exceptional Value, a riparian / riparian forest buffer is not mandatory in accordance with 25 Pa. Code § 102.14(a).

Other Comments:

A Doylestown block valve site is identified within the PCSM Plan Narrative for the block valves; however, that block valve is located within the footprint of the Doylestown Pump Station. The Doylestown block valve "site" was accounted for and evaluated as part of the PCSM Plan for the Doylestown Pump Station.

The permit application was noticed in the Pennsylvania Bulletin on August 6, 2016.

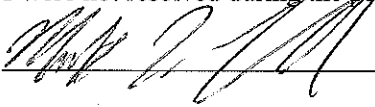
Public comments were received and considered in the review of this permit application. See DEP's Comment Response document for more information.

Upon technical review of the response documents, numerous issues from the DEP's Technical Deficiencies letter, dated September 6, 2016 remained inadequately addressed. These issues were elevated to the Program Management and Bureau for concurrence. The Program Management and Bureau determined that not all the remaining issues preclude the DEP from issuing the permit. A selected number of issues were considered to be deficiencies which precluded the DEP from issuing the permit without further information from the applicant. The applicant provided additional information.

Recommendation:

Issuance: This application has been reviewed and based on the submitted information; the application has been found to be **adequate** and satisfactorily addresses the administrative and technical requirements for the Erosion and Sediment Control Permitting Program and the antidegradation requirements found at 93.4c.

Denial/ Return/ Withdrawal: (circle one). This application has been reviewed and based on the submitted information; the application has been found to be **inadequate** and does not satisfactorily address the administrative and/or technical requirements for the Erosion and Sediment Control Construction Permitting Program and/or Antidegradation requirements found in 93.4. Deficiencies were not resolved during the permit review process.

Reviewer: 

Initials/Date: NRC 2/10/17

Nathan R. Crawford, P.E.
Chief, Permits Section
Waterways & Wetlands Program