



ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

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Pesi 593

25 September 2017

Mr. John Schmidt
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241

RE: Abandoned Mine Portal Located along Mountain Valley Pipeline in Nicholas County, West Virginia.

Dear Mr. Schmidt:

On 15 September 2017, ESI biologists evaluated a proposed new access road Mountain Valley Pipeline, LLC (MVP), is requesting to add to the Mountain Valley Pipeline Project (Project). The road was evaluated for birds, plants, and bats. No raptor nests were identified. The proposed access road is adjacent to areas previously identified by agency staff as potential Virginia spiraea habitat; however the access road was dry and upland, thus did not possess qualities necessary for the species. Qualified bat biologists identified one portal that was evaluated to be potentially suitable for hibernating bats (data sheets and photos are attached). The portal is located approximately 450 meters (0.28 miles) from the limits of disturbance for the pipeline right-of-way and 60 meters (196.9 feet) from the proposed access road. No direct impacts to the portal will occur. The proposed access road already exists as a gravel vehicle road; it will be upgraded and maintained permanently for use by MVP. Clearing of approximately 1.81 hectares (4.48 ac), which will primarily consist of tree trimming, is associated with this access road. Approximately 0.66 hectares (1.64 acres) will be permanently converted from forest to road; the remaining 1.15 hectares (2.84 ac) will be allowed to return to forest.

Table 1. Land cover types and acreages within the Project Area and Action Area as indicated by NLCD and field assessments.

Vegetative Cover Type ¹	Action Area (acres)	Project Area	
		Construction (acres)	Operation (acres)
Deciduous Forest	210,363.67	3,922.88	1,411.72
Evergreen Forest	6,537.70	118.92	44.66
Mixed Forest	4,342.19	415.80	144.07
Wetlands ²	559.46	41.40	12.25

Vegetative Cover Type ¹	Action Area (acres)	Project Area	
		Construction (acres)	Operation (acres)
Shrub/Scrub	1,421.18	71.41	21.49
Grassland/Herbaceous	4,402.56	182.76	54.74
Pasture/Hay	30,489.06	1,003.65	279.90
Cultivated Crops	3,479.06	57.66	14.09
Developed ³	15,787.13	503.92	119.28
Open Water	710.53	19.85	9.84
Barren Land	986.68	30.49	6.72
Total⁴	279,079.22	6,368.74	2,118.76

(Note that the increase in Action Area acres was very small because the majority of the Action Area associated with this road already falls within the Action Area of other project features.)

MVP proposes to assume presence for listed bats within this potential hibernaculum and conduct all tree clearing within 5 miles of the potential portal during the winter period of hibernation (November 15 – March 30). Yellow highlights below show where Take values have changed as a consequence of this portal discovery.

$$\begin{array}{rcl}
 & 2.007 & \text{Individuals from Tawney's Cave} \\
 & 2.007 \times 5 & \text{Individuals from suitable features } (n=5) \\
 + & 0.9262 \times 57 & \text{Individuals from features with unknown suitability} \\
 & & (n=57) \\
 \hline
 & \mathbf{64.828} & \mathbf{\text{Total Indiana bats harassed in Winter}}
 \end{array}
 \quad \text{Eq. 1}$$

Table 34. Summary of effects and effects determinations for Indiana Bats.

Description	Expected Harassed	Expected Harmed	Construction Impacts (ha)*	Permanent Impacts (ha)*	Effect Determination	Section
Direct Effects						7.1.1
Winter Season of Hibernation	65	0	-	-	May Affect – Likely to Adversely Affect	7.1.1.1
Autumn Swarming and Spring Staging	112	2	327.30	188.8	May Affect – Likely to Adversely Affect	7.1.1.2
Summer Resident Indiana Bats	32	1	1,806.46	648.51	May Affect – Likely to Adversely Affect	7.1.1.3
Spring and Autumn Migration	1	1	1,806.46	648.51	May Affect – Likely to Adversely Affect	7.1.1.4
Indirect Effects	-	-	-	-	May Affect – Not Likely to Adversely Affect	7.1.2
Collective Impact/Determination	210	4			May Affect – Likely to Adversely Affect	7.1.3

$$\begin{array}{rcl}
 & 7.017 & \text{Individuals from Tawney's Cave} \\
 & 7.017 \times 5 & \text{Individuals from suitable features } (n=5) \\
 & 1 & \text{Individual from Canoe Cave} \\
 & 1.293 & \text{Individuals from PS-WV3-Y-P1} \\
 & 3.2384 \times 57 & \text{Individuals from features with unknown suitability } (n=57) \\
 \hline
 & \mathbf{228.9838} & \mathbf{\text{Total NLEB harassed in Winter}}
 \end{array}
 \quad \text{Eq. 2}$$

Table 2. Summary of effects and effects determinations for northern long-eared bats, where take is not exempted.

Description	Expected Harassed	Expected Harmed	Construction Impacts (ha)*	Operational Impacts (ha)*	Effect Determination	Section
Direct Effects						7.2.1
Winter Season of Hibernation	229	0	-	-	May Affect – Likely to Adversely Affect	7.2.1.1
Autumn Swarming and Spring Staging	1	1	24.57	8.62	May Affect – Likely to Adversely Affect	7.2.1.2
Summer Resident Bats	0	0	1,806.46	648.51	May Affect – Likely to Adversely Affect	7.2.1.3
Spring and Autumn Migration	1	1	1,806.46	648.51	May Affect – Likely to Adversely Affect	7.2.1.4
Indirect Effects	-	-	-	-	May Affect – Not Likely to Adversely Affect	7.2.2
Collective Impact/Determination	231	2			May Affect – Likely to Adversely Affect	7.2.3

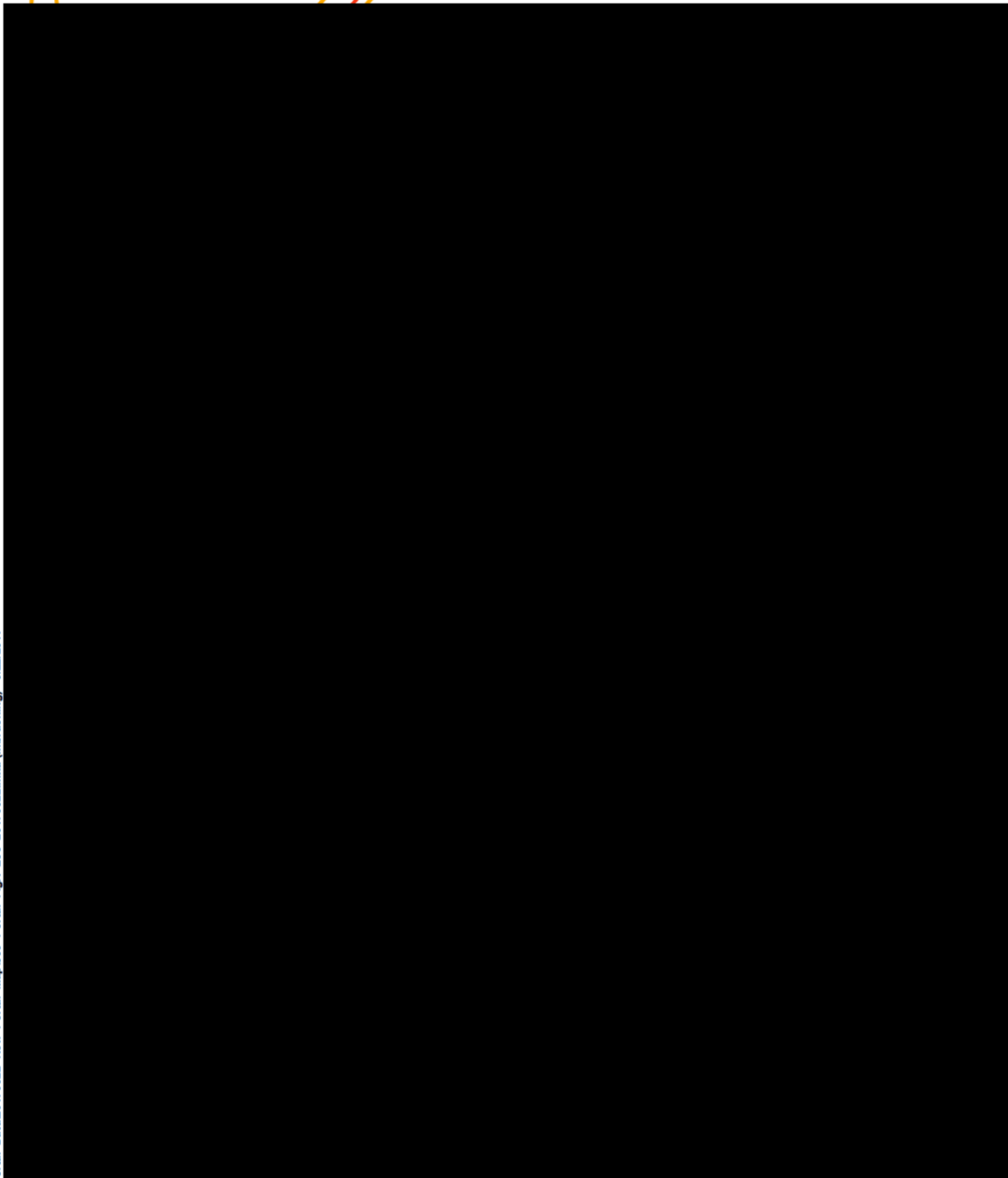
Please feel free to contact me if you have any questions.






Sincerely,

Taina Pankiewicz
TPankiewicz@envsi.com

Enclosures: Portal Location Map, Data sheet, photos

Path G:\Current\593 EQT MVP\PMXD\Portal Data\20170922 New Portal Map\593 Portal FigX Loc 20170922.mxd (mbruening) - 9/22/2017



-  New Portal Opening
-  Previously Identified Portal Opening
-  Proposed Route
-  Proposed Access Roads
-  Proposed Limits-of-Disturbance

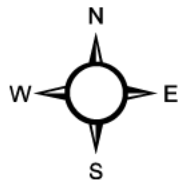
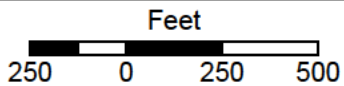


Figure 1. Location of Portal MVP-NI-151-P0001 along the Mountain Valley Pipeline Project in West Virginia and Virginia.

Project No.
593.06



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Mine Portal Description

Project Name:	Mountain Valley Pipeline Project	Company Name	MVP
Project Number:	593.06	State	West Virginia
Site Name:	Mountain Valley Pipeline	County	Nicholas
Date_:	09/15/2017	Latitude (dec. deg.)	
Permitted Biologist	Valerie Clarkston	Longitude (dec. deg.)	
Field Crew1		Other Field Crew	
Portal Opening ID	MVP-NI-151-P0001	Number of Portal Openings	3

Portal/Opening

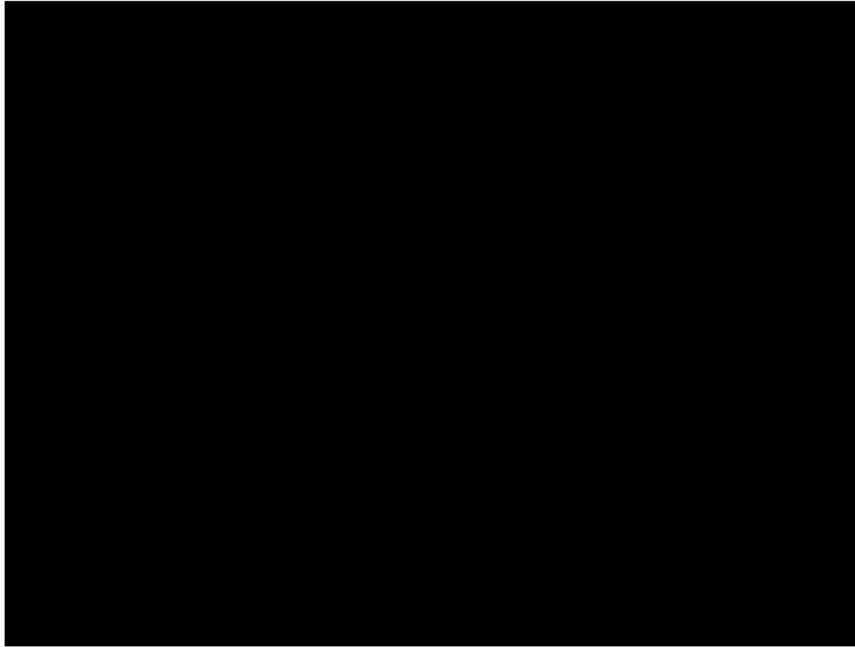
Portal Opening Diameter Height	3.0	Estimated Internal Dimensions Height	6.0	Estimated Internal	Feet
Portal Opening Diameter Width	6.0	Estimated Internal Dimensions Width	15.0	Measurement Units	
Portal Opening Measurement Units Feet		Estimated Internal Dimension Depth ft	60.0		
Portal Orientation (V or H)	Horizontal				
Estimated Portal Opening Slope	5				
Is Entrance Stable?	Yes	Evidence of Collapse	Yes	Ceiling condition stable	Yes
Amount of airflow	Slight	Direction of Airflow Out			
Outside Temperature	68.00	Temperature at Portal	65.00	Temperature Units used	Fahrenheit
Evidence of Past Flooding	Yes				
Percent of Canopy Closure at Entrance	60				
Portal Obstructed by Vegetation	No				
Portal Obstructed by Spider Webs	No				
Presence of guano	No	Amount of Guano Present	N/A		
Estimated Distance to Water meters	20				
Evidence of Foraging (insect remains)	No	Foraging Evidence Description			
Would use make bat susceptible to predation	Yes				

Comments Likely leads back to coal mine; numerous mine adits present allowing for drainage; third opening is grated culvert

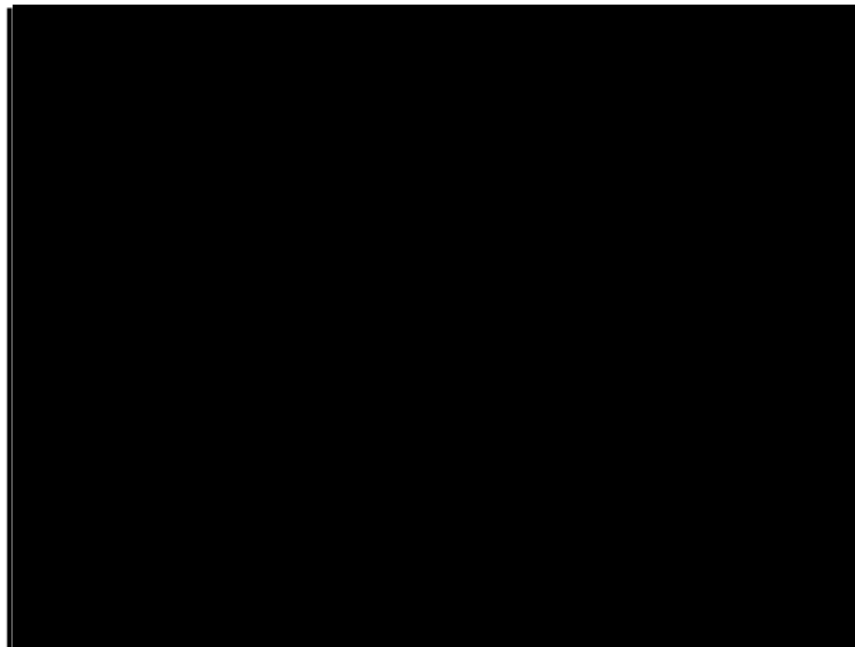
Additional Comments :

Would Portal be recommended for survey? Yes

Portal MVP-NI-151-P0001

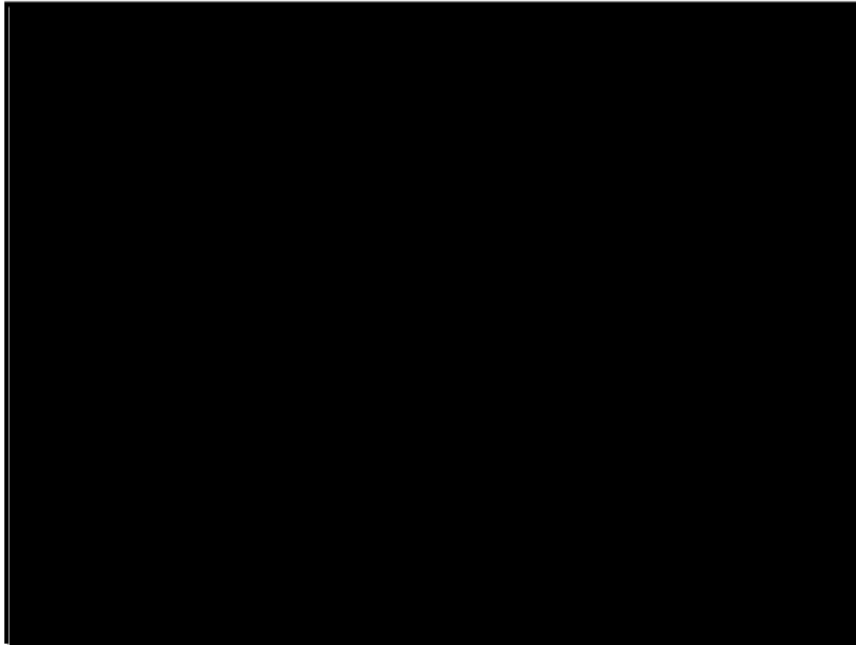


Portal openings 1 and 2

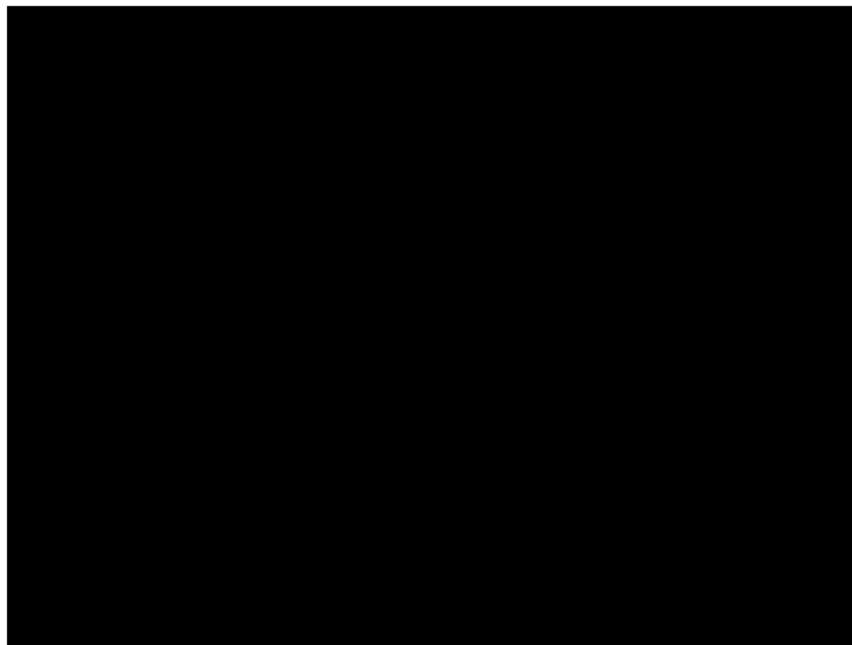


Portal opening 1 of 3

Portal MVP-NI-151-P0001



Portal opening 2 of 3



Portal opening 3 of 3