

January 20, 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
Greenbrier 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.

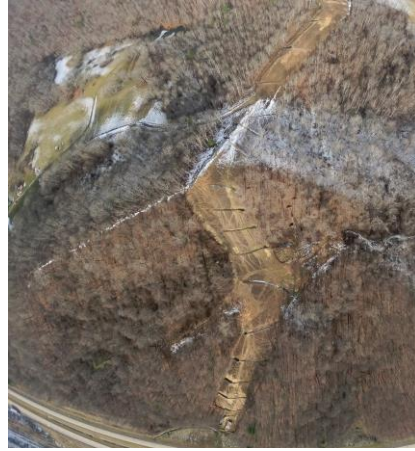
On December 10, 2020, a single engine plane flew over the route of the Mountain Valley Pipeline (MVP) in West Virginia. During the flight, the pilot captured several thousand aerial photos of the MVP under construction. Volunteers from the MVW reviewed thousands of aerial photos to determine the extent 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 Greenbrier 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 156.6 - 156.7 [G0022979.jpg](#)
Large area with no vegetative cover on steep slope with slips and gullies forming on slope.



Milepost 156.6 - 156.7 [G0022982.jpg](#)
Continuation of areas with sparse vegetation with slips and gullies forming.



Milepost 156.4 - 156.5 [G0022985.jpg](#)
Large area on slope at end of access road with sparse or dead vegetation. Slips and rill gullies forming on bare areas of slope.



Milepost 155.5 [G0022998.jpg](#)
Sparse vegetation or dead grass with bare areas and rill erosion at toe of slope.



Milepost 154.4 [G0023017.jpg](#)
Bare or sparse vegetation north of the compressor station site. Re-seeding and maintenance of erosion control devices is needed.



Milepost 153.75 - 153.9 [G0023025.jpg](#)
Bare or sparse vegetation. Re-seeding is needed.



Milepost 150.9 [G0023076.jpg](#)
Bare/sparsely vegetated area at bend of ROW. Re-seeding required.



Milepost 149.8 [G0023098.jpg](#)
Bare/sparsely vegetated areas with rill erosion creating possible slips. Re-seeding required to stabilize slopes.



Milepost 148.2 [G0023130.jpg](#)
Bare/sparsely vegetated areas with rill erosion at toe of slope. Re-seeding required to stabilize slopes.



Milepost 147.0 - 147.1 [G0023152.jpg](#)
Bare/sparsely vegetated areas with rill erosion at toe of slope. Re-seeding required to stabilize slopes.



Milepost 146.6 - 146.9 [G0023156.jpg](#)
Long steep slope with bare/sparsely vegetated areas and rill erosion. Re-seeding required to stabilize slopes.



Milepost 143.5 - 143.8 [G0023210.jpg](#)
Long steep slope with bare/sparsely vegetated areas and rill erosion. Re-seeding and erosion control matting required to stabilize slopes.



Milepost 143.2 - 143.5 [G0023215.jpg](#)
Long slope with bare/sparsely vegetated areas and rill erosion. Re-seeding and erosion control matting required to stabilize slopes.



Milepost 142.2 [G0023234.jpg](#)
Long slope with bare/sparsely vegetated areas. Re-seeding required to stabilize slope.



Milepost 141.6 [G0023245.jpg](#)
Long slope with bare/sparsely vegetated areas. Re-seeding required.



Milepost 140.8 [G0023259.jpg](#)
Area next to the road crossing has no vegetative cover in place. Inspection needed to determine the condition of this area.



<p>Milepost 139.7 - 139.9 G0023274.jpg Sparsely vegetated areas with rill erosion in places on slope. Re-seeding needed.</p>	
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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.

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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,