

January 13, 2020

From: Mountain Valley Watch (MVW)
Kirk A Bowers, PE
Autumn Crowe

To: West Virginia Department of Environmental Protection
601 57th Street SE
Charleston, WV 25304
Attention: Jason Liddle

SUBJ: Mountain Valley Pipeline Stabilization
Braxton, Lewis and Doddridge Counties, WV

To Whom This Concerns,

We are submitting documentation of slips and lack of stabilization in the right-of-way of the Mountain Valley Pipeline.

On December 10, 2020, a single engine plane flew over the route of the Mountain Valley Pipeline (MVP) in West Virginia. During the flight, the pilot captured several thousand aerial photos of the MVP under construction. Volunteers from the MVW recently reviewed thousands of aerial photos to determine the extent of bare unvegetated soil in the pipeline right of way.

Photo review of construction of the MVP revealed numerous areas of exposed soils with inadequate ground cover and stabilization measures to protect the bare soil from erosive forces. The report includes photos with mile post location of areas with slips or landslides, or lack of vegetative cover in the pipeline right-of-way in Braxton and Lewis Counties, WV. Several of the areas in the photos are on steep slopes that show erosion occurring. Many of the bare soil areas are adjacent to stream crossings.

The links to the aerial photos are below the inset photo. Hold down Ctrl and click on the link to open the photo for review. The photos are High resolution photos and you can zoom in on specific areas to gain a close-up view of an area.



Milepost 80.2 [G0024312.jpg](#)
Possible washouts through woods,
sediment piles



Milepost 79.7 [G0024321.jpg](#)
Bare areas, looks like sediment may
have washed out where they are
trying to contain



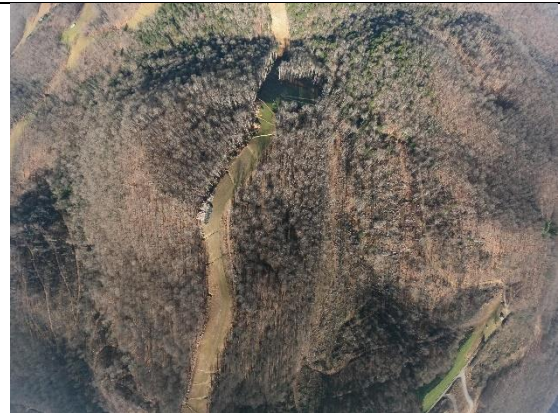
Milepost 78.2 [G0024346.jpg](#)
Bare areas, lot of loose dirt by a
stream crossing.



Milepost 77.9 [G0024350.jpg](#)
Bare areas by top water bars, piles of
dirt/sediment



Milepost 77.5 [G0024358.jpg](#)
Rock/dirt piles/sediment coming off of
hillside and slope around
Compressor station



Milepost 76.9 [G0024367.jpg](#)
Bare patches, possible erosion.



Milepost 76.5 [G0024373.jpg](#)
Bare ground. No cover in several areas.



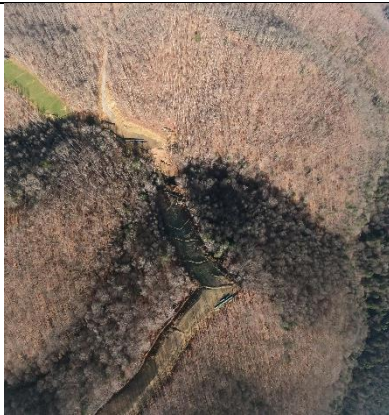
Milepost 75.1 [G0024401.jpg](#)
Bare areas next to stream crossing. Erosion devices appear to be missing.



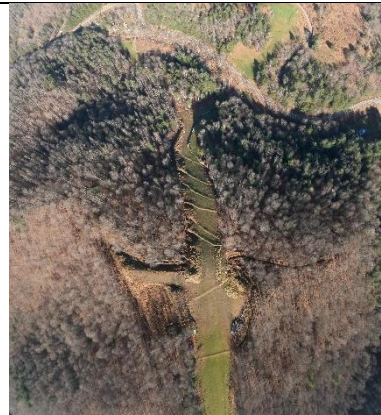
Milepost 74.9 [G0024404.jpg](#)
Major Stream crossing issues.



Milepost 74.6 [G0024410.jpg](#)
Bare dirt. No vegetative cover in areas.



Milepost 74.1 [G0024418.jpg](#)
Bare ground, steep drop off, possible hole, pipe laying out exposed



Milepost 72.6 [G0024449.jpg](#)
No vegetation on slopes above stream crossing.



Milepost 68.7 [G0024524.jpg](#)
Muddy construction area/water crossing, timber mats



Milepost 69.9 [G0024501.jpg](#)
Disturbed ground, pipe out of the ground and lying on the ground on both sides



Milepost 65.5 [G0024584.jpg](#)
Construction area. Bare unvegetated areas next to stream.



Milepost 62.2 [G0024643.jpg](#)
Extensive matting shown with slips at MP 62.3 on 10/15/20, 10/29/20 and 12/5/20.



Milepost 61.3 [G0024660.jpg](#)
Lack of vegetation next to stream crossing.



Milepost 61.1 [G0024664.jpg](#)
Large area of bare soil on slopes with matting.



Milepost 61 [G0024667.jpg](#)
Several large unvegetated areas.



Milepost 60.8 [G0024671.jpg](#)
Several areas with lack of vegetation on steep slopes.



Milepost 60.6 [G0024673.jpg](#)
Unvegetated areas with signs of slip on slope.



Milepost 60.3 [G0024680.jpg](#)
Bare dirt next to stream crossing.



Milepost 60 [G0024684.jpg](#)
ROW v. brown, bare areas north of I-79, compared to ROW to immediate south.



Milepost 59.7 [G0024690.jpg](#)
Bare areas at and near intersection with extremely steep access road.



Milepost 59.4 [G0024695.jpg](#)
Large bare, unvegetated areas, E&S measures need maintenance.



Milepost 58.7 [G0024705.jpg](#)
No vegetative in ROW next to wetlands crossing.



Milepost 57.3 [G0024732.jpg](#)
Construction underway at what appears to be an interconnect point.



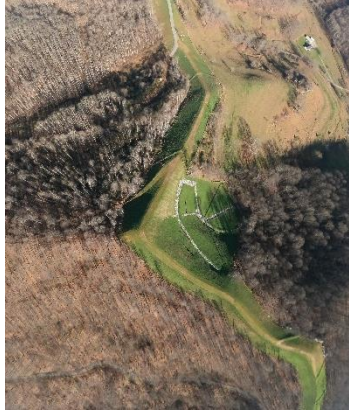
Milepost 57.2 [G0024733.jpg](#)
Large areas of bare dirt. There is no vegetation in ROW. Area under construction.



Milepost 56.5 [G0024748.jpg](#)
Bare, unvegetated areas north of Brush Run Rd and farther uphill. Slip area shown midway up slope.



Milepost 55.2 [G0024770.jpg](#)
Problem area south of Copley Rd. ROW and triangular workspace area in shadow show collapsing slopes and sediment in stream crossing.



Milepost 53.5 [G0024800.jpg](#)
Large slip area re-vegetated. Upper slopes show signs of instability.



Milepost 52.8 [G0024810.jpg](#)
Large timber mat surface with slip and erosion control measure failure



Milepost 52.3 [G0024817.jpg](#)
Bare, unvegetated area south of Cove Lick access road crossing.



Milepost 47.9 [G0024901.jpg](#)
Bare areas south and north of road crossing US 119/33 near Camden



Milepost 47 [G0024921.jpg](#)
Bare, unvegetated area. Sediment overflowing E&S device near stream crossing. Large slip area that is still unvegetated.



Milepost 46.6 [G0024928.jpg](#)
Construction underway. Large bare, unvegetated areas. Sediment flowing into stream crossings. Slip occurring on north side of photo.



Milepost 46.5 [G0024931.jpg](#)
Unvegetated areas with sediment flowing off LOD.



Milepost 45.9 [G0024942.jpg](#)
Large timber-matted work area south of Churchville Rd/CR-9 crossing. Sediment in stream below road crossing.



Milepost 44.8 [G0024963.jpg](#)
Unvegetated areas and extensive matting south of access road to crossing of Fink Ck. Sediment appears to be in stream.






Milepost 43.5 [G0024988.jpg](#)
Large unvegetated area, Needs grass and cover.



Milepost 44.3 [G0024990.jpg](#)
Large unvegetated area, Needs grass and cover.



Milepost 43.0 [G0024996.jpg](#)
Unvegetated area at bottom slope is eroding into stream.

 <p>Milepost 40.2 G0025044.jpg Unvegetated area needs re-seeding.</p>	 <p>Milepost 38.6 G0025075.jpg Large area of dead grass. Needs re-seeding.</p>
 <p>Milepost 38.1 G0025085.jpg Needs detailed inspection. Slips forming above roadway. Bare areas above slips need vegetative cover or additional matting.</p>	

In the West Virginia Erosion and Sediment Control Best Management Practice Manual (revised August 29, 2016), several regulatory elements required for construction projects described in the Handbook are:

Element #4: Stabilize soils

Exposed and unworked soils shall be stabilized by application of effective BMPs that protect the soil from the erosive forces of raindrops, flowing water, and wind. The General Permit requires that all graded areas that are at final grade must be seeded and mulched within 7 days and areas that will not be worked again for 21 days or more must be seeded and mulched within 7 days.

Element #12: Stabilization

The construction site should be stabilized as soon as possible after completion. Establishment of final cover must be initiated no later than 7 days after reaching final grade. Final stabilization means that all soil-disturbing activities are completed, and that either a permanent vegetative

cover with a density of 70% or greater has been established or that the surface has been stabilized by hard cover such as pavement or buildings. It should be noted that the 70% requirement refers to the total area vegetated and not just a percent of the site.

Areas shown in the aerial photos have less than 70% vegetative cover. The majority of the photos show 0% vegetative cover at the photo location. These areas are susceptible to erosion as most of them are on mild to steep slopes. **The time limit for establishment of vegetative cover on these areas has exceeded 6 months.**

A common method of providing vegetative cover during dormant phases in a construction project is shown in the WV Erosion Control Handbook under Standard **3.10 - TEMPORARY SEEDING**, which states that:

Temporary erosion control measures consist of seeding and mulching, or matting used to produce a quick ground cover to reduce erosion on exposed soils that may be redisturbed or permanently stabilized at a later date.

This method is used where exposed soil surfaces are not to be fine-graded for periods longer than 21 days. Such areas include denuded areas, soil stockpiles, dikes, dams, sides of sediment basins, temporary road banks, etc. A permanent vegetative cover shall be applied to areas that will be left unworked for a period of more than six months.

There are numerous areas within the Mountain Valley Pipeline right-of-way that show little to no vegetative cover. Numerous areas remain unvegetated despite efforts to grow grass.

The photos are conclusive evidence of unvegetated areas requiring corrective action for lack of ground cover. We request immediate action to correct these regulatory violations. Please contact Autumn Crowe with any questions.

Respectfully,