

CHESTER COUNTY CONSERVATION DISTRICT 688 Unionville Road, Suite 200, Kennett Square, PA 19348 Phone: 610-925-4920 ~ Fax: 610-925-4925

www.chesco.org/conservation

August 20, 2015

Eastern Shore Natural Gas Company Attn: Richard Welsh 1110 Forrest Ave, Suite 201 Dover, DE 19904-2788

Morris & Ritchie Associates, Inc. Attn: Charlie Barnett 18 Boulden Circle, Suite 36 Wilmington, DE 19720-3494

RE: Incompleteness Review Letter- Erosion and Sediment Control General Permit (ESCGP)

White Oak Mainline Expansion Project- Daleville Loop ESCGP File Number: ESG 00 029 15 0001

Highland & Londonderry Townships, Chester County, PA

Stream Name(s): Doe Run & Big Elk Creek Plan Date: 6/12/15 Designation(s): Not Provided

Narrative Date: June 2015

To Whom it May Concern:

The Chester County Conservation District has reviewed the above referenced application and has determined that it is incomplete. The Following list specifies the items that must be included in the resubmittal of your application and/or the submission of additional information. The Pennsylvania Erosion and Sediment Pollution Control Program Manual and the Pennsylvania Stormwater Best Management Practices Manual include information that will aid you in the responding to some of the items listed below. The items are based on applicable laws and regulations, and the guidance sets forth the DEP's preferred means of satisfying the applicable regulatory requirements.

Items for Resubmittal or Submission of Additional Information

ESCGP-2 NOI Comments

1.) NOI Section B Site Information- Site location box needs to be updated with more specific information, i.e. Beginning and ends of the pipeline locations. 102.5(m)(2)

- 2.) NOI Section C Box 18 should be completed as much as possible, this project in not crossing may different watersheds and the information in its entirety can be provided on the NOI. 102.5(m)(2)
- 3.) NOI Section D Box 2 indicates the site is protecting and converting a voluntary riparian buffer, please provide the buffer management plan as part of the PCSM Plan. Please refer to the PA DEP's website for the Riparian Forest Buffer Management Plan information. 102.5(m)(2) http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-82308/394-5600-001.pdf
- 4.) NOI Section E Box 1 indicates the project is compliant with local Act 167 ordinances, please provide a consistency letter from each municipality indicating this or a PE signed and sealed verification report. 102.5(m)(2) Please note that Act 167 requires all land cover to be converted to Meadow and then the site will have to address the pre to post change in land cover i.e. Meadow to agriculture, or meadow to lawn, etc, and a stormwater volume control and peak rate components will be required that may require structural PCSM BMPs along the ROW. The designing engineers may want to reevaluate the statement that the site complies with Act 167.
- 5.) NOI Section E Box 2, please provide the buffer management plan as part of the PCSM Plan. 102.5(m)(2)
- 6.) NOI Section E Box 4, all BMPs checked should be illustrated on the Site Restoration Plans. 102.5(m)(2)
- 7.) NOI Section G should be completed for the Specially Protected Watershed portion of this project. 102.5(m)(2)

ESCGP-2 NOI Checklist Comments

- 1.) Box 1- Please provide 2 more copies of the ESCGP-2.
- 2.) Box 2- The provided plan sets are not titled E&S Control Plans. All E&S Control plan pages should be titled E&S Plans.
- 3.) Box 2.e- Please provide the stream designations.
- 4.) Box 2.f- Pages 18-20 of the narrative don't address this BMP Description Narrative, please revise accordingly.
- 5.) Box 2.g- Please provide the drawing plan page numbers.
- 6.) Box 2.k- Please provide drawing plan page numbers where the recycling and disposal information can be found.
- 7.) Box 2.o- The ESCGP-2 NOI indicates that buffers were identified but the checklist marks N/A. Please clarify and revise both the NOI and checklist for consistency.

- 8.) Box 2.p- Antideg requirements are needed on this site in its Specially Protected watersheds, please revise checklist accordingly.
- 9.) Box 5- The provided PNDI receipt indicates an older PNDI that was run prior to May 4, 2015. A new species was added to the PNDI database and the PNDI needs to be re-run/ updated after the may 4, 2015 date.
- 10.) Box 6- The PCSM/Site Restoration (SR) plan pages could not be found, please provide 3 sets of the PCSM/SR plans.

Other

1.) Please provide copies of 105 Stream and Wetland Crossing Permit applications.

You may request a time extension, in writing before the 60 calendar days expire to respond to the deficiencies beyond the sixty (60) calendar days. Requests for time extension will be reviewed by the Chester County Conservation District and considered. You be notified in writing of the decision either to grant or deny, including the specific due date to respond if the extension is granted. Time extensions shall be in accordance with 25 Pa. Code §102.6(c).

As stipulated in 25 Pa. Code §102.6(c) of DEP's Chapter 102 rules and regulations (regarding complete applications) information requested by this office must be received within sixty (60) calendar days from the date of this letter or the Chester County Conservation District will consider the application to be withdrawn by the applicant and no further action will be taken on the application. Fees are not refunded when an application is considered to be withdrawn.

Questions regarding this matter can be directed to:

Joe Sofranko

Resource Conservationist Chester County Conservation District (610) 925-4920 ext. 107

Sincerely.

Christian E. Stedmaren

Christian E. Strohmaier Electronic signature Director

CC:

Highland Twp (e-mail)
Londonderry Twp (e-mail)
MRA (e-mail)
PA DEP (e-mail)
Project File
Permit File

RECEIVED AUG 1 1 2015

8000-PM-OOGM0005 Rev. 1/2014
Notice of Intent

Pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF WATER MANAGEMENT OFFICE OF OIL AND GAS MANAGEMENT

CCCD &	ory
OFFICIAL USE ONLY ID# <u>ESG</u> 00 029 15 0 Date Received <u>8-11 - 20 15</u>	20 01

NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP-2) FOR EARTH DISTURBANCE ASSOCIATED WITH OIL AND GAS EXPLORATION, PRODUCTION, PROCESSING, OR TREATMENT OPERATIONS OR TRANSMISSION FACILITIES

READ THE INSTRUCTIONS I	PROVIDE	D INTHIS PERMIT	APPLICATION PACK	AGE BEFO	RE COMPL	ETING '	THIS FORM.
PLEASE PRINT OR TYPE INFORMATION IN BLACK OR BLUE INK.							
		SECTION A.	APPLICANT INFO	RMATION			
APPLICATION TYPE N	IEW 🛛	RENEWAL [MAJOR MODIFICA	TIONS 🗌	EXPEDITE	D 🗌	PHASED [
Applicant's Last Name (If a	applicable	e)	First Name	М	Phone		
Welsh			Richard		FAX		
Organization Name or Registered Fictitious Name						(302)	734 - 6710
Eastern Shore Natural Gas	s Compar	ny			FAX	(302)	734 - 6745
Mailing Address			City		State	ZIP +	· 4
1110 Forrest Avenue, Suite	e 201		Dover		DE	1990	4-2788
Email Address rwelsh@ch	pk.com				'		
Co-Applicant's Last Name ((If applica	able)	First Name	МІ	Phone		
Barnett			Charlie		FAX		
Organization Name or Registered Fictitious Name				Phone	(302)	326 - 2200	
Morris & Ritchie Associates	s, Inc.				FAX	(302)	326 - 2399
Mailing Address			City		State	ZIP +	4
18 Boulden Circle, Suite 36	3		Wilmington		DE 19720-3494		
Email Address cbarnett@n	mragta.co	om					
380		SECTION	N B. SITE INFORMA	TION	×		
Site Name						_	· · ·
White Oak Mainline Expans	sion Proj	ect - Daleville Loc	р				
Site Location 🗶							3,4000
Chester County							
Site Location – City					State	ZIP+	-4
Cochranville					PA		
Detailed Written Directions					727	3282 0	
Daleville (Cochranville, PA) Take Limestone Rd (S.R. 1 addressed 3266 Limestone	0) North	to the project site	, located in an agricu	Itural field	on right-han	d side p	rior to a residence
County		Municipality			City	Boro	Twp.
Chester		Highland and Londonderry					

	SECTION C. PROJECT INFORMATION						
1.	Total Project Area/Project Site (Ac):	4	Total Disturbed A	Area (Ac):	44		
2.	Project Name White Oak Mainline Expansion Project	ect - Daleville	Loop		1		
3.	Project Type (Check all that apply) ☐ Oil/Gas Well ☐ Transmission Facility ☐ Gathering Facility ☐ Processing Facility ☐ Treatment Facility ☐ Centralized Fresh Water Impoundment ☐ Centralized Wastewater Impoundment ☐ Water Pipeline ☐ Ground/Surface Water Withdrawal Site ☐ Other						
	If Oil/Gas well, is the well conventional or unconver		☐ Conventi	onal [Unconventional		
Pro	pject Description			_	_		
The Da	The project involves the installation of a 16-inch diameter buried natural gas pipeline totaling approximately 3.3 miles. The project will commence along Limestone Road near Cochranville, Pennsylvania and proceed southeast to the existing Daleville Compressor Station along Street Road. Please see attached Erosion and Sedimentation Pollution Control Narrative for additional information.						
4.	Please provide the latitude and longitude coordinategrees, minutes seconds (DD MM SS.SS) and project's termini.	ates for the o North Amer	center of the pro ican Datum 198	ect. The cod 3. For linear	ordinates should be in projects provide the		
	Latitude 39 degrees 51 minutes 35 seconds	Longitu	de <u>75</u> degrees <u>53</u>	minutes <u>31</u> s	econds		
	Latitudedegreesminutesseco	nds Longitud	de degree	s minut	es seconds		
	Horizontal Collection Method: ☐ GPS ☐ Inte	erpolated fron	n U.S.G.S. Topog	raphic Map	☐ DEP's eMAP		
5.	U.S.G.S. 7.5 min. Quad Map Name See Figure 1 (I	nclude a copy	of the project ar	ea on the 7.5	min quad map)		
6.	Will the project be conducted as a phased permit professional of Yes, Include Master Site Plan Estimated Timetable			Additional she	et(s) attached.		
	hase No.		Disturbed				
	or Name Description Construction	Total Are		Start Date Aug 2015	End Date Jan 2016		
	Concil delicit	747/0.	77 / (.	Aug 2013	3an 2016		
7.	List existing and previous land use for a minimum o	f the previous	5 years. Varies	See Attached	d Narrative		
8.	Other Pollutants: Will the stormwater discharge cor	tain pollution	al substances oth	ner than sedim	nent? ☐ Yes ⊠ No		
	If yes, explain and provide any available quantitative						
9.	Will fuels, chemicals, solvents, other hazardous wa activities? Yes ⊠ No ☐ (If yes, a PPC Plan must be main				ring earth disturbance		
10.	Does the project have the potential to discharge to			acui vallee.)			
	Yes ☐ No ☒ (If yes, show how the project will not result in a net change in volume, rate or water quality. See section G below.)						

11.	11. 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 ☒ (If yes, BMPs to avoid or min	imize the potential pollution must be utilized.)			
12.	Has the project site been analyzed to determine pol	tential thermal impacts to surface waters of the Commonwealth?			
	Yes □ No ⊠				
	Have potential thermal impacts to surface wate identified?	er of the Commonwealth from earth disturbance activity been			
	Yes ☐ No ☒ (If yes, BMPs to avoid, minim	ize or mitigated the thermal pollution must be utilized.)			
13.	Have the E&S Plan and PCSM/SR Plan been plann Yes ⊠ No □	ned, designed and implemented to be consistent?			
14	Have existing and/or proposed Riparian Forest Buff	iora hoon identified?			
17.	Yes ⊠ N/A ☐ (If not, they must be shown o				
15	Is a riparian buffer waiver being requested?	and planely			
	Yes □ No ☒				
	If yes, the applicant requesting a waiver must subm	it a written request that demonstrates that reasonable alternatives			
	will meet the requirements of 25 Pa. Code § 102.1 undisturbed to the extent practicable.	4 and to demonstrate that any existing riparian buffer will remain			
16.	16. Have antidegradation implementation requirements for special protection waters been addressed?				
X	Yes 🛛 No 🗌 (If no, antidegradation requirements must be included in the plan.) N/A 🗌				
17.	Has the seasonal high groundwater level been ider than those which will contain top-hole water, fresh w	ntified at all excavation locations for pits and impoundments other vater and uncontaminated drill cuttings?			
		a 20-inch separation between the seasonal high			
		undments containing pollutional substances is required.)			
18.	Receiving Water/Watershed Name	Name of Municipal or Private Separate Storm Sewer Operator			
V	* See Attached Narrative	×			
1	Chapter 93, Designated Use and Existing Use Stream Classification				
	☐ High Quality ☐ Exceptional Value ☐ Other	*			
	☐ Siltation-impaired				
	Secondary Receiving Water				
19.	Is an Expedited Review being requested?	Yes ☐ No ⊠			
	If yes, be advised that the Expedited Review is not available for all projects. Refer to the "Expedited Review Process" Item 8, Page 17 of the ESCGP-2 Instructions to determine if your project is eligible.				
sc=la S		D SEDIMENT CONTROL PLAN BMPS ons on how to complete this section.			
thro con Sec	Erosion and Sediment Control Plan BMPs should be designed to minimize accelerated erosion and sedimentation chrough limiting the extent and duration of earth disturbance, protection of existing drainage and vegetation, limiting soil compaction and controlling the generation of increased runoff. The Department recommends the use of the Erosion and Sediment Control BMP Manual to achieve this goal. The E&S Plan must meet the requirements of Pa. Code § 102.4(b) and submitted with the NOI.				

_		
1.	Ε8	& S Plan
	The	e E & S Plan must satisfy at least one of subparagraph A or B below.
	and Pro	ovide a brief summary of proposed BMPs and their performance to manage E & S for the project. If E & S BMPs of their application do not follow the guidelines referenced in the Pa. Erosion and Sediment Pollution Control ogram Manual, provide documentation to demonstrate performance equivalent to, or better than, the BMPs in the inual.
		A selection of various BMPs have been proposed to minimize accelerated soil erosion and sedimentation due to earth disturbance activities and protect, maintain and restore water quality of surface waters. Each of the proposed measures have been obtained from the DEP Erosion and Sediment Pollution Control Program Manual, dated March 2012 and are acceptable E&S Measures for the state of Pennsylvania.
	A.	E & S plan is designed using BMPs in the Pennsylvania Erosion & Sedimentation Pollution Control Manual (ESPC) (Technical Guidance #3632134-008/March 2012)
	OR	
	B.	☐ E & S plan is designed using an alternative BMP or design standard
")	Dir	parian Buffer Information
len s		Will you be protecting, converting or establishing a riparian buffer or a riparian forest buffer as a part of this project?
		Protect ⊠ Yes ☐ No Convert ⊠ Yes ☐ No Establish ☐ Yes ☒ No
	B.	Will you be protecting, converting or establishing a voluntary riparian forest buffer as part of this project? ☑ Yes ☐ No
	C.	Are you proposing to conduct oil and gas activities for which site reclamation or restoration is required as part of the Chapter 78 permit authorization in a high quality or exceptional value watershed that is currently attaining its designated use and within 150 ft of a perennial or intermittent river, stream or creek or lake, pond or reservoir?
		\square Yes \square No If yes, provide a demonstration that any existing riparian buffer is undisturbed to the extent practicable.
	D.	If the regulations require a riparian buffer or riparian forest buffer and you are not providing one, list the waiver provisions in the Chapter 102 regulations, Section 102.14(d)(2)(i)-(vi), that you are requesting and provide additional documentation to demonstrate reasonable alternatives for compliance with 102.14 requirements and to demonstrate that any existing reparian buffer will remain undisturbed to the extent practicable.
	No	te: If the proposed activity protects, converts or establishes a riparian or riparian forest buffer a Buffer Management Plan is required in the PCSM Plan.

3.	Thermal Impacts Analysis Please explain how thermal impacts associated with this project were avoided, minimized, or mitigated. Construction efforts to minimize thermal impacts associated with stream and wetland riparian areas will consist of the reduction of work areas in the immediate vicinity of the proposed crossings. Tree removal will be minimized to only those necessary for the excavation of the pipeline and installation of temporary access roads for equipment crossings, which would permit the existing canopy to remain intact. Upon completion of the pipeline installation, site restoration measures will be performed, including but not limited to regrading the disturbed area to the original contours, utilization of the existing soil material to re-establish vegetation and utilization of temporary seeding in areas where Erosion and Sedimentation (E&S) are of an emminent concern. Upon establishment of permanent vegetation, final cleanup would be performed for the removal of temporary E&S measures and the site will permit vegetation to regenerate naturally. The only area that will be continuously maintained and kept clear of any over growth will be limited to the immediate area of the gas pipline and potentially the width of permanent easement.					
	SECTION E. SITE RESTORATION (SR) PLAN BMPS See the attached Instructions on how to complete this section.					
	If this section is not applicable to your project, please indicate by checking this box: N/A \Box					
sim aut	earth disturbance projects involving oil and gas activities authorized by Chapter 78 (well pads) or pipelines and other ilar utility infrastructure provide the information outlined below. If your project includes both oil and gas activities norized by Chapter 78 (well pads) or pipelines and other similar utility infrastructure and other activities requiring Post astruction Stormwater Management, provide the information outlined in this Section as well as Section F.					
exte The	Restoration BMPs should be designed to use natural measures to eliminate pollution, infiltrate runoff, not require ensive construction/maintenance activity, promote pollutant reduction, and preserve the integrity of stream channels. Department recommends the use of PA Stormwater BMP manual to achieve this goal. The SR Plan must meet the uirements of Pa Code § 102.8(n) and be submitted with the NOI.					
1.	. Site Restoration Plan Information – The Site Restoration Plan should be designed to maximize volume reduction technologies, eliminate (where possible) or minimize point source discharges to surface waters, preserve the integrity of stream channels, and protect the physical, biological and chemical qualities of the receiving surface water.					
	Design standards applied to develop the Site Restoration Plan. Check those that apply.					
	Act 167 Plan – The attached SR Plan is consistent with an applicable approved Act 167 Plan.					
	Complete the following for all approved Act 167 Stormwater Management Plans. (Use additional sheets if necessary)					
	Act 167 Plan Name Date Adopted Consistency Letter Included Verification Report Included					
	NOTE : A consistency letter is not required if a verification report is provided. Please see NOI Instructions. The Site Restoration Plan must satisfy either sub paragraph A, B, <u>or</u> C below. Check those that apply.					

	A. Act 167 Plan approvals on or after January 2005 - The attached PCSM Plan, in its entirety, is consistent with all requirements pertaining to rate, volume, and water quality from an Act 167 Stormwater Management Plan approved by DEP on or after January 2005. Letter A must be checked if a current, DEP approved Act 167 plan exists.						
	B. The PCSM meets the standard design criteria from the PA Stormwater BMP Manual. For projects involving oil and gas activities authorized by a permit issued under Chapter 78 (well pads) or pipelines and other similar utility infrastructure, post construction stormwater management requirements are met for all areas that are restored to preconstruction conditions or to a condition of meadow in good condition or better.						
	C.		102.8(g)(2). Demonstr	ate/explain in the space	e provided below how t	ned using approaches other than his standard will be either more existing water quality and existing	
2.	Rin	arian	Buffer Information				
	_	Will y				prest buffer as part of this activity?	
	B.	Will y ⊠ Ye	ou be protecting, convertes \textsq No	ting or establishing a volu	ıntary riparian forest buffe	er as part of this activity?	
	C.	perm value	it issued under the auhto	ority of the 2012 Oil and otly attaining its designate	Gas Act and Chapter 78	or restoration is required under a in a high quality or exceptional of a perennial or intermittent river,	
		☐ Ye practi	es 🛛 No If yes, cable.	provide a demonstration	that any existing riparian	buffer is undisturbed to the extent	
	D. If the regulations require a riparian buffer or riparian forest buffer and you are not providing one, list below the waiver provisions in the Chapter 102 regulations, Section 102.14(d)(i)-(vi), that you are requesting and provide additional documentation to demonstrate reasonable alternatives for compliance with 102.14 requirements and to demonstrate that any existing reparian buffer will remain undisturbed to the extent practicable.					t you are requesting and provide with 102.14 requirements and to	
	Note: If the proposed activity protects, converts or establishes a riparian or riparian forest buffer a Buffer Management Plan is required in the PCSM Plan.						
3.					AND MEASUREMENT D	ATA	
	See Attachment D in the Instructions on how to Complete This Section This section does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.						
Wa	ters	hed N	ame:				
			frequency int inches	Pre-construction	Post Construction	Net Change	
Imp	ervi	ous ar	ea (acres)				
	t) v		ormwater runoff (acre- planned stormwater				
	Volume of stormwater runoff (acre- leet) with planned stormwater BMPs						

Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change
1) 2-Year/24-Hour			
2) 10-Year/24-Hour			
3) 50-year/24-Hour			
4) 100-year/24-Hour			

4. SUMMARY DESCRIPTION OF SITE RESTORATION BMPs

In the lists below, check the BMPs identified in the Post Construction Stormwater Management Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the Site Restoration Plan is not listed below, describe it in the space provided after "Other".

		Volume of stormwater	
ВМР	Function(s)	treated	Acres treated
Site Restoration	Infiltration/Recharge Detention/WQ Treatment		
Restore Site to Meadow in Good Condition or Better, or Existing Conditions			<u>44</u>
Bio-infiltration areas	Infiltration/Recharge		
☐ Infiltration Trench			
☐ Infiltration Bed			
☐ Infiltrated Basin			
Natural Area Conservation	Infiltration/Recharge		
Sensitive Area Buffer Zone			<u> </u>
□ Pre-Construction Drainage			44
Pattern Intact			111
Stormwater Retention	Detention/Retention		
☐ Constructed Wetlands			
☐ Wet Ponds			
Retention Basin			
Sediment and Pollutant Removal	Water Quality Treatment		
☐ Vegetated Filter Strips			
☐ Detention Basins			
Access Road Design	Infiltration/Recharge		
☐ Road Crowning			
☐ Ditches			
☐ Turnouts			
☐ Culverts			
Roadside Vegetated Filter			
Strips			

Stormwater Energy Dissipaters	Infiltration/Recharge						
☐ Level Spreaders		<u></u>					
☐ Riprap Aprons							
☐ Upslope Diversions							
5. Off-site Discharge Analysis.							
Does the activity propose any o		-					
If yes, it is the applicant's respo		•	-				
The Applicant must provide a c cause erosion, damage, or a nu	demonstration in both the isance to off-site propertie	E&S and Site Restoration Pla es.	ns that the discharge will not				
Thermal Impact Analysis.Explain how thermal impacts as	sociated with this project	were avoided, minimized, or mi	tigated.				
reduction of work areas in the in those necessary for the excavat crossings, which would permit the restoration measures will be percontours, utilization of the existing where Erosion and Sedimentation final cleanup would be performed regenerate naturally. The only a	Construction efforts to minimize thermal impacts associated with stream and wetland riparian areas will consist of the reduction of work areas in the immediate vicinity of the proposed crossings. Tree removal will be minimized to only those necessary for the excavation of the pipeline and installation of temporary access roads for equipment crossings, which would permit the existing canopy to remain intact. Upon completion of the pipeline installation, site restoration measures will be performed, including but not limited to regrading the disturbed area to the original contours, utilization of the existing soil material to re-establish vegetation and utilization of temporary seeding in areas where Erosion and Sedimentation (E&S) are of an emminent concern. Upon establishment of permanent vegetation, final cleanup would be performed for the removal of temporary E&S measures and the site will permit vegetation to regenerate naturally. The only area that will be continuously maintained and kept clear of any over growth will be limited to the immediate area of the gas pipline and potentially the width of permanent easement.						
SECTION F. POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN BMPS See the attached Instructions on how to complete this section.							
If this section is not ap	If this section is not applicable to your project, please indicate by checking this box: N/A ⊠						
For earth disturbance projects req below. If your project includes both Gas Act and Chapter 78 (well pads Construction Stormwater Management	oil and gas activities aut) or pipelines and other s	horized under a well permit is imilar utility infrastructure and	sued under the 2012 Oil and other activities requiring Post				
Post Construction Stormwater Man infiltrate runoff, not require extension integrity of stream channels. The D If PCSM BMPS and their application documentation to demonstrate performance.	ve construction/maintenal epartment recommends t n do not follow the guideli	nce activity, promote pollutant he use of PA Stormwater BMP nes referenced in the PA Storr	reduction, and preserve the manual to achieve this goal. mwater BMP Manual, provide				

1.	Post Construction Stormwater Management Plan Information – The Post Construction Stormwater Management Plan must meet the requirements in 25 Pa. Code §102.8 and should be designed to maximize volume reduction technologies, eliminate (where possible) or minimize point source discharges to surface waters, preserve the integrity of stream channels, and protect the physical, biological and chemical qualities of the receiving surface water.							
	Design standards applied to develop the Post Construction Stormwater Management Plan. Check those that apply. — Act 167 Plan – The attached PCSM Plan is consistent with an applicable approved Act 167 Plan.							
	Col	mplete	e the following for all appr	oved Act 167 Stormwater	Management i	Plans. (Use addition	al sheets	s if necessary)
Act 167 Plan Name Date Adopted Consistency Letter Included Verification Report Included								
	NO	TE: A	A consistency letter is n	ot required if a verificat	ion report is p	rovided. Please see	NOI Ins	structions.
			SM Plan must satisfy eith I Act 167 Plan exists, lette	ner subparagraph A, B, er A must be checked.	<u>or</u> C below.	Check those that ap	oply. If a	current, DEP
	A. Act 167 Plan approvals on or after January 2005 - The attached PCSM Plan, in its entirety, is consistent with all requirements pertaining to rate, volume, and water quality from an Act 167 Stormwater Management Plan approved by DEP on or after January 2005.							
	B.		The PCSM meets the s [Note: PCSM plans hav provided in these 2 sect	standard design criteria fr we to meet both the volutions].	om 102.8(g)(2) ume and rate r	and (3) the PA Storequirements in the	rmwater regulatio	BMP Manual. ons, which are
	C.		provided in 102.8(g)(2)(standard will be either n	dard – The attached PC- iv) and 102.(g)(3)(iii). Do nore protective than what er quality and existing and	emonstrate/exp t is required in	plain in the space pro 102.8(g)(2) and 102.	ovided b	elow how this
2.	Rip	arian	Buffer Information					
	Α.			ing or establishing a ripar overt Yes No		•	as part c	of this activity?
	R		- -	ivert ☐ Yes ☐ No ing or establishing a volui	Establish 🔲 \		thic ooti	vity?
	ъ,		es 🗌 No	ing of establishing a volul	ntary ripantan ic	nest buller as part of	แม่ง สดแ	vity:
	C. Are you proposing to conduct oil and gas activities for which site reclamation or restoration is is required under a well permit issued under the authority of the 2012 Oil and Gas Act and Chapter 78 and in a high quality or exceptional value watershed that is currently attaining its designated use and within 150 ft of a perennial or intermittent river, stream or creek or lake, pond or reservoir?							
			es 🗌 No If yes, provide icable.	e a demonstration that a	any existing ri	oarian buffer is undi	isturbed	to the extent
	D.	waive addit	er provisions in the Chap ional documentation to de	parian buffer or riparian fo oter 102 regulations, Sect emonstrate reasonable alt reparian buffer will remair	tion 102.14(d)(i ternatives for c)-(vi), that you are ro ompliance with 102.1	equestin 14 requir	g and provide
	Not		he proposed activity prote on is required in the PCSN	ects, converts or establish Il Plan.	es a riparian or	riparian forest buffer	r a Buffe	r Management

3. SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA See Attachment D in the Instructions on how to Complete This Section						
Watershed Name:						
Design storm frequency Rainfall amount inches	Pre-construction	Post Construction	Net Change			
Impervious area (acres)						
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs						
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs						
Stormwater discharge rate for the design frequency storm						
1) 2-Year/24-Hour						
2) 10-Year/24-Hour						
3) 50-year/24-Hour						
4) 100-year/24-Hour						
4. SUMMARY DESCRIPTION OF PO	OST CONSTRUCTION S	TORMWATER BMPs				
In the lists below, check the BMPs function(s) of the BMP listed in the fu functions may be added if applicable BMP type when calculations are requispace provided after "Other".	nctions column (infiltration to that BMP. List the sto	n/recharge; detention/retention; ormwater volume and area of ru	water quality). Additional income water quality). Additional income water wate			
ВМР	Function(s)	Volume of stormwater treated	Acres treated			
Bio-infiltration areas Infiltration Trench Infiltration Bed Infiltrated Basin	Infiltration/Recharge					
Natural Area Conservation Streamside Buffer Zone Wetland Buffer Zone Sensitive Area Buffer Zone Pre-Construction Drainage Pattern Intact	Infiltration/Recharge					
Stormwater Retention Constructed Wetlands	Detention/Retention					
 Wet Ponds Retention Basin						
Sediment and Pollutant Removal	Water Quality Treatment					
☐ Vegetated Filter Strips☐ Compost Filter Sock						

	1	I	
Access Road Design	Infiltration/Recharge		
☐ Road Crowning			
Ditches			*****
☐ Turnouts			***************************************

Culverts			
Roadside Vegetated Filter			
Strips			
Stormwater Energy Dissipaters	Infiltration/Recharge		
Level Spreaders			
1	1		
Riprap Aprons			
Upslope Diversions	[
5. Off-site Discharge Analysis.		·	<u> </u>
	tt		
Does the activity propose any off-si	te discharges to areas othe	er tnan surface waters? 🔲 Y	es 🔲 No
If yes, it is the applicant's responsit	pility to ensure that they have	ve legal authority for any off-sit	e discharge.
			·
The Applicant must provide a der	nonstration in both the E	&S and PCSM Plans that the	discharge will not cause
erosion, damage, or nuisance to of	r-site properties.		
6. Thermal Impact Analysis.			
Explain how thermal impacts assoc	iated with this project were	avoided minimized or mitigat	ed
	aced with the project were	avoidod, mmmmzod, or maigae	ou.
			ļ
	THE RESERVE OF THE PERSON OF T		
7. Critical PCSM Plan stages.			
Identify and list critical stages of im	plementation of the PCSM	Plan for which a licensed prof	essional or designee shall
be present on site.	-	•	9
-			

SECTION G. ANTIDEGRADATION ANALYSIS

This section must be completed where earth disturbance activities will be conducted in special protection or siltation-impaired watersheds.

Part 1 NONDISCHARGE ALTERNATIVES EVALUATION

The applicant must consider and describe any and all nondischarge alternatives for the entire project area which are environmentally sound and will:

- Minimize accelerated erosion and sedimentation during the earth disturbance activity
- Achieve no net change from pre-development to post-development volume, rate and concentration of pollutants in water quality

E & S Plan	Official Use Only	PCSM/Site Restoration Plan	Official Use Only
Check off the environmentally sound nondischarge Best Management Practices (BMPs) listed below to be used prior to, during, and after earth disturbance activities that have been incorporated into your E & S Plan based on your site analysis. For non-discharge BMPs not checked, provide an explanation of why they were not utilized. Also for BMPs checked, provide an explanation of why they were utilized. (Provide your analysis and attach additional sheets if necessary)		Check off the environmentally sound nondischarge Best Management Practices (BMPs) listed below to be used after construction that have been incorporated into your PCSM/SR Plan based on your site analysis. For non-discharge BMPs not checked, provide an explanation of why they were not utilized. Also for BMPs checked, provide an explanation of why they were utilized. (Provide your analysis and attach additional sheets if necessary)	
Nondischarge BMPs Alternative Siting Alternative location Alternative configuration Alternative location of discharge Limited Disturbed Area Limiting Extent & Duration of Disturbance (Phasing, Sequencing) Riparian Buffers (150 ft. min.) Riparian Forest Buffer (150 ft. min.) Other		Nondischarge BMPs Alternative Siting Alternative location Alternative configuration Alternative location of discharge Low Impact Development (LID / BSD) Riparian Buffers (150 ft. min.) Riparian Forest Buffer (150 ft. min.) Infiltration Water Reuse Other	
Will the non-discharge alternative BMPs elin construction? ☐ Yes ☐ No	minate the r	et change in rate, volume and quality during	g and after
If yes, antidegradation analysis is complete. If no, proceed to Part 2.			

Sediment basin water for dust control

Sediment basin water for irrigation

Other____

PART 2 ANTIDEGRADATION BEST AVAILABLE COMBINATION OF TECHNOLOGIES (ABACT) If the net change in stormwater discharge from or after construction is not fully managed by nondischarge BMPs, the applicant must utilize ABACT BMPs to manage the difference. The Applicant must specify whether the discharge will occur during construction, post-construction or both, and identify the technologies that will be used to ensure that the discharge will be a non-degrading discharge. ABACT BMPs include but are not limited to: Official Official E & S Plan Use PCSM/Site Restoration Plan Use Only Only ☐ Treatment BMPs: Treatment BMPs: Sediment basin with skimmer Infiltration Practices Sediment basin ratio of 4:1 or greater Wet ponds (flow length to basin width) Created wetland treatment systems Sediment basin with 4-7 day detention Vegetated swales Flocculants Manufactured devices Compost Filter Socks Bio-retention/infiltration Compost Filter Sock Sediment Basin Green Roofs RCE w/ Wash Rack Land disposal: Land disposal: Vegetated filters Vegetated filters Riparian Buffers <150ft. Riparian buffers <150ft. Riparian Forest Buffer <150ft. Riparian Forest Buffer <150ft. Disconnection of roof drainage Immediate stabilization Bio-retention/bio-infiltration Pollution prevention: Pollution prevention: PPC Plans Street sweeping Street sweeping Nutrient, pesticide, herbicide or other Channels, collectors and diversions chemical application plan lined with permanent vegetation, rock, alternatives geotextile or other non-erosive PPC Plans materials Non-structural Practices ☐ Stormwater reuse technologies: Restoration BMPs

Stormwater reuse technologies:

Underground storage Spray/Drip Irrigation

Other_

Divert rainwater into impoundment

SECTION H. COMPLIANCE REVIEW
Is the applicant in violation of any existing permit, regulation, order, or schedule of compliance issued by the Department within the last 5 years?
☐ Yes ⊠ No
If yes, provide the permit number or facility name, a brief description of the violation, the compliance schedule (including dates and steps to achieve compliance) and the current compliance status. (Attach additional information on a separate sheets, when necessary)

SECTION I. CERTIFIC	ATION BY PERSON PRE	PARING APPLICATION
PCSM/Site Restoration Plans are true and corre	ect, represent actual field c s rules and regulations. I	ef, that the Erosion and Sediment Control and onditions, and are in accordance with the 25 Pa. am aware that there are significant penalties for ent.
Print Name Phillip L. Tolliver, P.E.	Signature Signature	NONPMOTESTOTAL Seal
Company Morris & Ritchie Associates, Inc.		RECUSTORED TO
Address 18 Boulden Circle, Suite 36, New Cast	e, DE 19720	PROFESSIONAL
Phone (302) 326 - 2200		A THE TOLLINER 3
Most Recent DEP Training Attended	Location	Date FNGINEED
e-Mail Address ptolliver@mragta.com		PE-050533-E
EXPEDITED REVIEW PROCESS		SYLVEIN
In addition to the certification required above a and PCSM/Site Restoration Plans developed geologist. The plans shall contain the following	and sealed by a licensed	ited permit review process must attach an E&S professional engineer, surveyor or professional
true and correct, represent actual field condition	is and are in accordance w vare that there are signific	hat the E & S Control and SR/PCSM BMPs are with the 25 Pa. Code Chapters 78 and 102 of the cant penalties for submitting false information,
SECTION	N J. APPLICANT CERTIF	ICATION
my direction or supervision in accordance with a evaluated the information submitted. Based of persons directly responsible for gathering the inbelief, true, accurate, and complete. The resparticipate in the permit, and that the applicant a	a system designed to assur on my inquiry of the person aformation, the information sponsible official's signatu agrees to abide by the term	d all attachments were prepared by me or under that qualified personnel properly gathered and or persons who manage the system, or those submitted is, to the best of my knowledge and re also verifies that the activity is eligible to as and conditions of the permit. I am aware that g the possibility of fine and imprisonment for
Richard Welsh		Charlie Barnett, Associate
Print Name and Title of Applicant	Print N	ame and Title of Co-Applicant (if applicable)
Jack Wills		
Signature of Applicant		Signature of Co-Applicant
JUNE 11, 2015		JUNE 16, 2015
Date Application Signed		Date Application Signed
Notarization Sworn to and subscribed to before me this	Commo	nwealth of Pennsylvania
11th day of June 20 15	County	- 22
Michell Pupi Africa Notary Public		nmission expires
AFFIX SEAL		
MICHELE PIPER-AFRIYIE NOTARY PUBLIC STATE OF DELAWARE MY COMMISSION EXPIRES ON March 14, 2018		

Contact's Last Name	First Name	МІ	Phone	(302) 326-2200
Barnett	Charlie		FAX	(302) 326-2399
Mailing Address	City	City		ZIP + 4
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