WETLAND BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.2

Wetland ID: W-MM8-PEM	**Crossing Start Date:** 11/15/2023	**Crossing Completion Date:** 11/20/2023
Milepost: 294.9	**Pre-Con Assessment Date:** 11/11/2023	**Post-Con Assessment Date:** 11/22/2023
Station: 15598+05	**Cowardin Classification:** PEM **(PEM, PFO, PSS, POW)**	**Wetland Impact Area (sq ft.):** 2408.87
County: Pittsylvania		

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?		X	
2.	Was the existing vegetation removed prior to initiating land disturbance within the resource?		X	
3.	Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils?		X	
4.	Was excess material not needed for backfill removed and disposed of in an upland area?		X	
5.	Was the top 12-inches of backfill made with clean native wetland topsoil?		X	
6.	Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed?		X	
7.	Was wetland topsoil replaced and temporarily seeded?		X	
8.	Was permanent seed applied to unsaturated wetlands?		X	
9.	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area.		X	
10.	Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area?		X	
11.	Was the pre-construction survey data provided and 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?		X	
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?		X	
13.	Was the time of disturbance minimized by conducting resource work continuously to completion?		X	
14.	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?		X	
15.	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30) in PFO classified wetlands?			X
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.			X

Item #	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)*	2 - Minor	2 - Minor
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 - Suboptimal	2 - Suboptimal

Comments/Remarks

11-11-23: PreCon meeting and auditor assessment. This crossing activity was completed in conjunction with the resources S-CC1 and W-MM8-PFO.
Foreman: B. Manning
EI: R. Mathews

Buffer zones established. Crossing method will be an open cut. Blasting crew from Hoover onsite for test drill. Work anticipated to commence on or around Wed 11-22. -K. Douglas

11-16-23: Environmental crew came out for fish relocation. The initial 12" of topsoil from the 10' buffer and 50' buffer was removed on both sides of the stream. Wetland topsoil was stripped and stored on geotech and straw was placed over it. 12" top soil stream substrate, removed and segregated from other topsoil. Dam and pump installed. Trench excavation started. -G. Aceves

11-17-23: Trench excavation continued. Lined up and placed pipe in trench. Weld on CIS. -G. Aceves

11-18-23: QA/QC, blasted and coated CIS weld. CIS trench breakers were installed within 25' of top of bank to prevent erosion to or from the resource area. Started backfilling wetland and stream.

11-19-23: Continued backfilling. Stream substrate and stream bank restore with topsoil. Survey crews on site assisting restoration of pre-construction contours. Environmental crew seeded stream bank with riparian seed and blanket with erosion control blanket. -G. Aceves

11-20-23: Installed GAS trench breakers with 25' of stream and within the wetland. Wetland topsoil restored and survey was on site assisting with final grade for reconstruction. Trench was backfilled within both 50-foot buffer zones, installed compost filter sock, seeded with temporary and permanent mixes then mulched with CFS installed at 10 and 50 ft buffer zones and wetland boundary.

11-22-23: Post-con auditor assessment conducted. -G. Aceves

No impacts to biological conditions or unauthorized discharges were observed during the crossing activity.

In accordance with the Mountain Valley Pipeline Consent Decree, dated October 11, 2019, 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.

This report was written by	George Aceves *Print Name*	 *Signature*	11/22/2023 *Date*

Required Photos

Photo Description: View of permitted resource impact area during pre-construction assessment.

Photo Description: At edge of LOD, view of unpermitted resource area conditions during pre-construction assessment.

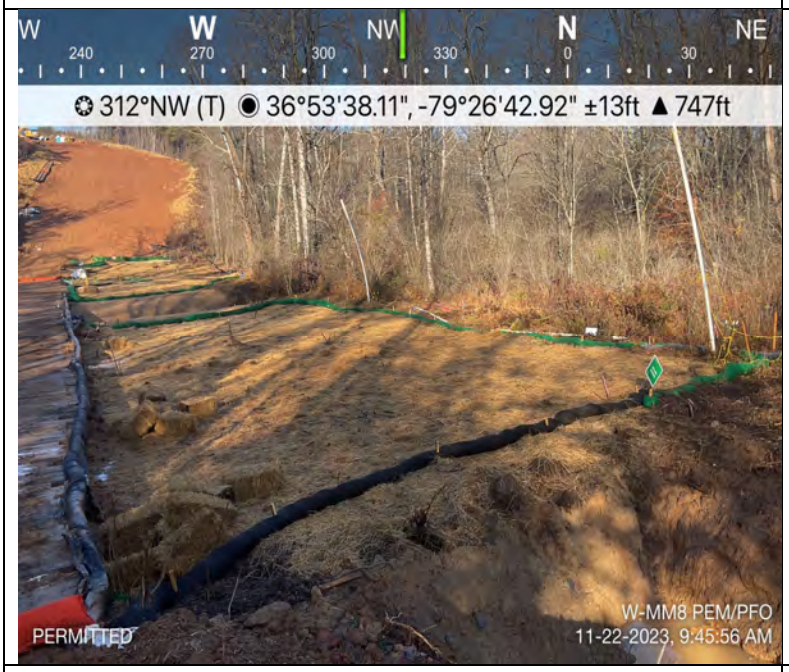

Photo Description: View of permitted resource impact area during post-construction assessment.

Photo Description: At edge of LOD, view of unpermitted resource area conditions during post-construction assessment.

Optional Additional Photos

Photo Description: Dewatering structure installed and operational throughout crossing.

Photo Description: Restoration of seed and straw to the wetland impact area.

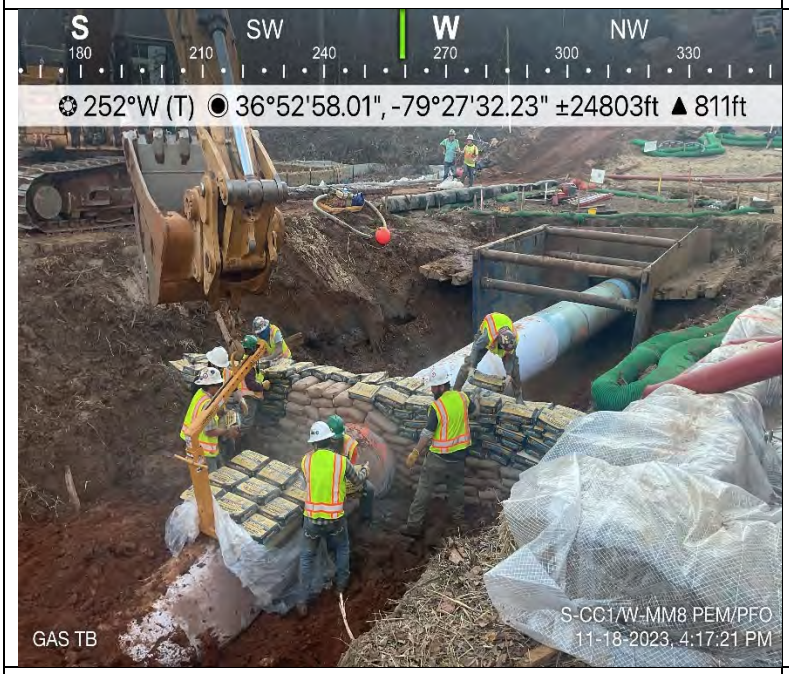

Photo Description: Trenchbreaker installation on the going away side of the resource.

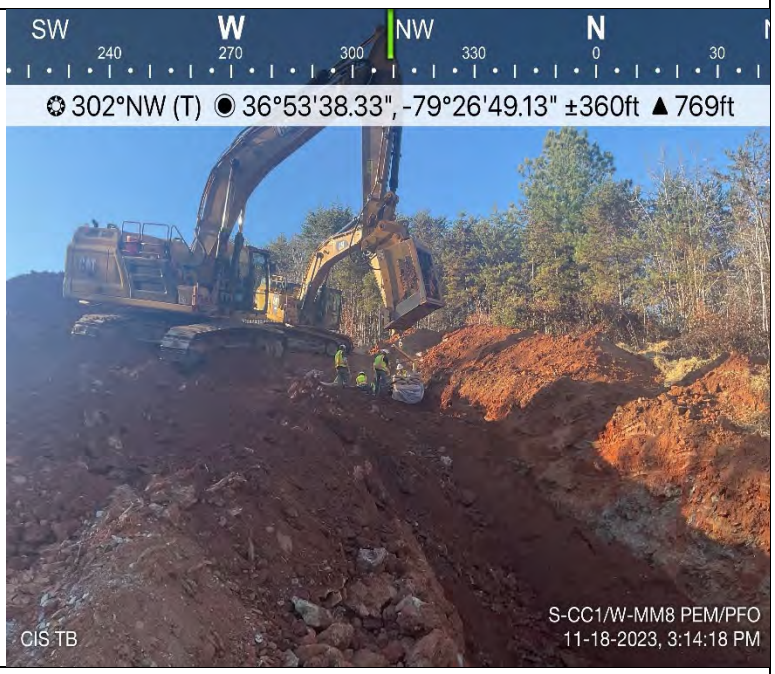

Photo Description: Trenchbreaker installation on the coming in side of the resource, and backfill of soil with padding bucket.