

February 3, 2021

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  
Webster County, 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 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 milepost locations of areas with slips or landslides, or lack of vegetative cover in the pipeline right-of-way in Webster County, WV. Several of the areas in the photos are on steep slopes that show erosion occurring. Several of the bare soil areas are adjacent to stream crossings.

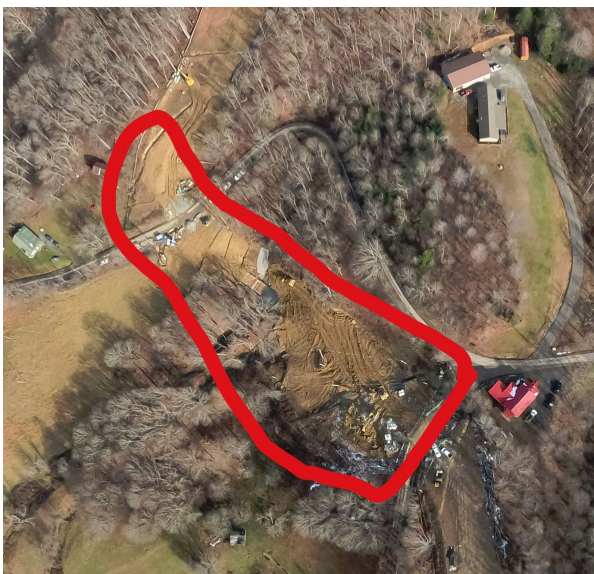
The links to the aerial photos are below the inset photo. Hold down Ctrl and click the right mouse key for high resolution photos.



**Milepost 109.5** [G0023800.jpg](#)  
The Steep Slope above stream crossing has little vegetation. Waterbars are in need of stabilization and maintenance.



**Milepost 106.4** [G0023856.jpg](#)  
Area on the slope above wetlands crossing is bare and needs vegetative stabilization.



**Milepost 106.1** [G0023860.jpg](#)  
Bare areas above stream crossing need stabilization. The photo shows a dozer pushing dirt into the stream crossing. The bridge for the crossing appears to have collapsed.



**Milepost 98.7** [G0023997.jpg](#)  
Large area with little vegetation on both sides of stream crossing. Work area perimeter control is too close to the edge of the live stream. Inspection requested.





**Milepost 95.6** [G0024052.jpg](#)  
Bare area with pipe lying on ground, Very little vegetation in ROW. Seeding required.



**Milepost 95.4** [G0024059.jpg](#)  
Large bare area at intersection with access road. Seeding required. There appears to be a slip above the road intersection. Possible sediment flowing off site.



**Milepost 94.6** [G0024071.jpg](#)  
Remote location at the top of the ridge has sparse vegetation. Perimeter erosion controls are not visible. Inspection requested.



**Milepost 94.3** [G0024075.jpg](#)  
Small area at low point/access road with sparse vegetation. Additional seeding necessary at this location.





**Milepost 93.1** [G0024095.jpg](#)  
Stream crossings. The area at the bottom of slopes is not well protected. Erosion control devices are not visible. Too many unvegetated areas close to the stream. Pipeline has no stream buffer at the stream crossings.



**Milepost 92.4** [G0024109.jpg](#)  
Large unvegetated areas adjacent to stream crossing on both sides. Rill erosion occurring on the slope above the stream. Possible slips forming on slope at this location. Inspection requested.

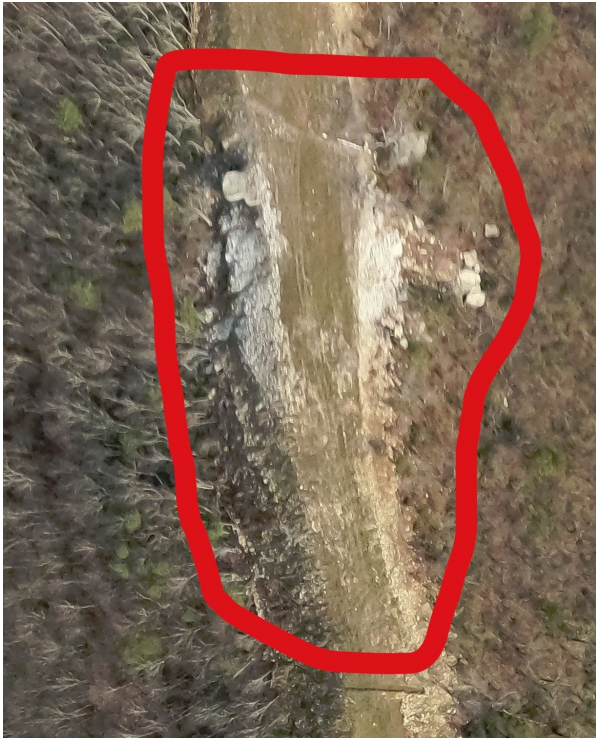




**Milepost 91.8** [G0024119.jpg](#)  
Areas along access road at the top of ridge need inspection for erosion along edges of access road.



**Milepost 90.7** [G0024138.jpg](#)  
Unvegetated areas adjacent to stream crossing on both sides. Inspection requested.



**Milepost 90.3** [G0024144.jpg](#)

A large amount of rock is strewn along the edge of ROW at the top of the ridge. Several large rocks have rolled out of ROW into the forest.



**Milepost 89.7** [G0024156.jpg](#)

Area at the intersection with the access road is bare and needs inspection. Wetlands crossing needs seeding. It has lain bare for more than 6 months.





**Milepost 89.4** [G0024159.jpg](#)  
Large unvegetated area on the ridge line.  
Inspection and seeding requested.



**Milepost 89.2** [G0024162.jpg](#)  
Bare unvegetated areas on the ridge line.  
Seeding maintenance needed at this  
location.





**Milepost 87.2 - 87.4** [G0024192.jpg](#)  
Large area with no vegetative cover next to river crossing. There is evidence of sediment flowing out of ROW, This area needs inspection.



**Milepost 87.1** [G0024196.jpg](#)  
Remote area with long steep slope showing signs of erosion. This area needs inspection.



**Milepost 86.9** [G0024202.jpg](#)  
Steep drop off, clear erosion/brown dirt on side of dropoff. Drainage channels forming on edge of ROW. Needs inspection.



**Milepost 86.7 - 86.6** [G0024205.jpg](#)  
Large area with little vegetation on top of ridge. Remote location that needs inspection. It looks like the erosion control devices require maintenance.





**Milepost 86.5** [G0024207.jpg](#)

Large area on ridge with little vegetation showing. Perimeter erosion control measures are not visible. Inspection needed.



**Milepost 86.3** [G0024210.jpg](#)

Large bare area on slope. How long has this area remained bare? Perimeter controls are difficult to see. No E&S measures are visible at the bottom of the slope. This area needs ground inspection.





**Milepost 86.0** [G0024217.jpg](#)  
Large bare area forming. Soil collapse on slope. Need inspection for stabilization.



**Milepost 84.7** [G0024239.jpg](#)  
This area has sparse vegetation. It has lain bare for more than 6 months. Very remote location. Inspection requested.



**Milepost 83.7** [G0024252.jpg](#)  
Bare areas on the upper slope need reseeding. Inspection requested.



**Milepost 83** [G0024264.jpg](#)  
Bare area on top of ridge. Additional seeding needed to cover the area.





**Milepost 82.6** [G0024271.jpg](#)  
Steep slope with sparse vegetation in remote area. Additional stabilization measures needed. Inspection requested.



**Milepost 82.3** [G0024276.jpg](#)  
Perimeter controls for large bare area are at the edge of stream crossing, instead of setback from stream bank. This area needs stabilization measures installed. Inspection requested.



**Milepost 81.8** [G0024285.jpg](#)  
Several areas without vegetation cover next to stream crossings.



**Milepost 80.8** [G0024302.jpg](#)  
Bare areas on both sides of stream crossing. Inspection requested.



**Milepost 80.3** [G0024310.jpg](#)  
Stabilization measures for bare areas are needed. Inspection for cover requested.

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



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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 have little to no 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 evidence of unvegetated areas requiring corrective action for lack of ground cover. We request immediate action to correct these regulatory concerns. Please contact Autumn Crowe with any questions.

*Respectfully,*

Kirk A Bowers, PE  
Autumn Crowe