

# If Interim report, Subject to Change as Additional Information Becomes Available If Interim Report, this Report is cumulative, containing information from previous reports in addition to new information and may change SPLP PENNSYLVANIA PIPELINE PROJECT

HORIZONTAL DIRECTIONAL DRILLING – INADVERTENT RETURN REPORT FORM

INTERIM REPORT	IF INTERIM, SEE NOTE ABOVE.		Interim Report 37: On 8/10/2020 at approximately 1530 hours, drilling fluid emerged within wetland WL-H17, and entered streams S-H11 and S-H10. The drilling fluid continued to f. Jown S-H10 and entered pond H3 (Marsh Creck Reservoir). The drill was in the ream phase at the time of release, with a volume of 7,712 gallons of drilling fluid released (The initial notification of the inadvertent return was estimated to be 1,000 gallons. This estimate was provided by the onsite PG and was based on the surface dimensions of the emergence, approximately 10° x 20° and several inches deep. The number was revised after discussion with the driller and collection of survey data.). Drilling was immediately stopped upon discover of the IR. Two turbidity curtains were installed at the confluence of S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir). The sand bag and silt fence dams were constructed within S-H10 (UNT to Marsh Creek). Or a part of the drilling fluid and transport in to onsite storage tanks. Stream water was pumped and used to spray remaining bentonite pockets within stream S-H10 (UNT to Marsh Creek). On 8/11/2020, a subsidence feature was discovered at the location of the inadvertent return, within wet WL-H17. On 8/12/2020 the subsidence was filled with approximately 26 cubic yards of flowable fill. As of 8/17/2020, one containment dam remains within S-H10, the containment structure remains in place at the initial IR location, and two turbidity curtains remain at the confluence of stream S-H10 and pond H3. Drilling fluid has been recovered from WL-H17, H11 and S-H10. Additional survey is in progress to implement a recovery plan for drilling fluid within pond H3. Drilling fluid has been recovered from WL-H17, H11 and S-H10. At 12/19/20 two earth features were discovered near the HDD S3-0290 staging area and the confluence of stream S-H10 and pond H3. Drilling fluid has been recovered from WL-H17, S-H11, at 110. On 12/19/20 two earth features were discovered near the HDD S3-0290 staging area and the re						ons of drilling fluid released (The initial face dimensions of the emergence, ing was immediately stopped upon discovery sand bag and silt fence dams were as IR release point working their way towards as. Stream water was pumped and used to ation of the inadvertent return, within wetland remains within S-H10, the containment fluid has been recovered from WL-H17, S-of 8/31/2020, the containment structure been recovered from WL-H17, S-H11, and S-of flowable fill within the earth features. eted at this site. These features, along with 12/28/2020, during geophysical survey, five, 4825+70. The five features are within the the five features was conducted with no tabilized with erosion control blanket. An stabilized with erosion control blanket. The environmental surveys and assessments are	
REPORT DATE:	Current as of 4/27/202	21		HDD A	LIGNMENT #	PA-CH-100.0000-RD				
PROJECT SITE:	PPP 6 - S3-0290 - Mi	lford Rd./Little Conestog	ga Rd	HDD	COMPANY:	Michels Directional Crossing				
DATE .	AND TIME WHEN	IR WAS INITIALLY I	DISCOVERED	]	DATE:	8/10/2020	<b>TIME:</b> 1530			
LOCATION: STREET	427-423 Green Valley	y Rd, Downingtown, PA	19335	MUN	CIPALITY:	Upper Uwchlan		COUNTY:	Chester	
LATITUDE:	40.0794	LONGITUDE:	-75.7104	FROM	I STATION:	14824+00	r	TO STATION	14824+00	
STREAM NAME:	S-H10 (UNT to Mars	h Creek), S-H11 (UNT t	to Marsh Creek)	POND /	LAKE NAME:	Pond H3 (Marsh Creek Reservo	oir) WE	TLAND NAME:	WL-H17 (PEM, PFO)	
CORPS PERMIT	DEP PERMIT Nos. (102 AND 105)  E&S Permit # ESG0100015001, Water Obstruction Permit E15-862									
NO.	`	·	Interim 27 0/2021							
IR TRACKING ID:  IS AUGUST 8, 2017	rrro_ra-CH-0100.0	0000-RD_MilfordRd_IR	mæm_5/_042821							
ORDER APPLICABLE?	YES	LISTED IN WHICH EXHIBIT?	3	DESCRIPT	ION IN EXHIBI	T HDDs for Reevaluation				
ATTEICABLE.										
			COME	PLETE THE F	OLLOWING QU	JESTIONS IF APPLICABLE:				
1. IS THE IR ON-GO of all IRs.	1. IS THE IR ON-GOING? Provide dates, times, and duration of all IRs.				On 8/10/20 at approximately 1530 hours, approximately 7,712 gallons of drilling fluid emerged within WL-H17, and entered streams S-H1 and S-H10. The drilling fluid continued to flow down S-H10 and entered pond H3 (Marsh Creek Reservoir). The IR ceased emerging after drilling was stopped.					
2. HAS THE IR CEASED? Provide date and time for each IR.			YES		On 8/10/20 at approximately 1530 hours, approximately 7,712 gallons of drilling fluid emerged within WL-H17, and entered streams S-H11 and S-H10. The drilling fluid continued to flow down S-H10 and entered pond H3 (Marsh Creek Reservoir). The IR ceased emerging after drilling was stopped.					
3. WHEN WAS DRI time for each IR.	3. WHEN WAS DRILLING STOPPED? Provide date and  Drilling was immediately stopped on 8/10/2020 at approximately 1530 hours									
4. VOLUME OF IR	(CURRENT ESTIM	ATE)?	Approximately 7,712 gallons							
4A. DOES THIS VOLUME RELEASE REPRESENT A TOTAL VOLUME RELEASED SINCE THE RELEASE BEGAN?			YES	NOTE:	Approximately 7,712 gallons of drilling fluid emerged on 8/10/2020.					
5. HAS THIS VOLUME CHANGED SINCE THE LAST REPORT? IF SO, HOW?			NO	NOTE:						
6. WHAT IS THE D and times.	6. WHAT IS THE DURATION OF EACH IR? Provide dates and times.  The IR ceased emerging on 8/10/2020 at 1530 hours after the IR was discovered and drilling was stopped.									
	Two turbidity curtains were installed at the confluence of S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir). Ten sand bag and silt fence dams were constructed within H10 (UNT to Marsh Creek). Crew members began clean up and recovery of the drilling fluid starting at the location of the IR release point working their way towards pond H3 (Marsh Creek Reservoir). Creek Reservoir). Creek Reservoir). Creek Reservoir). Crew members used pumps and hand tools to recover the drilling fluid and transport it to onsite storage tanks. Stream water was pumped and used to spray remaining bentonite pockets within stream S-H10 (UNT to Marsh Creek).							orking their way towards pond H3 (Marsh		
8. WHAT REVISION IMPLEMENTED PRILLING? Providen	RIOR TO EACH RE									
8a. What was the tec	chnical basis for resu	ming drilling?								
9. WAS THE DRILLING RESUMED? Provide dates, times, and duration for each IR.			NO	NOTE:						
9A. IF SO, HAS ANOTHER IR OCCURRED? If YES, provide dates and times for each IR.			NO	NOTE:						
10. HAS IR BEEN CONTAINED? If YES, Provide dates, times, and measures for each IR.			YES		Two turbidity curtains were installed at the confluence of S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir). Ten s and silt fence dams were constructed within S-H10 (UNT to Marsh Creek) on 8/10/2020.					
11. HAS A FISH KILL OCCURRED? If YES, Provide dates, times, and measures for each IR.			NO	NOTE:						
12. ARE FISH AND OR OTHER AQUATIC LIFE IN DISTRESS?			NO	NOTE:						
13. AS OF THE DATE OF THIS REPORT, DOES DRILLING FLUID REMAIN IN THE WETLAND OR WATERCOURSE?			YES	NOTE:	Drilling fluid remains in pond H3 (Marsh Creek Reservoir)					
14. IS THERE NOTICEABLE HIGH LEVELS OF TURBIDITY IN THE WATERCOURSE? If YES, Provide dates, times, and duration for each IR.			YES	NOTE:	Drilling fluid rem	ains in pond H3 (Marsh Creek Reser	rvoir)			

15. HAS FLUID LOSS OCCURRED? (IF KNOWN) If YES, Provide dates, times, and duration for each loss of fluid.	YES	NOTE:	E: 500 gallon loss on 3/3/2020.				
16. CORRECTIVE MEASURES IMPLEMENTED NOT PREVIOUSLY LISTED ABOVE? Provide dates and times for each IR.							
·	Drilling fluid emerged within 8/10/20.	wetland WL-H	17, and entered streams S-H11 and S-H10. The drilling fluid continued to flow down S-H10 and entered pond H3 (Marsh Creek Reservoir) on				

	LIST AN	NY NOTIFICATIONS OF INCIDENT MAI	DE TO WATER INTAKES,	WATER WE	LL OWNERS AND	LANDOWNER	S, INCLUDIN	G DATE AND	TIME WHEN EACH NO	OTIFICATION OCCURRED:	
	NAME:	2 Private Well Owners	DATE:	8/11/2020	TIME:		PUBLIC OR PRIVATE:	Private	NOTE:	Letters sent.	
NAME: 1 Public Water Supply		DATE:	8/10/2020	TIME:	1625	PUBLIC OR PRIVATE:	Public	NOTE:	Informed of release on 8/10, letter sent on 8/11.		
	NAME:		DATE:		TIME:		PUBLIC OR PRIVATE:		NOTE:		
	NAME:		DATE:		TIME:		PUBLIC OR PRIVATE:		NOTE:		
	NAME:		DATE:		TIME:		PUBLIC OR PRIVATE:		NOTE:		
NAME:		DATE:	TIME:			PUBLIC OR PRIVATE:		NOTE:			
NAME:		DATE:		TIME:		PUBLIC OR PRIVATE:		NOTE:			
		NAN	ME OF ALL PERSON(S) PR	OVIDING IN	FORMATION FOI	R THIS REPOR		ACT INFORM	IATION		
	NAME:	Josh Prosceno	PHONE:	570-336-9606		EMAIL:	josh.prosceno@	@tetratech.com	TITLE:	LEI	
	NAME:	Chris Cable	PHONE:	518-533-9847		EMAIL:	chris.cable@te	etratech.com	TITLE:	Environmental Inspection Manager	
	NAME:		PHONE:			EMAIL:	TITLE:		TITLE:		
	NAME:		PHONE:			EMAIL:			TITLE:		
	NAME:		PHONE:			EMAIL:	TITLE:				
				I	MPACTED RESOU	TRCE(S)					
	RESOURCE:	RESOURCE: WETLAND WL-H17		PEM/PFO		ELIMINATE O			Sandbag and silt fence con Drilling fluid recovered us	tainment constructed at release point. ing hand tools and pumps.	
	RESOURCE:	RESOURCE: STREAM S-H10		DRAINS TO HQ-TSF		ELIMINATE O			Sandbag and silt fence con Drilling fluid recovered us	tainments constructed within stream. ing hand tools and pumps.	
	RESOURCE:	STREAM S-H11	WETLAND TYPE: SURFACE WATER CLASSIFICATION OR	DRAIN	S TO HQ-TSF	ELIMINATE OR MITIGATE THE D <sub>1</sub>		Sandbag and silt fence con Drilling fluid recovered us:	tainments constructed within stream. ing hand tools and pumps.		
	RESOURCE:	POND H3	WETLAND TYPE: SURFACE WATER CLASSIFICATION OR WETLAND TYPE:	I I	HQ-TSF	IMPACTS? WHAT STEPS I ELIMINATE O IMPACTS?			Two turbidity curtains wer pond H3.	re installed at the confluence of S-H10 and	
	RESOURCE:		WETLAND TYPE: SURFACE WATER CLASSIFICATION OR WETLAND TYPE:			WHAT STEPS HAVE BEEN TAKEN TO ELIMINATE OR MITIGATE THE IMPACTS?					
	RESOURCE:		SURFACE WATER CLASSIFICATION OR WETLAND TYPE:			WHAT STEPS I ELIMINATE O	WHAT STEPS HAVE BEEN TAKEN TO ELIMINATE OR MITIGATE THE IMPACTS?				
	RESOURCE:		SURFACE WATER CLASSIFICATION OR WETLAND TYPE:			WHAT STEPS	IAT STEPS HAVE BEEN TAKEN TO IMINATE OR MITIGATE THE				
			WEILAND IIIE.	RMATION	<b>1ATION</b>						
		SUMED DOES IT INVOLVE A CHANGE IENT, DEPTH OR ALIGNMENT?	NO	NOTE:							
	PUBLIC OR PRIVA	ATE WATER SUPPLY - PROXIMITY TO STREAM WATER INTAKES?		NOTE:							
		5	YES	NOTE:							
LIST AND DESCRIBE MATERIAL(S) RELEASED:			A mixture of bentonite clay ar	nd water with n	ative cuttings						
		IATED QUANTITY OF THE RELEASE CE THE LAST REPORT? IF SO, HOW?	VES NOTE: Approximately / /1/ gallons of drilling fluid emerged on X/10/20/0								
	ESTIMATEI	D AERIAL EXTENT OF RELEASE	8/10/2020 - 25'x25' at initial I	R release locat	tion						
	•	AR FEET/MILES) OF DOWNSTREAM GE OF RELEASE, IF ANY	IR traveled approximately 1,800 feet downstream from S-H10 (UNT to Marsh Creek) into pond H3 (Marsh Creek Reservoir). Extent into pond H3 (Marsh Creek Reservoir) unknown.								
	DESCR	RIBE ROOT CAUSE(S) OF IR									
		NTS: NOTE ANY MATERIAL CHANGE RMATION FROM PRIOR REPORTS)									
HAVE THE IMPACTS FROM THE IR BEEN REMEDIATED? Please provide date of remediation.  8/10/2020 - Sandbag and silt fence containment set up at IR location. Ten sandbag and silt fence containments constructed within stream S-H10. Two turbidity curtains installed at the confluence of S-H10 and pond H3. Drilling fluid recovered using hand tools and pumps. As of 4/28/2021, drilling fluid remains in pond H3.								0. Two turbidity curtains installed at the			
	PRINTED NAME, TITLE AND SIGNATURE OF PERSON(s) COMPLETING THIS REPORT										
	NAME:	Chris Cable TITLE:	Environmental Inspection Man	nager	SIGNATURE:	Christophe	ref Cable	DATE:	4/28/2021		
					PADEP USE ON		0				
	AUTHORIZATIO	N FROM PADEP OR CCD TO RESUME		NIOTT							
HDD REQUIRED?				NOTE:							
	PI	ERMIT AMENDMENT?		NOTE:							
PADEP / CCD REVIEWER NAME:					DATE:						



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IV. PHOTO DOCUMENTATION





View of drilling fluid within WL-H17 at location of IR release point.

View of drilling fluid flowing downstream within stream S-H10 (UNT to Marsh Creek).

8/10/2020

Notes:





Notes:

View of drilling fluid within stream S-H10 (UNT to Marsh Creek).

8/10/2020

8/10/2020

View of drilling fluid entering pond H3 (Marsh Creek Reservoir).

8/10/2020

Notes:





Notes:

View of contractor crew members installing two turbidity curtains at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir).

View of IR release location within WL-H17.

8/17/2020

Notes:

Notes:





Notes:

View of sandbag containment within S-H10 (UNT to Marsh Creek).

8/17/2020

View of stream S-H10 (UNT to Marsh Creek) following cleanup.

8/17/2020



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View of stream S-H10 (UNT to Marsh Creek) following cleanup.

View of stream S-H10 (UNT to Marsh Creek) following cleanup.

8/17/2020

Notes:

8/17/2020



Notes:

View of turbidity curtain at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir).

View of pond H3 (Marsh Creek Reservoir).

8/17/2020

Notes:



View of IR release location within WL-H17.

8/17/2020

Notes:

8/22/2020

8/24/2020

View of turbidity curtain at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir).

8/22/2020

Notes:





Notes:

View of pond H3 (Marsh Creek Reservoir).

View of stream S-H10 (UNT to Marsh Creek)

8/24/2020



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View of IR release location and containment within WL-H17.

View of stream S-H10 (UNT to Marsh Creek)

8/31/2020

Notes:

8/28/2020



Notes:

View of stream S-H10 (UNT to Marsh Creek)

Notes:

View of pond H3 (Marsh Creek Reservoir).

8/31/2020

Notes:

9/5/2020





Notes:

View of IR release location and containment within WL-H17.

View of stream S-H10 (UNT to Marsh Creek)

9/4/2020





Notes:

View of turbidity curtain at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek

Reservoir). 9/14/2020

View of stream S-H10 (UNT to Marsh Creek)

9/14/2020



# SPLP PENNSYLVANIA PIPELINE PROJECT HORIZONTAL DIRECTIONAL DRILLING – INADVERTENT RETURN REPORT FORM





View of IR release location and containment within WL-H17.

View of stream S-H10 (UNT to Marsh Creek)

Notes:

Notes:

Notes:

9/21/2020

9/21/2020





View of IR release location and containment within WL-H17.

View of turbidity curtain at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir).

9/28/2020





View of IR release location and containment within WL-H17.

View of IR release location and containment within WL-H17.

10/5/2020





Notes:

View of turbidity curtain at the confluence of stream S-H10 (UNT to Marsh Creek) and pond H3 (Marsh Creek Reservoir).

View of IR release location and containment within WL-H17. 10/26/2020

10/19/2020



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View of IR release location and containment within WL-H17.

11/9/2020

Notes:

View of IR release location and containment within WL-H17.

11/2/2020



Notes: View of IR release location and containment within WL-H17. Notes: View of IR release location and containment within WL-H17.

11/16/2020

Notes:

12/1/2020

12/15/2020

11/23/2020

Notes:





View of IR release location and containment within WL-H17.

View of IR release location and containment within WL-H17.

12/8/2020





Notes: View of IR release location and containment within WL-H17.

View of earth feature one filled with 13 cubic yards of flowable fill.

12/19/2020



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View of earth feature two filled with 28 cubic yards of flowable fill.

12/21/2020

Notes:

View of IR release location and containment within WL-H17.

12/19/2020





Notes:

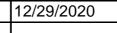
View of contractor crew members installing erosion control blanket to stabilize earth feature locations.

Notes:

View of IR release location and containment within WL-H17.

12/28/2020

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Notes:

View of IR release location and containment within WL-H17.

Notes:

View of IR release location and containment within WL-H17.

1/5/2021 1/12/2021





Notes:

View of IR release location and containment within WL-H17.

1/19/2021

Notes:

View of IR release location and containment within WL-H17.

1/26/2021



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Notes:

View of IR release location and containment within WL-H17.

2/8/2021





Notes: View of IR release location and containment within WL-H17.

View of IR release location and containment within WL-H17.

Notes:

View of IR release location and containment within WL-H17.

2/23/2021 2/16/2021





View of IR release location and containment within WL-H17.

Notes:

3/16/2021

View of IR release location and containment within WL-H17.

3/9/2021





Notes: View of IR release location and containment within WL-H17. Notes:

View of IR release location and containment within WL-H17.

3/23/2021



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Notes:

View of IR release location and containment within WL-H17.

View of IR release location and containment within WL-H17.

4/6/2021 3/30/2021





Notes: Notes: View of IR release location and containment within WL-H17. View of IR release location and containment within WL-H17.

4/13/2021 4/20/2021

Insert Photo Here

Notes:

View of IR release location and containment within WL-H17.

4/27/2021

PRINTED NAME, TITLE AND SIGNATURE OF PERSON(s) COMPLETING THIS REPORT

Environmental Inspection Chris Cable 4/28/2021 NAME: TITLE: SIGNATURE: DATE: Manager

