



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread C	AFE	124300131	Spread	H-600 Pipeline Spread C
Contractor	Precision	Report #	155		
Environmental Auditor	Jeffrey Arbogast			Date/Time	12/14/2023 10:51 AM
Wetland ID	W-B31	Crossing Start Date	12/14/2023	Crossing Completion Date	12/16/2023
Milepost	97.82	Pre-Con Assessment Date	12/14/2023	Post-Con Assessment Date	12/16/2023
Station	5164+82	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.0515
State	WV				
County	Webster				

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?	N/A
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?	See Below
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)	No		No
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		4
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.)	1		4

AFE 124300131	Date/Time 12/14/2023 10:51 AM	Report # 155
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Additional Notes

The alignment sheets indicate that the mainline crosses wetland W-B31 from station number 5164+82 to 5165+06.

Expanded notes for question 10: Survey verified that the bentonite trench breakers were installed at 8' from coming in side (CIS) and 9' from going away side (GAS) of the wetland at station numbers 5164+74 and 5165+15, respectively.

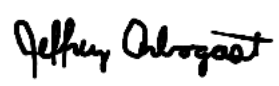
Conditions 18 and 19 were given a rating of 4 due to the lack of vegetation in the disturbed permitted impact area following completion of the crossing and restoration efforts. Wetland W-B31 topsoil was properly stabilized and seeded with the appropriate permanent seed mix in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.

12/14/2023: The upper 12 inches of topsoil were segregated and stockpiled alongside the trench within the wetland boundary (Ref. Appendix B: Restoration Work Plan – MVP Section 3.2). The native subsoil removed during trench excavation was stored separately in an upland area to be used as wetland backfill.

12/15/2023: Ditch excavation was completed and the pipe section from the CIS loose end through the wetland was lowered in. Welding, x-ray, and coating operations were completed on the CIS loose end prior to the installing the bentonite trench breaker on the CIS of the wetland.

12/16/2023: The GAS bentonite trench breaker was installed prior to backfilling the trench with wetland subsoil. The wetland topsoil was replaced and survey verified that all elevations met preconstruction specifications. Silt fence was placed on the wetland boundaries and the approved wetland seed mix was applied.

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
Jeffrey Arbogast		SWCA	12/16/2023







AFE 124300131	Date/Time 12/14/2023 10:51 AM	Report # 155
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Required Photos

 <p>12/14/2023 07:43:42 +38.494410,-80.561152 151° SE W-B31 (Pre-JA)</p>		 <p>12/14/2023 07:44:06 +38.494346,-80.561265 1246° SW W-B31 (Pre-JA)</p>	
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	View of permitted resource impact area during pre-construction assessment. Photo taken while standing on Amos Run Road near the centerline.	Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. Photo taken while standing on the timber mat bridge facing off LOD..
 <p>12/16/2023 15:06:33 +38.492759,-80.560772 148° SE W-B31 (Post-JA)</p>		 <p>12/16/2023 14:36:09 +38.494377,-80.561333 247° SW W-B31 (Post-JA)</p>	
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	View of permitted resource impact area during post-construction assessment. Photo taken while standing on Amos Run Road near the centerline.	Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. Photo taken while standing on the timber mat bridge facing off LOD..
 <p>12/14/2023 13:03:04 +38.494333,-80.561164 91° E W-B31 (Dur-JA)</p>		 <p>12/14/2023 13:54:42 +38.494415,-80.561254 180° S W-B31 (Dur-JA)</p>	
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	Wetland topsoil being removed.	Description	Wetland subsoil being removed.

AFE	124300131	Date/Time	12/14/2023 10:51 AM	Report #	155
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Optional Photos

			
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	The pipe section being lowered in.	Description	GAS bentonite breaker and river weight.
			
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	Wetland subsoil has been replaced and readied for topsoil. Survey crew is in photo but obscured by the caption.	Description	Topsoil being returned.
			
GPS Location	See Caption in Photo	GPS Location	See Caption in Photo
Description	Topsoil being graded back to pre-construction contours.	Description	Final erosion and sediment controls being installed.