

July 30, 2021

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

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

SUBJ: Mountain Valley Pipeline Stabilization  
Summers County, WV

To Whom This Concerns,

This report includes photo observations from aerial flights of the Mountain Valley Pipeline (MVP). The flyover of the MVP occurred during July 2021 under sunny weather conditions and light winds. This report includes photos from Summers and Monroe Counties, WV.

Review of MVP aerial photos shows numerous areas of exposed soils with inadequate ground cover and stabilization measures to protect the bare soil from erosive forces. The photos are listed with milepost locations of areas with no or sparse grass growing in the pipeline right-of-way in two counties . Several of these areas are on steep slopes that show erosion occurring. Many of the bare soil areas are adjacent to stream crossings.

The aerial photos in this report show that seeding of disturbed areas in the MVP right-of-way has not met minimum cover requirements. The first series of photos is a comparison to aerial photos taken in January 2021. The majority of the photos show bare or sparsely vegetated areas adjacent to streams or creeks. The contrast between the “green” areas and the “bare” areas is stark in the recent series photos.

Photos in the left column were taken in July 2021. Photos in the right column were taken in December 2020.

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Milepost 171.7 Large denuded area adjacent to Greenbrier River. Sediment deposits are visible on the edge of Greenbrier River.



Same area at MP 171.7 in December 2020. This area has lain dormant for over a year. Sediment is not visible on the edge of the river.



Sandbar in Greenbrier River adjacent to workspace shown in photos above. Milepost 171.7.



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Milepost 172 Laydown yard has lain dormant for over a year with exposed soil.



Same area shown in December 2020 with exposed soil.



Milepost 172.7 Exposed soil next to Kellys Creek and Kellers Creek road.



Same area at Milepost 172.7. Photo taken November 2020.

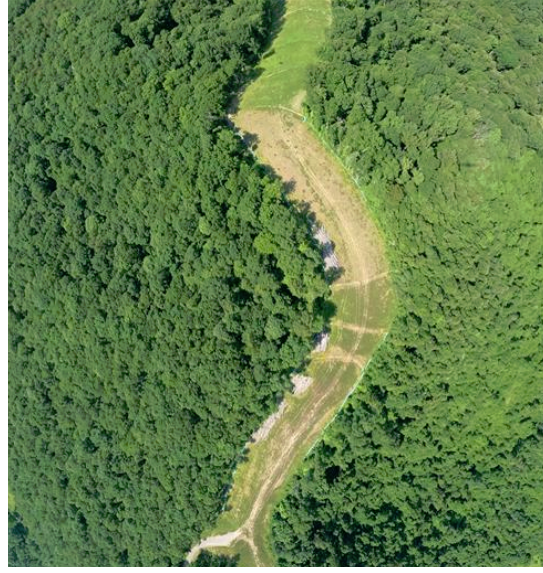
The next series of photos show areas in the right-of-way that are not adequately covered with vegetation. These photos were taken July 6, 2021. They are in order of mileposts flying from south to north along the pipeline alignment.



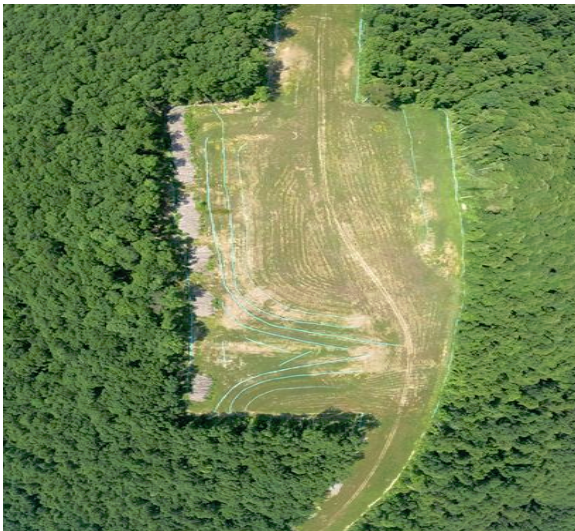
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Milepost 172.3 Bare, exposed soil in ROW.



Milepost 177.7 Bare section in ROW on slope.



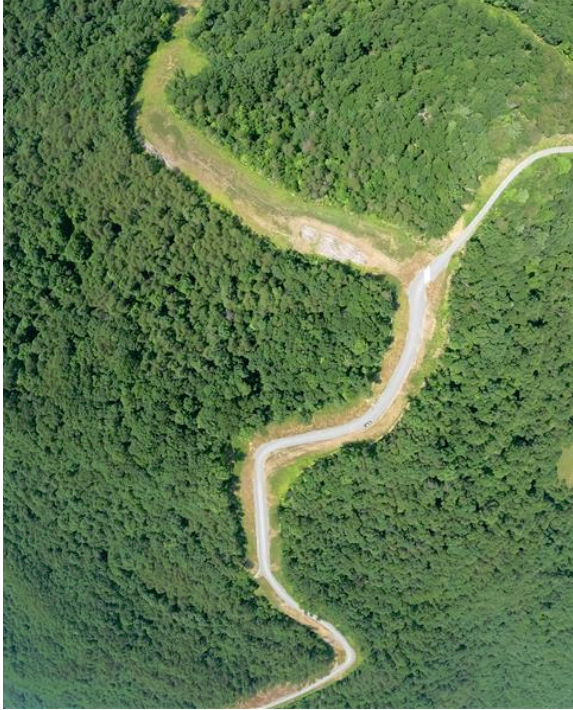
Milepost 178.3 Workspace needs additional seeding.



Milepost 178.8 Exposed soil needs additional seeding.



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Milepost 180.3 Exposed soil next to the roadway.



Milepost 180.7 Large area needs additional seeding.



Milepost 181.5 Inspect area to determine if vegetation coverage is adequate.



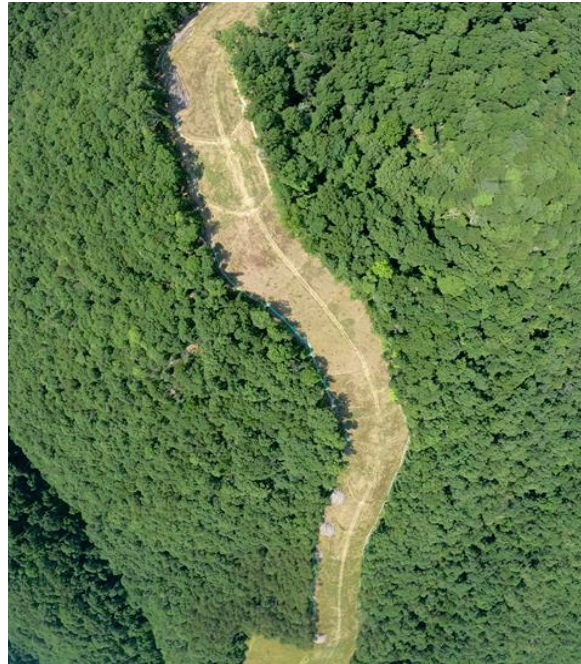
Milepost 181.6 Inspect area to determine if vegetation coverage is adequate.



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Milepost 181.7 Exposed soil on ridgeline.



Milepost 182 Bare soil in ROW above Slate Run.



Mileposts 182.4 - 182.8 Two large areas of bare soils next to Slate Run.



Mileposts 184.2 - 184.4 Exposed soil next to creek lacks vegetative cover.



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Milepost 185.3 Exposed soil on slope.



Milepost 185.5 Area with bare soils needs additional seeding.



Milepost 185.6 Another area with bare soils in the same area as two photos above.



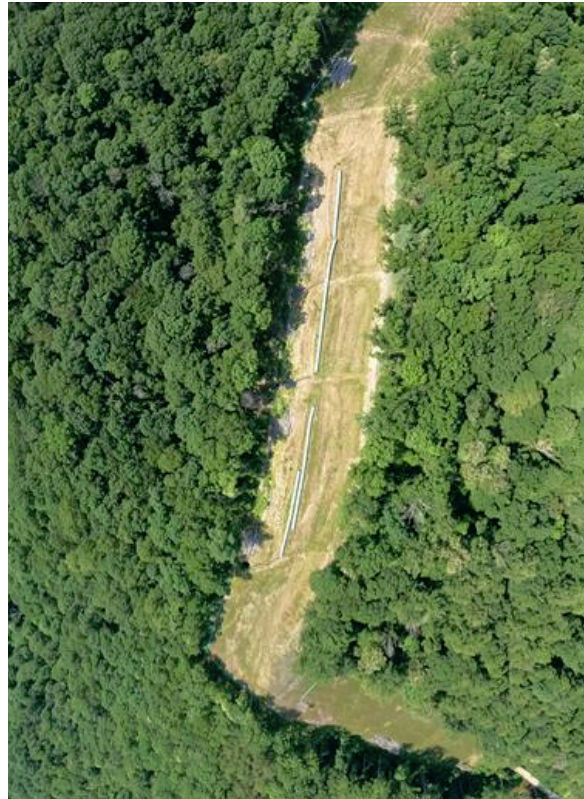
Milepost 186.3 Bare spots on slope



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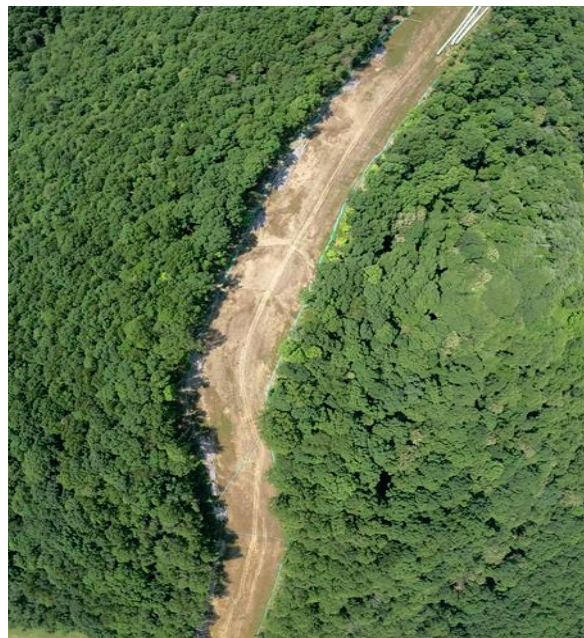
Milepost 187.4 Exposed soil at ATWS needs additional seeding.



Milepost 187.6 Bare areas on slope above Narrows of Hans creek crossing.



Milepost 187.7 Exposed soil on slope on other side of Narrows of Hans creek crossing.



Milepost 188 Additional seeding needed on slope.



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Milepost 188.8 Seeding needed on slope above stream crossing.



Milepost 189.3 Exposed soil on slope needs additional seeding.



Milepost 189.7 Additional seeding needed on exposed areas.



Milepost 191.3 Bare soil on slope does not meet adequate vegetative coverage requirements.



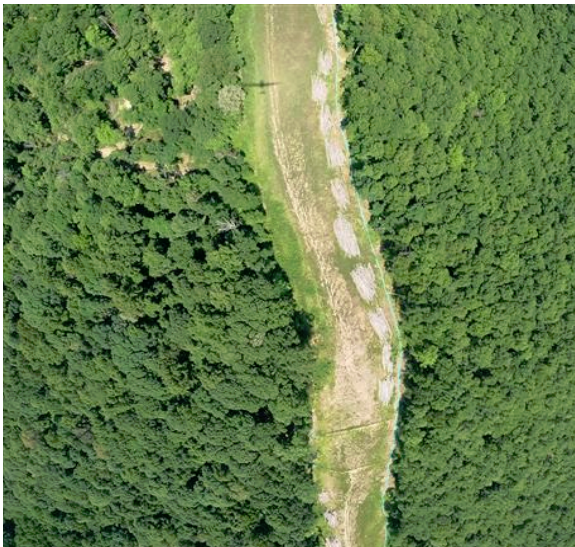
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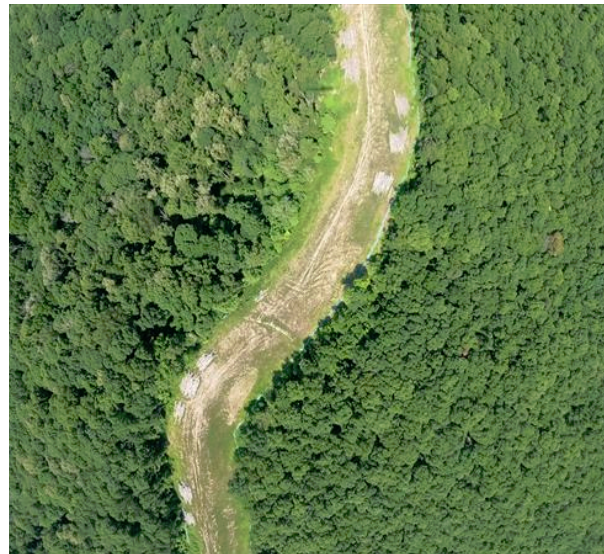
Milepost 191.5 Bare, exposed soil on both sides of Seneca Trail. Reseeding required.



Mileposts 191.8 - 192.1 Large area of exposed soil in ROW. Additional seeding needed.



Milepost 193.8 Sparsely vegetated area in ROW.



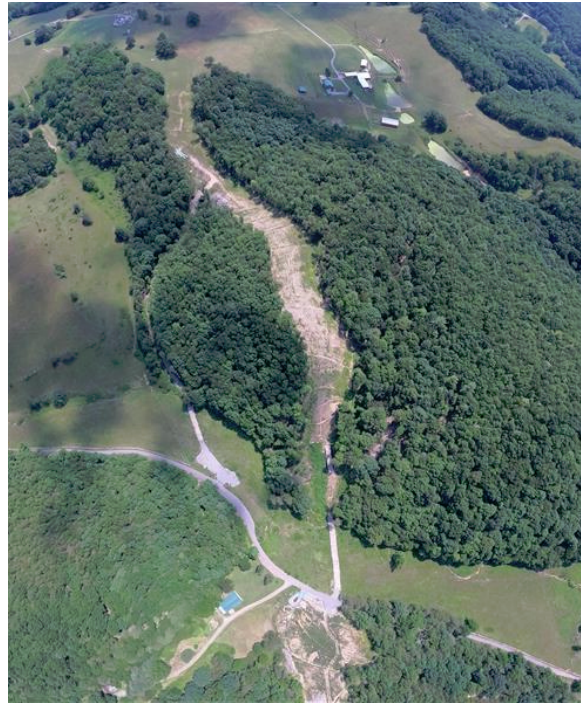
Milepost 194 Sparsely vegetated area in ROW.



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Milepost 194.3 - 194.6 Numerous bare areas on slope above Painters Creek.



Milepost 194.8 Large bare area in ROW south of Painters Creek.

Sheet erosion, caused by the impact of rain on bare soil, is the source of most fine particles in sediment. To reduce this sediment load in runoff, the soil surface itself should be protected. Vegetative cover controls erosion by reducing the velocity and the volume of overland flow and protecting the bare soil surface from raindrop impact. The most common and economical means of establishing this cover is by seeding grasses and legumes.

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. In the West Virginia Erosion and Sediment Control Best Management Practice Manual (revised August 29, 2016), regulatory elements require 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. A permanent vegetative cover shall be applied to areas that will be left unworked for a period of more than six months.

The areas shown in the photos have lain dormant for over a year in most cases. Exposed bare areas increase stormwater runoff rates which increases the quantity of runoff flowing from the ROW. Increased runoff from the ROW is flowing into streams and creeks which destabilizes and erodes the stream channel. Lack of grass growing



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on the ROW is the source of large increases in runoff rates into waterways. This is in addition to erosion from displacement of fine soil particles by rainfall impact.

The contractor failed to carefully follow sound agronomic practices which resulted in inadequate stands of vegetation that provides little or no erosion control. Proper seedbed preparation is important in applying seeds. During construction, landowners have not observed scarifying or aerating soils to prepare for seeding.

The photos are continuing evidence of areas with inadequate vegetative cover needing corrective action. We request action to correct these site stabilization deficiencies.

Respectfully,  
Kirk A Bowers PE