



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread E	A/E	124300134	Spread	H-600 Pipeline Spread E
Contractor	Price Gregory	Report #	79		
Environmental Auditor	Allyson Kincaid			Date/Time	10/2/2023 10:19 AM
Wetland ID	W-H33	Crossing Start Date	10/2/2023	Crossing Completion Date	10/19/2023
Milepost	131.49	Pre-Con Assessment Date	10/2/2023	Post-Con Assessment Date	10/19/2023
Station	6942+67	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.059
State	WV				
County	Nicholas				

Resource Post-Crossing Conditions

1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	Yes
2	Was the existing vegetation removed prior to initiating land disturbance within the resource?	Yes
3	Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils?	Yes
4	Was excess material not needed for backfill removed and disposed of in an upland area?	Yes
5	Was the top 12-inches of backfill made with clean native wetland topsoil?	Yes
6	Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed?	Yes
7	Was wetland topsoil replaced and temporarily seeded?	Yes
8	Was permanent seed applied to unsaturated wetlands?	Yes
9	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area?	Yes
10	Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area?	Yes
11	Was the pre-construction survey data utilized during restoration in attempt to maintain the original surface hydrology, and were contours re-established to pre-construction conditions to maintain overland flow patterns?	Yes
12	Have civil surveys been scheduled to verify as-built conditions meet pre-construction conditions in accordance with the project Mitigation Framework and federal/state permit requirements?	Yes
13	Was the time of disturbance minimized by conducting resource work continuously to completion?	Yes
14	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?	Yes
15	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30) in PFO classified wetlands?	N/A
16	Did any unauthorized discharges to unpermitted resources occur during the crossing? If so, explain the corrective actions implemented in the Comments section and include additional photos.	No

Biological Conditions

		Pre-Con		Post-Con
17	Wetland Saturation: Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No)	Yes		Yes
18	Resource Alterations: Are the wetland soil conditions visibly disturbed? Examples: Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc. Rating: 1-Negligible (undisturbed/natural resource), 2-Minor (20-40% of resource disturbed by alterations), 3-Moderate (40-80% of resource disturbed), 4-Poor (>80% of resource disturbed)	1		3
19	Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con)Are areas properly seeded and stabilized after restoration? (Post-Con) Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetative coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetative coverage, etc.)	2		4

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Additional Notes

Day 1 (10-2-2023)
 Arrived on-site 1000. Conducted pre crossing assessments for S-H71 and W-H33. S-H71 substrate consists of sand and silt with some large pieces of cobble. Silt sand dominant. W-H33 is located on both side of S-H71, the wetland area on the RDB had surface water present but had rocky refuse when drying to dig the 12" soil pit, soil pit was dug on the wetland area on the LDB. Soil water saturated towards the bottom of the pit, no recharge in soil pit. Soils were a sandy loam consistency. Pre crossing assessments completed 1050.

Topsoils removed and segregated in an upland area for both resources. Dams put in place in S-H71 for pumping around system to maintain flow in the stream outside LOD. water running clear in this system once stabilized.

Day 2 (10-3-2023)
 Drilling occurring in and around resource in preparation for blasting for the next two days. Geo-tarp was placed on US edge of TMB to prevent any blowback from enter DS area of stream.

Day 3 (10-4-2023)
 Placing dynamite into drilled holes. Blasting occurred.

Day 4
 Placing dynamite on S slope out of resource area. Blasting occurred. Preparation for trenching the following day.
 Done drilling 1155. Placing mats for blast.
 1415 how efforts pump around system for SH71 being replaced due to a hole from rocks.

Day 5
 Trenching and hammering in resource area. Mats utilized to prevent compaction.

Day 6
 Trenching outside of resource area.

Day 7
 Welding

Day 8
 Blasting and coating, building trench breakers, X-ray welding on going away side.

Day 9
 Welding, padding dirt added into trench, X-ray.

Day 10
 Welding


Day 11
 Welding, reinforcing upstream dam in S-H71

Day 12
 Building trench breakers within 25' of resource area, X-ray occurring on going away slope.

10/17
 Rebuilding collapsed trench breaker, trench filling, stream contouring began. Stream and wetland scheduled for tomorrow.

10/18
 Stream contouring and stream substrate replaced. Dams and pump removed. Stream flowing. Dams were removed and flow restored before seeding and ECD's installed because no footprints could be in area (this is according to EI Carl). Wetland contouring and topsoil replaced. Jute placed in wetland resource area. Curlex used on going away slope to wetland boundary. Curlex used on coming in side to wetland boundary.

In accordance with the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework, this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

Name	Signature	Company	Date
Allyson Kincaid		POTESTA	10/19/2023

Required Photos					
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GPS Location	See Photo	GPS Location	See Photo
Description	View of permitted resource impact area during pre-construction assessment.	Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.
			
GPS Location	See Photo	GPS Location	See Photo
Description	View of permitted resource impact area during post-construction assessment. RDB	Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.
			
GPS Location	See Photo	GPS Location	See Photo
Description	Photo 1: Surface water present in wetland.	Description	Photo 2: Removal of wetland topsoil.

Optional Photos		
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 <p style="font-size: small; margin-top: 5px;"> Date & Time: Tue, Oct 3, 2023 at 10:47 EDT Position: 1038124334, -080735583 (-12.6ft) Altitude: 2393ft (Error) Datum: WGS-84 Azimuth/Bearing: 227° S67W 4391mils True (+12.1) Elevation Angle: -07.8 Horizon Angle: +02.8 Zoom: 1.0x S-H33 topsoil containment Mountain Valley Pipeline </p>	 <p style="font-size: small; margin-top: 5px;"> Date & Time: Tue, Oct 3, 2023 at 11:30 EDT Position: 1038124660, -080735619 (-12.4ft) Altitude: 2341ft (Error) Datum: WGS-84 Azimuth/Bearing: 022° N22E 0691mils True (+13.2) Elevation Angle: -23.4 Horizon Angle: +01.8 Zoom: 1.0x W-22 2in RDB drilling Mountain Valley Pipeline </p>
GPS Location See Photo	GPS Location See Photo
Description Photo 3: Topsoil segregated in upland area.	Description Photo 4: Drilling within wetland resource area.
 <p style="font-size: small; margin-top: 5px;"> Date & Time: Tue, Oct 3, 2023 at 10:47 EDT Position: 1038124334, -080735583 (-12.6ft) Altitude: 2393ft (Error) Datum: WGS-84 Azimuth/Bearing: 227° S47W 4071mils True (+12.7) Elevation Angle: -04.6 Horizon Angle: +00.6 Zoom: 1.0x S-H71/W-H33 cleanup ECDs /Trench Mountain Valley Pipeline </p>	 <p style="font-size: small; margin-top: 5px;"> Date & Time: Mon, Oct 2, 2023 at 05:09 EDT Position: 1038124660, -080735619 (-12.4ft) Altitude: 2374ft (Error) Datum: WGS-84 Azimuth/Bearing: 217° S37W 3858mils True (+13.2) Elevation Angle: +00.7 Horizon Angle: +00.6 Zoom: 1.0x S-H71/W-H33 pipe being brought down slope away from resource area Mountain Valley Pipeline </p>
GPS Location See Photo	GPS Location See Photo
Description Photo 5: Trench through resource area.	Description Photo 6: Bring pipe to resource area. Padding in place.
 <p style="font-size: small; margin-top: 5px;"> Date & Time: Tue, Oct 3, 2023 at 12:41 EDT Position: 1038124404, -080735636 (-12.6ft) Altitude: 2387ft (Error) Datum: WGS-84 Azimuth/Bearing: 88° N88E 1529mils True (+13.1) Elevation Angle: +01.4 Horizon Angle: +01.4 Zoom: 1.0x S-H71/W-H33 trench breaker coming in Mountain Valley Pipeline </p>	 <p style="font-size: small; margin-top: 5px;"> Date & Time: Tue, Oct 3, 2023 at 11:09 EDT Position: 1038124404, -080735636 (-12.6ft) Altitude: 2387ft (Error) Datum: WGS-84 Azimuth/Bearing: 88° N88E 1529mils True (+13.1) Elevation Angle: +02.7 Horizon Angle: +01.4 Zoom: 1.0x Trench filling upslope continuing Mountain Valley Pipeline S-H71/W-H33 </p>
GPS Location See Photo	GPS Location See Photo
Description Photo 7: Placement of first trench breaker.	Description Photo 8: Filling of trench in resource area.