Post-Application Environmental Information Request #3 **Dated June 11, 2019**

Federal Energy Regulatory Commission

Request:

General

1. As noted in Mountain Valley's response to the February 13, 2019 Environmental Information Request (EIR) item #1, provide Mountain Valley's project-specific Erosion Control Plan that was to be provided to Virginia and North Carolina agencies for review in April, 2019. If a final plan cannot be provided at this time, provide a draft plan. In addition, outline measures that Mountain Valley has incorporated to account for stormwater and sedimentation generated from run-off generated by large storm events during construction.

Response Submitted June 21, 2019:

A draft narrative of Virginia and North Carolina Erosion and Sediment Control Plans are included as Attachment 1-1. The Project anticipates submitting these plans for Virginia in June 2019 and for North Carolina in July 2019. The Project will update the FERC with these submittals upon delivery to the agencies.

The respective state standards for Virginia and North Carolina require that erosion and sediment control be sized to handle storm events that are reasonably expected to occur during the period of construction. At a minimum, the standards generally require that controls be sufficient to handle a 2-year 24-hour storm event. Many supplemental actions, which exceed the minimum state design standards and applicable regulations, will be applied to Southgate, such as:

- Southgate's environmental inspectors will be authorized to supplement the ESC measures installed in the field when, in their judgment, the measures required the approved ESC plans should be supplemented to better address field conditions. Supplemental or enhanced ESC measures will be implemented in the field and recorded on the approved ESC plans as redline changes.
- The proposed inspection frequency for ESC measures exceeds the minimum state requirements.
- The use of pelletized or hydraulically applied soil stabilization products (e.g., Earthguard, Flexterra) is authorized as an enhanced BMP to stabilize areas of bare soil on slopes.
- Mountain Valley will develop supplemental field guides for the proper installation and maintenance of common ESC measures. This practical guidance has proven effective on other projects at improving ESC measure implementation in the field, which ensures that the measures will be able to manage the intended volume of stormwater. This guidance will be employed to facilitate successful BMP installation and maintenance for Southgate.

Name of Respondent: Mr. Alex Miller

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- 2. Provide revised impact tables and appendices, as appropriate, which include Mountain Valley's Southgate Project (Project) changes noted in the May 22, 2019 supplemental filing. Updated tables should include the tables listed below and any other applicable tables:
 - a. Table 1.3-1-Land Requirements for the Southgate Project Pipeline/Associated Workspace;
 - b. Table 1.3-2 Land Requirements for the Southgate Project Aboveground Facilities;
 - c. Table 1.3-4 Contractor Yards along the Southgate Project Pipeline;
 - d. Appendix 1-F Proposed New, Improved, and Private Access Roads for the MVP Southgate Project;
 - e Appendix 1-D Additional Temporary Workspace Areas Associated with Construction of the Southgate Project;
 - f. Table 2.2-2 Private Wells and Springs within 150 feet of the Southgate Project Construction Workspace;
 - g. Table 2.3-3 Permanent Impacts within the 100-year Flood Zone;
 - h. Table 2.3-4 Summary of Waterbodies Crossed by the Pipeline of the Southgate Project;
 - i. Table 2.3-5 Summary of FERC Classification of Waterbody Crossings by the Pipeline of the Southgate Project;
 - j. Table 2.4-1 Summary of Wetlands Crossed by the Southgate Project;
 - k. Appendix 2-A Waterbodies Crossed by MVP Southgate Project;
 - 1. Appendix 2-B Wetlands Crossed by the MVP Southgate Project;
 - m. Appendix 2-F ATWS Within 50 feet of Wetland or Waterbody;
 - n. Table 3.4-1 Vegetation Acreage Affected by Construction and Operation of the Proposed Southgate Project Pipeline;
 - o. Appendix 6-G, Table 6-G-1 Potential Areas of Steep Slopes Crossed by the Southgate Project";
 - p. Appendix 6-G, Table 6-G-2 Potential Areas of Side Slopes Crossed by the MVP Southgate Project;
 - q. Landslide Mitigation Plan Appendix A: Site Specific Mitigation Controls.
 - r. Table 7.2-1 Summary of Soil Characteristics and Limitations for the MVP Southgate Project;
 - s. Table 7.2-2 Soil Types Crossed by the MVP Southgate Project;
 - t. Table 7.3-1 Prime Farmland Affected by the MVP Southgate Project;
 - u. Table 8.2-1 Land Uses Crossed by the Southgate Project Pipeline;
 - v. Table 8.2-2 Land Use Acreage Affected by Construction and Operation of the Proposed Southgate Project Pipeline; and
 - w. Table 8-D Structures within 50 Feet of the Southgate Project.

Response Submitted June 21, 2019:

The above-listed tables reflecting the Project changes noted in the May 22, 2019 supplemental filing, are provided in Attachment 2-1.

An updated Landslide Mitigation Plan is also included in Attachment 2-1.

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Equations are used to calculate new mileposts for any centerline adjustments to help identify route changes in the Project compared to the original filed route. The milepost symbol will be annotated "MP XX.X RR". The XX.X will represent the current milepost number in the equation area. The "RR" represents centerline adjustments (reroutes). Mileposts have not changed on environmental resources outside of the centerline adjustment areas.

A KMZ showing the current route revised mileposts is included as Attachment 2-1.

Name of Respondent: Mr. Alex Miller

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Resource Report 1 - General Project Description

3. Provide an update regarding current environmental survey progress and percent completion for each resource.

Response Submitted June 21, 2019:

The tables below provide environmental survey completion status as of June 14, 2019 and reflect additional survey efforts completed subsequent to the last survey progress update (through March 14, 2019) provided to FERC in Supplement #2 based on the currently proposed alignment:

		Table 3-1: Biolo	ogical Survey Co	mpletion Status			
Wetland / Waterbody Survey Status							
Route	County	State	Total Miles	Survey Status	Length Surveyed or Not Surveyed (Miles)	Percent Remaining / Complete	
Southgate H605 Total:	Pittsylvania	Virginia	0.47	Not Surveyed	0.00	0.00%	
				Surveyed	0.47	100.00%	
Southgate H650	Pittsylvania	Virginia	26.21	Not Surveyed	0.01	<1%	
				Surveyed	26.20	99%	
Southgate H650	Rockingham	North Carolina	26.66	Not Surveyed	1.08	4%	
				Surveyed	25.58	96%	
Southgate H650	Alamance	North Carolina	20.76	Not Surveyed	4.79	23%	
				Surveyed	15.97	77%	
Southgate H650 Total:			73.64	Not Surveyed	5.89	8%	
				Surveyed	67.75	92%	
Project Total:			74.11	Not Surveyed	5.89	8%	
				Surveyed	68.22	92%	

Table 3-2 - Cultural Resource Survey Completion Status							
Route	County	State	Total Miles	Survey Status	Length Surveyed or Not Surveyed (Miles)	Percent Remaining / Complete	
Southgate H605 Total:	Pittsylvania	Virginia	0.47	Not Surveyed	0.00	0.00%	
				Surveyed	0.47	100.00%	
Southgate Pit H650	Pittsylvania	Virginia	26.21	Not Surveyed	0.23	<1%	
				Surveyed	25.98	99%	

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Table 3-2 - Cultural Resource Survey Completion Status							
Route	County	State	Total Miles	Survey Status	Length Surveyed or Not Surveyed (Miles)	Percent Remaining / Complete	
Southgate H650	Rockingham	North Carolina	26.66	Not Surveyed	1.20	5%	
				Surveyed	25.46	96%	
Southgate H650	Alamance	North Carolina	20.76	Not Surveyed	5.09	25%	
				Surveyed	15.67	75%	
Southgate H650 Total:			73.64	Not Surveyed	6.53	9%	
				Surveyed	67.11	91%	
Project Total:			74.11	Not Surveyed	6.53	9%	
				Surveyed	68.69	91%	

The following tables provide a listing of milepost locations where biological and cultural resource surveys have not been completed to date. The Project continues to seek survey access permission for these outstanding tracts and anticipates completion of additional survey efforts in the third quarter of 2019. In addition, the Project is currently conducting surveys for federal and state-listed rare species and now anticipates completion of those during the third quarter of 2019.

Pipeline	Parcel ID	MP Start	MP End	Length (Feet)
Southgate H650	VA-PI-151.000	19.94	19.94	16
Southgate H650	VA-PI-179.000.RR	24.96	24.97	55
Southgate H650	NC-RO-081.000	37.72	37.76	213
Southgate H650	NC-RO-080.000	37.76	37.84	469
Southgate H650	NC-RO-081.000	37.91	37.97	328
Southgate H650	NC-RO-095.000.RC	39.68	39.69	31
Southgate H650	NC-RO-098.000	39.69	39.69	24
Southgate H650	NC-RO-097.000.RR	39.69	39.72	134
Southgate H650	NC-RO-111.000.RC	41.58	41.63	272
Southgate H650	NC-RO-111.000.RC	41.64	41.64	14
Southgate H650	NC-RO-143.000	46.01 RR	46.27 RR	1,354
Southgate H650	NC-RO-173.000	49.93 RR	50.13 RR	1,051
Southgate H650	NC-RO-177.000	50.34 RR	50.46 RR	628
Southgate H650	NC-RO-178.000	50.46 RR	50.59 RR	678
Southgate H650	NC-GU-001.000	52.34 RR	52.42 RR	427
Southgate H650	NC-RO-184.000	52.42 RR	52.44 RR	90
Southgate H650	NC-AL-000.020	52.77	52.92	812
Southgate H650	NC-AL-004.000	53.89	53.9	93
Southgate H650	NC-AL-050.000	58.23	58.53	1,598
Southgate H650	NC-AL-052.000	58.7	58.9	1,060
Southgate H650	NC-AL-053.000	58.9	59.11	1,105
Southgate H650	NC-AL-054.000	59.11	59.15	250
Southgate H650	NC-AL-058.000	59.17	59.29	654
Southgate H650	NC-AL-057.000	59.29	59.41	650
Southgate H650	NC-AL-059.000	59.41	59.47	285
Southgate H650	NC-AL-062.000	59.47	59.57	532
Southgate H650	NC-AL-064.000	59.57	59.72	806
Southgate H650	NC-AL-077.000	61.16	61.37	1,106
Southgate H650	NC-AL-077.000.RC	61.37	61.38	61
Southgate H650	NC-AL-080.000	61.38	61.39	59

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Pipeline	Parcel ID	MP Start	MP End	Length (Feet)
Southgate H650	NC-AL-097.000.WBC	63.59	63.64	302
Southgate H650	NC-AL-104.000	63.64	63.97	1,722
Southgate H650	NC-AL-104.000	63.98	64	75
Southgate H650	NC-AL-104.000	64.03	64.06	156
Southgate H650	NC-AL-106.000	64.06	64.33	1,473
Southgate H650	MVF-NC-AL-002.000	64.35	64.47	593
Southgate H650	MVF-NC-AL-003.000	64.47	64.47	20
Southgate H650	MVF-NC-AL-002.000	64.47	64.49	95
Southgate H650	FA3-AL-005.000	66.21	66.38	870
Southgate H650	NC-AL-122.000.RC	66.38	66.39	63
Southgate H650	FA3-AL-007.000	66.5	66.53	175
Southgate H650	FA3-AL-009.000	66.61	66.83 RR	1,124
Southgate H650	NC-AL-127.000.ABU	66.83 RR	66.88 RR	278
Southgate H650	NC-AL-129.000	66.88 RR	67 RR	638
Southgate H650	NC-AL-128.000	67 RR	67.3 RR	1,567
Southgate H650	NC-AL-134.000	67.52 RR	67.61 RR	455
Southgate H650	NC-AL-137.000	67.61	67.74	674
Southgate H650	NC-AL-139.000	67.89	68.01	622
Southgate H650	NC-AL-140.000	68.01	68.07	293
Southgate H650	NC-AL-141.000	68.07	68.1	195
Southgate H650	NC-AL-142.000	68.1	68.23	663
Southgate H650	NC-AL-145.000	68.47	68.57	525
Southgate H650	NC-AL-144.000	68.57	68.65	415
Southgate H650	NC-AL-163.000	69.47	69.47	3
Southgate H650	NC-AL-166.000	69.47	69.57	501
Southgate H650	NC-AL-169.000	69.57	69.64	381
Southgate H650	NC-AL-184.000	69.85	69.92	367
Southgate H650	NC-AL-191.000.RC	71.31	71.36	257
Southgate H650	NC-AL-194.000	71.87	72.06	989
Southgate H650	NC-AL-195.000	72.06	72.11	271
Southgate H650	NC-AL-196.000	72.11	72.2	451

Pipeline	Parcel ID	MP Start	MP End	Length (Feet)
Southgate H650	VA-PI-053.000	9.72	9.85	645
Southgate H650	VA-PI-175.000	23.55	23.67	613
Southgate H650	NC-RO-007.000	29.39 RR	29.39 RR	21
Southgate H650	NC-RO-042.000	33.6	33.88	1465
Southgate H650	NC-RO-081.000	37.72	37.76	213
Southgate H650	NC-RO-080.000	37.76	37.84	469
Southgate H650	NC-RO-143.000	46.01 RR	46.27 RR	1354
Southgate H650	NC-RO-173.000	49.93 RR	50.13 RR	1051
Southgate H650	NC-RO-176.000	50.34 RR	50.34 RR	7
Southgate H650	NC-RO-177.000	50.34 RR	50.46 RR	628
Southgate H650	NC-RO-178.000	50.46 RR	50.59 RR	678
Southgate H650	NC-RO-179.000	50.59 RR	50.6 RR	97
Southgate H650	NC-GU-001.000	52.34 RR	52.42 RR	427
Southgate H650	NC-RO-184.000	52.42 RR	52.43 RR	50
Southgate H650	NC-AL-000.020	52.77	52.92	812
Southgate H650	NC-AL-004.000	53.89	53.9	93
Southgate H650	NC-AL-046.000	57.86	58.23	1926
Southgate H650	NC-AL-050.000	58.23	58.53	1598
Southgate H650	NC-AL-052.000	58.7	58.9	1060
Southgate H650	NC-AL-053.000	58.9	59.11	1105

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Pipeline	Parcel ID	MP Start	MP End	Length (Feet)
Southgate H650	NC-AL-054.000	59.11	59.15	250
Southgate H650	NC-AL-054.000.RC	59.15	59.17	67
Southgate H650	NC-AL-058.000	59.17	59.29	654
Southgate H650	NC-AL-057.000	59.29	59.41	650
Southgate H650	NC-AL-059.000	59.41	59.47	285
Southgate H650	NC-AL-062.000	59.47	59.57	532
Southgate H650	NC-AL-064.000	59.57	59.72	806
Southgate H650	NC-AL-077.000	61.15	61.37	1120
Southgate H650	NC-AL-077.000.RC	61.37	61.38	61
Southgate H650	NC-AL-080.000	61.38	61.39	59
Southgate H650	NC-AL-104.000	63.64	63.97	1722
Southgate H650	NC-AL-104.000	63.98	64	75
Southgate H650	NC-AL-104.000	64.03	64.06	156
Southgate H650	NC-AL-106.000	64.06	64.33	1473
Southgate H650	MVF-NC-AL-002.000	64.35	64.47	593
Southgate H650	MVF-NC-AL-003.000	64.47	64.47	20
Southgate H650	MVF-NC-AL-002.000	64.47	64.49	94
Southgate H650	MVF-NC-AL-005.000	64.62	64.68	332
Southgate H650	MVF-NC-AL-006.000	64.68	64.69	46
Southgate H650	MVF-NC-AL-005.000	64.69	64.78	505
Southgate H650	FA3-AL-005.000	66.21	66.38	870
Southgate H650	FA3-AL-007.000	66.5	66.53	175
Southgate H650	FA3-AL-009.000	66.61	66.83 RR	1123
Southgate H650	NC-AL-127.000.ABU	66.83 RR	66.88 RR	278
Southgate H650	NC-AL-129.000	66.88 RR	67 RR	638
Southgate H650	NC-AL-128.000	67 RR	67.17 RR	902
Southgate H650	NC-AL-134.000	67.52 RR	67.61 RR	455
Southgate H650	NC-AL-137.000	67.61	67.74	674
Southgate H650	NC-AL-139.000	67.89	68.01	622
Southgate H650	NC-AL-140.000	68.01	68.07	293
Southgate H650	NC-AL-141.000	68.07	68.1	195
Southgate H650	NC-AL-142.000	68.1	68.23	663
Southgate H650	NC-AL-145.000	68.47	68.57	525
Southgate H650	NC-AL-144.000	68.57	68.65	415
Southgate H650	NC-AL-163.000	69.47	69.47	3
Southgate H650	NC-AL-166.000	69.47	69.57	501
Southgate H650	NC-AL-169.000	69.57	69.63	337
Southgate H650	NC-AL-184.000	69.85	69.92	367
Southgate H650	NC-AL-194.000	71.87	72.06	989
Southgate H650	NC-AL-195.000	72.06	72.11	271
Southgate H650	NC-AL-196.000	72.11	72.2	451
Southgate H650	NC-AL-206.000	72.84 RR	72.85 RR	19
				34,578

Name of Respondent: Mr. Alex Miller

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Request:

Resource Report 1 - General Project Description

4. In review of the Project alignment sheets, staff notes that Mountain Valley proposes ATWS at the intersection of every proposed temporary and permanent access road with the right-of-way. Provide site-specific justifications for all of these ATWSs. General parking, passing, and materials storage is not sufficient justification for this use of ATWS. Justifications should note limitations such as topography, reduced construction right-of-way, etc. Also, describe the measures Mountain Valley would implement to minimize vehicle traffic along the right-of-way. Lastly, describe the feasibility of bussing workers to construction areas as a measure to reduce vehicle traffic along the right-of-way and to reduce the need for the proposed ATWS associated with the proposed temporary and permanent access roads.

Response Submitted June 21, 2019:

Updated Appendix 1-D - Additional Temporary Workspace Areas Associated with Construction of the Southgate Project provided in Attachment 2-1 includes updated justifications for ATWS areas located at (or near) the intersection of access roads and the construction right-of-way.

The Project will make every effort possible to reduce personal vehicles parking and traversing throughout the Project area. The Project is committed to bussing or shuttling workers to the project that do not require the use of vehicles to reduce overall parking and vehicle traffic along the ROW. A bussing plan will be established closer to construction once contractor resources, schedules, and logistics have been confirmed. Please note that parking will still be required for personnel that require transportation such as welders, NDE service, survey, and other inspection. The Project will also use utility terrain vehicles to reduce the amount of space needed for parking in ATWS.

The Project calculates that there is approximately 2.16 acres of forested land that would be affected by the use of identified ATWS areas which represents approximately 2.6% of the overall land use impacts associated with ATWS areas located at or near the intersection of the access roads and the construction right-of-way. The Project will continue to review proposed pull-off locations along access roads and modify ATWS, if feasible, to minimize tree clearing.

Name of Respondent: Mr. James Sabol

Title: Project Manager

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5. Per the October 5, 2018 EIR item #10, quantify the acreage affected by the projects listed in table 1.10-2 within the geographic scope for cumulative impacts to land use.

Response Submitted June 21, 2019:

The acreage affected by the projects listed in Table 1.10-2 within the geographic scope for cumulative impacts to land use was added to Table 1.10-2 (see the "Acres Affected" column in Attachment 5-1).

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

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6. In revised table 1.10-2, submitted in Mountain Valley's May 13, 2019 EIR #2 Data Response, the Kimery Road Solar Project is described as a 7.6 kilowatt residential rooftop installation located at 1900 Kimery Road, Haw River, NC; however, the application submitted to the North Carolina Utilities Commission states this project would be a 2.682 MW (DC) / 1.99 MW (AC) ground-mounted facility located at 1800 Kimery Road, Haw River, NC. Clarify this discrepancy and update acreages and potential cumulative impacts for this project accordingly.

Response Submitted June 21, 2019:

The North Carolina Utilities Commission (NCUC) application for a 1.99 megawatt ground-mounted solar facility has been added to the updated Table 1.10-2 in Attachment 5-1. Both the ground-mounted facility at 1800 Kimrey Road (NCUC docket SP-8494) and the roof-mounted facility at 1900 Kimrey Road (NCUC docket SP-16880) are now included in Table 1.10-2. The ground-mounted facility (SP-8494) was applied for in 2016. There is no constructed facility visible on available aerial imagery at 1800 Kimrey Road, and no project footprint is provided in the NCUC application materials available online. Project personnel visited the location and confirmed that a ground mounted facility has not been installed. It is currently unknown if the project is still planned, therefore, impact acres for the applicable geographic scopes for the 1800 Kimrey Road ground-mounted solar facility are unknown.

Name of Respondent: Mr. Alex Miller

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7. Provide discussion for the Virginia Southside Expansion II Project (CP15-118), which included upgrades to Transco's Compressor Station 166 located approximately 600 feet from the location for the proposed Lambert Compressor Station. Evaluate cumulative impacts for all applicable resources from Transco Compressor Station 166.

Response Submitted June 21, 2019:

The Transco Virginia Southside Expansion II includes approximately 4.19 miles of 24-inch-diameter lateral pipeline connecting the existing Brunswick Lateral to the planned Virginia Electric and Power Company (VEPCO) Greensville Power Station; one new meter and regulator station; additional compression at two existing compressor stations; and modifications at 19 existing facilities. The project is within Brunswick, Greensville, Prince William and Pittsylvania Counties, Virginia; Polk County, North Carolina; and Spartanburg and Cherokee Counties South Carolina. Information for the Virginia Southside Expansion II was obtained from the Virginia Southside Expansion Project II Environmental Assessment, May 2016 (FERC Docket CP15-118). The Virginia Southside Expansion II Project is currently in-service.

The Environmental Assessment stated construction of the project would affect approximately 180.1 acres of land; 29.3 acres would be used as permanent ROW or land affected during operation; 150.8 acres total would revert to pre-construction conditions and uses.

Transco would disturb approximately 0.9 acres of wetlands during construction of the Virginia Southside Expansion II. Of the total construction-related impacts, approximately 0.5 acres of wetlands would be permanently affected by operation of the project. Transco would disturb approximately 100.9 acres of developed land, 47.7 acres of herbaceous vegetation, and 30.0 acres of deciduous forest. Areas within the permanent right-of-way are 1.0 acres of developed land, 14.9 acres of herbaceous vegetation, and 12.4 acres of deciduous forest. Approximately 1.3 miles of prime farmland and 3.6 miles of farmland of statewide importance are crossed by the pipeline. A total of 1.7 acres of prime and farmland of statewide importance would be impacted by new aboveground facilities.

The operation of this project would result in emissions typical of those from natural gas project with compressor stations and associated equipment. The Environmental Assessment concluded that there would be no regionally significant impacts to air quality.

The modification of Compressor Station 166 in Pittsylvania County, Virginia falls within the geographic scope for cumulative impacts, as it is located approximately 600 feet from the proposed Lambert Compressor Station. The modification includes 21,830 horsepower of additional compression, including piping, valve modification, gas cooling, and the re-wheeling of two existing compressor units. This modification would affect 29.2 acres of land that had already been cleared, graded, and fenced for the previously approved Transco Southside Expansion project.

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Project modifications at Compressor Station 166 would not require any additional acreage and the fence line would not need to be expanded for the modifications associated with Virginia Southside Expansion II. Work areas associated with these modifications are located within two shared 5th level (HUC 10) watersheds and two 6th level (HUC 12) sub watersheds of the proposed Project; no wetland or waterbody impacts are associated with the modifications at Compressor Station 166. Other resource areas within the geographic scope for cumulative impacts include cultural resources, vegetation, wildlife, land use, air quality, noise, and visual resources, which would not be significant, as the station is already an existing aboveground facility. Detailed information on cumulative impact resources is provided in Attachment 5-1, Table 1.10-2.

Major environmental permits, licenses, approvals and consultations applicable to the Virginia Southside Expansion II project include Federal, State and local permits: a FERC Certificate; Clean Water Act, Section 404 Permit, Nationwide 12; Section 401; Section 7 consultation with the U.S. Fish and Wildlife Service; and other state and local permits for the states of Virginia, North Carolina, and South Carolina.

Name of Respondent: Mr. Alex Miller

Mountain Valley Pipeline, LLC **MVP Southgate Project**

Docket No. CP19-14-000

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Federal Energy Regulatory Commission

Request:

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- 8. As requested in the February 13, 2019 EIR item # 12 a., b., and c., for each project described in table 1.10-2 provide the following information:
 - a. total acreage affected by the project within each shared hydrologic unit code (HUC) -12 watershed;
 - b. acreage of forest cleared within the shared HUC-12 watershed where the Southgate Project affects forest; and
 - c. acreage of wetlands (palustrine forested [PFO], palustrine scrub-shrub [PSS], and palustrine emergent [PEM]) affected within the shared HUC-12 watershed where the Southgate Project affects wetlands.

If the data is not available, please indicate this.

Response Submitted June 21, 2019:

- a. The total acres affected for each project in Table 1.10-2 in each shared HUC-12 watershed was previously provided to FERC on May 22, 2019, column heading "HUC 12 Acres (in Shared HUC 12)" (see Attachment 5-1). Where acreage information was not publicly available, it is noted as such in Table 1.10-2.
- b. Acreage of forest cleared within the shared HUC-12 watershed where the Southgate Project affects forest is provided in new table 1.10-2a, column heading "Acreage of upland forest cleared within the Shared HUC-12 where the Southgate Project affects forest" (see Attachment 5-1). Where acreage information was not available, it is noted as such in Table 1.10-2a.
- Acreage of wetlands (PFO, PSS, and PEM) affected within the shared HUC-12 watershed where the Southgate Project affects wetlands is provided in new table 1.10-2a, in three individual columns (i.e., PFO, PSS, PEM) (see Attachment 5-1). Where acreage information was not available, it is noted as such in Table 1.10-2a.

Name of Respondent: Mr. Alex Miller

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Request:

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9. Table 1.10-5 submitted in Mountain Valley's May 13, 2019 EIR #2 DataResponse lists 79 waterbodies as being crossed by the Southgate Project; however, Mountain Valley's Application cites 224 crossings of waterbodies. Reconcile this discrepancy and provide revised responses to February 13, 2019 EIR items 14.a. and 14.b.

Response Submitted June 21, 2019:

The May 13, 2019 Table 1.10-5 only included waterbodies crossed by the Southgate Project in HUC 10 watersheds where other projects were identified to also cross waterbodies (where that information was available) as requested by FERC in EIR#2. Table 1.10-5, included below, is updated to include the total number of waterbodies crossed by the Southgate Project based on the current route as file in the May 22, 2019 supplemental filing.

		Table 1.	10-5					
Waterbodies Affected in Sha	ared HUC 1	0 Watershed	ls for the So	uthgate Pr	oject and C	Other Proje	cts	
	Number	of Waterboo Southgate		d by the	Number of Waterbodies Crossed by the Other Relevant Projects ^b			
Watershed (10-Digit HUC)	Ephemeral	Intermittent	Perennial	Pond	Ephemeral	Intermittent	Perennial	Pond
Stinking River - Banister River (0301010502)	0	0	0	0	0	5	2	0
Cherrystone Creek-Banister River (0301010501)	0	13	10	1	o	11	5	0
Wolf Island Creek – Dan River (0301010310)	1	2	18	0	0	0	0	0
Cascade Creek – Dan River (0301010309)	10	19	33	0	0	0	0	0
Hogans Creek – Dan River (0301010401)	4	4	20	0	0	0	0	0
Headwaters Haw River (0303000202)	0	4	10	0	0	0	0	0
Back Creek – Haw River (0303000204)	9	34	37	1	0	4	1	0
Subtotal Waterbodies Crossed by type	24	76	128	2	0	20	8	0
Subtotal Waterbodies Crossed by the Project and the projects	227 28							
Cumulative subtotals Waterbodies Crossed ^{c/}	105 U/ 28							
a/ Field delineated streams through May 9, 201	9 crossed b	y the MVP S	outhgate Pro	ject pipeline	es.			

Post-Application Environmental Information Request #3

Dated June 11, 2019

Table 1.10-5								
Waterbodies Affected in Shared HUC 10 Watersheds for the Southgate Project and Other Projects								
	Number of Waterbodies Crossed by the Southgate Project ^{al}				Number of Waterbodies Crossed by the Other Relevant Projects ^b .			
Watershed (10-Digit HUC)	Ephemeral	Intermittent	Perennial	Pond	Ephemeral	Intermittent	Perennial	Pond

b/ Mapping included in the FERC eLibrary, available aerial imagery, and the USGS National Hydrography Dataset, were used to determine number of stream crossings for other projects in HUC 10 watersheds shared with the Southgate Project.

Name of Respondent: Mr. Alex Miller

c/ Waterbodies crossed by centerline only. Multiple crossings of individual waterbodies are counted as separate crossings.
d/ Sum of waterbodies shown in the gray shaded rows for Stinking River - Banister River, Cherrystone Creek-Banister River, and Back Creek-Haw River.

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 2 - Water use and Quality

10. Provide the quantity of acre-feet (or other volume measure) of displacement from permanent impacts located within 100-year flood zone including the 3 previously identified impacts areas located at T-15 Dan River interconnect/MLV-4, PA-RO- 082, PA-RO-82A. In addition, provide site-specific justification for placing permanent structures within floodplains.

Response Submitted June 21, 2019:

The current design of the T-15 Dan River Interconnect has a small imbalance of excess material that the Project anticipates can be balanced during construction. Therefore, the facility will have a net zero displacement within the 100-year flood zone. It should be noted that the majority of the facility location is "on grade." The two permanent access roads (PA-RO-082, PA-RO-082A) are existing roads that do not require any improvement or expansion and therefore displace zero cubic yards of material.

The Project does not have any other permanent facilities currently sited in the 100-year flood zone.

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 2 - Water Use and Quality

11. Provide justification for permanent impacts on wetlands at aboveground facilities which would constitute a modification to the FERC Procedures.

Response Submitted June 21, 2019:

The Project is not anticipating permanent loss (i.e. fill) of wetlands at aboveground facilities. The Project's permanent workspace extended beyond the limits of the compressor station fenceline, which would have resulted in a permanent conversion of 0.02 acres of forested wetland W-F18-11. The Project is finalizing the stormwater management design and is committed to modifying the permanent workspace at this location to eliminate Project-related activities to this wetland.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 2 - Water Use and Quality

12. Provide a copy of Mountain Valley's Wetland and Waterbody Construction and Mitigation Procedures that includes all of the Southgate Project's modifications to the FERC Wetland and Waterbody Construction and Mitigation Procedures.

Response Submitted June 21, 2019:

A copy of the Mountain Valley Pipeline, LLC, MVP Southgate Project, Wetland and Waterbody Construction and Mitigation Procedures that includes all of the Project's alternative measures to the FERC Wetland and Waterbody Construction and Mitigation Procedures is included Attachment 12-1. Appendix A of MVP Southgate Project Wetland and Waterbody Construction and Mitigation Procedures provides a list of those areas where use of ATWS within 50 feet of a wetland and/or waterbody is requested. Mountain Valley is also developing a Project-specific Upland Erosion Control, Revegetation and Maintenance Plan which will be submitted to FERC at a later date.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 3 – Fish, Wildlife, and Vegetation

13. Provide written correspondence from the pertinent U.S., Virginia, or North Carolina agencies indicating the allowable work windows during which Mountain Valley may conduct construction activities within the waterbodies of Virginia and North Carolina. The FERC Procedures (V.B.1(b) mandate that construction activities occur between June 1 and November 30 for warmwater habitat waterbodies unless expressly permitted or further restricted in writing on a site-specific basis by the appropriate federal or state agency.

Response Submitted June 21, 2019:

The Project consulted with the Virginia Department of Game and Inland Fisheries (VDGIF) regarding time of year restrictions (TOYRs) for waterbodies crossed by the Project in Virginia. Based on the results of consultation and the results of aquatic surveys (provided to VDGIF in May 2019), no in-stream work restrictions from VDGIF's "Time of Year Restrictions and Other Guidance Document" (July 5, 2018) are applicable to the Project. Copies of this correspondence are included in Attachment 13-1.

The Project consulted with the North Carolina Wildlife Resources Commission (NCWRC) regarding TOYRs for waterbodies crossing by the Project in North Carolina. Based on the proposed stream crossing methods and anticipated Best Management Practices, the NCWRC is not imposing any TOYRs at any waterbody crossings. Copies of this correspondence are included in Attachment 13-1.

Timing restrictions that differ from the FERC Procedures developed in consultation with the applicable state agencies is permitted under Section V of the FERC Procedures. Therefore, the Project anticipates that permitted in-stream activities can occur at any time of year within the waterbodies crossed by the Project per VDGIF and NCWRC approvals.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 3 – Fish, Wildlife, and Vegetation

14. Provide an update regarding the percent completed and results of the bat portal searches initiated in June 2018 (Resource Report 3 section 3.5.1.2 notes only 80 percent of Project had been surveyed at the time of the application filing but no further updates have been provided to-date).

Response Submitted June 21, 2019:

The Project has conducted bat portal surveys in conjunction with wetland surveys since June 2018. As of June 14, 2019, approximately 92 percent of the current Project alignment has been surveyed for wetlands and no potential bat portals were identified. A desktop review of mining databases and karst resources along the remaining 8 percent of the Project alignment shows no indication of potential portals; however, this will be verified by field surveys once survey permission has been obtained.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 3 – Fish, Wildlife, and Vegetation

15. Provide an update regarding consultation with VADGIF to determine applicable avoidance, minimization or mitigation strategies to minimize impacts on bat species, including the Virginia-endangered tri-colored bat.

Response Submitted June 21, 2019:

The February information request included a request for correspondence from VDGIF that the Project's proximity to the Transco Road Net Conservation would not significantly affect the state endangered tri-colored bat. Mountain Valley reduced the Project limits of disturbance to avoid impacts to the Transco Road Net Conservation site and a map showing this avoidance was submitted to VDGIF on June 20, 2019. Mountain Valley requested confirmation from VDGIF that this adjustment to the project limits of disturbance is sufficient to ensure the Project would not significantly affect the tri-colored bat. Upon confirmation from VDGIF, Mountain Valley will submit the proposed adjustments to the limits of disturbance to FERC as part of a future supplemental filing.

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 3 – Fish, Wildlife, and Vegetation

16. Provide results reports and any associated agency correspondence for the aquatic species surveys (including freshwater mussels and crayfish) conducted in North Carolina and referred to in the Agency Correspondence filed by Mountain Valley on May 22, 2019.

Response Submitted June 21, 2019:

Aquatic species surveys were conducted between April 8-20, 2019 at seven waterbody crossings in North Carolina. Of the remaining 12 streams, three have right-of-way access and are scheduled for survey June 24-27, 2019. The remaining nine waterbodies are currently denied properties and surveys are anticipated to be completed in July 2019. Once all stream locations are complete, a full survey report for all North Carolina locations will be submitted to FERC, USFWS and the NCWRC.

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 4 – Cultural Resources

17. Document that copies of all cultural resources investigation reports for Virginia were conveyed to the Upper Mattaponi Tribe (provided that they sign a confidentiality agreement with Mountain Valley to keep cultural resources data privileged and not release data to the public). File all tribal comments on the reports with the FERC.

Response Submitted June 21, 2019:

The Upper Mattaponi were provided access to cultural reports on February 27, 2019. A compact disc was additionally delivered to the tribal representative. A follow-up conversation was had on May 1, 2019 where they confirmed that there were no comments. Updated reports will continue to be provided to all interested tribes as practicable. Correspondence regarding transmittal of cultural reports is provided in Attachment 17-1 and labeled CUI/PRIV – DO NOT RELEASE.".

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 4 – Cultural Resources

- 18. File copies of the reviews by the North Carolina State Historic Preservation Office (SHPO) of the following cultural resources reports filed by Mountain Valley on May 22, 2019:
 - Karpynec, T. May 2019. Draft Addendum Report: Historic Architectural Survey for the MVP Southgate Pipeline Project, Rockingham, Alamance, Guilford, and Caswell Counties, North Carolina; and
 - b. Millis, T. April 2019. Draft Report: Phase II Archaeological Testing of Sites 31RK222, 31RK259, and 31RK261 and Supplemental Phase I Deep Testing Investigations at Four Locations in the Town Creek Drainage for the MVP Southgate Project, Rockingham County, North Carolina.

File copies of avoidance or treatment plans for archaeological sites 31RK222 and 31RK259. Document that the plans were also submitted to the North Carolina SHPO, and file the SHPO comments on the plans.

Response Submitted June 21, 2019:

As of June 17, 2019, the Project has not received the North Carolina SHPO's review of the Draft Addendum Historical Architectural Survey report (Karpynec 2019).

The North Carolina SHPO's review of the Draft Phase II Archaeological Testing of Sites 31RK222, 31RK259, and 31RK261 and Supplemental Phase I Deep Testing Investigations report is included as Attachment 18-1 and labeled CUI/PRIV – DO NOT RELEASE."

Avoidance or treatment plans for archaeological sites 31RK222 and 31RK259 will be prepared and submitted to the North Carolina SHPO in August 2019. The Project will file those plans, including subsequent SHPO comments, with the FERC when they are available.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 6 – Geology

19. Provide detailed methodology and location of field verification conducted as part of the Karst Hazard Assessment to determine the existence of potential karst.

Response Submitted June 21, 2019:

The evaluation of potential karst hazards for the Project was documented in the Karst Hazards Assessment (KHA), version 3.0 dated April 2019, originally provided in Appendix 6-E of Resource Report 6 (and filed on May 22, 2019). A desktop review identified potential portions of the limit of disturbance (LOD) where karst features may be present, as summarized below in Table 6.5-1 below and included in the KHA.

Table 6.5-1 Locations where the Project alignment intersects conglomerate that may represent karst terrain							
County, State	From Milepost	To Milepost	Crossing Length (feet)	Rock Type	Construction Method		
Pittsylvania, Virginia	0.03	1.00	3,696	conglomerate (covered by terrace deposits)	Open-cut and bore (road crossings)		
Pittsylvania, Virginia	14.95	15.70	3,960	Conglomerate	Open-cut and bore (road crossings)		
Pittsylvania, Virginia	21.20	21.50	1,584	Conglomerate	Open-cut and bore (road crossings)		
Pittsylvania, Virginia	21.80	21.91	581	Conglomerate	Open-cut and bore (road crossing)		
Pittsylvania, Virginia	22.12	22.30	950	Conglomerate	Open-cut and bore (road crossing)		

Henika, William S. and Paul A. Thayer. 1983. Geologic map of the Spring Garden Quadrangle, Va. Va. Division of Geology and Mineral Resources Publication 48, 1:24,000 scale map. Marr, J.D., Jr. 1984. Geologic map of the Pittsville and Chatham Quadrangles, Va. Va. Division of Geology and Mineral Resources Publication 49, 1:24,000 scale map. Price, V., J.F. Conley, R.G. Piepul, G.R. Robinson, P.A. Thayer, and W.S. Henika, 1980. Geology of the Whitmell and Brosville quadrangles, Va. Publication 021, 1:24,000 scale map.

No potential karstic geology was identified by this desktop study in North Carolina along the Project alignment.

A field verification was completed by karst specialists in April 2019 in order to complete the KHA. A team of two karst specialists walked, and directly observed the terrain within 150 feet of the proposed LOD along the mileposts summarized in Table 6.5-1. No sinkholes, areas of negative drainage, cave entrances, soil pipes, or other terrain features indicative of karst formations, were observed. Since none of these features were observed, the additional testing requiring invasive sampling, borings, or geophysical remote sensing were deemed unnecessary.

The field verification confirmed the overall conclusion in the KHA that the potential for karst hazards occurring along the Project LOD and near vicinity is minimal.

Post-Application Environmental Information Request #3 Dated June 11, 2019

Name of Respondent: Mr. Neil Florentine Title: Manager, Design Engineering Phone Number: 412-553-5936

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 6 – Geology

20. Pursuant to the April 23, 2019 EIR item #26 and Mountain Valley's May 22, 2019 supplemental filing, Mountain Valley states "with this change in alignment, the Project expects impacts to the Quarry will be reduced" and references that proposed route variations could impact East Alamance Quarry's proposed future mining operations. Describe the buffer zone between the proposed construction areas and current and currently identified future mine areas. Identify any landowner or operator concerns about the proposed facilities and state whether route alternative(s) address these concerns. Also, address the potential for the Project to hinder mine reclamation or expansion efforts.

Response Submitted June 21, 2019:

The current Project alignment (as filed on May 22, 2019) impacts the East Alamance Quarry parcels, owned by Martin Marietta, for approximately 230 feet.

The Project obtained public information that indicates that Martin Marietta has not yet filed for a mining permit on the parcel in question (NC-AL-128). Through discussions with Martin Marietta, it was identified that future mining operations may be completed on this parcel, conflicting with an earlier version of the pipeline route through the middle this parcel. As indicated in the May 22, 2019 supplemental filing, the Project proactively relocated the route in an attempt to minimize impacts to any future expansion of the East Alamance Quarry. Currently, the Project alignment is approximately 430 feet from disturbed areas (obtained via aerial imagery on parcel FA3-AL-010) at MP 66.7 and more than 1,200 feet from the disturbed areas at MP 67, where the alignment enters the Martin Marietta-owned property. The Project does not foresee any hindrance to mining reclamation and potential minimal impacts to future expansion.

At this time, the Project has not received any landowner or operator concerns related to the proposed facilities. The Project continues to attempt to coordinate survey efforts on the East Alamance Quarry property.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 7 – Soils

21. Provide an analysis that describes the likelihood of encountering contaminated soil and/or groundwater originating at any sites listed in Resource Report 2, appendix 2D and table 2.2-3 with a status of active or unresolved, or for which institutional or engineering controls are in place. At any location where there is a high likelihood of encountering existing contamination, develop and file a site-specific soil and groundwater management plan that would avoid, minimize, or otherwise mitigate impacts.

Response Submitted June 21, 2019:

Based on the distance and direction of the current Project workspace to the sites listed in Resource Report 2 – Table 2.2-3 and Resource Report 2 – Appendix 2D, the likelihood of encountering contaminated soil and/or groundwater originating from those sites is low. The closest identified site with an active or unresolved status is over 400 feet from the Project workspace, and none of the active sites have documented releases or issues outside of the subject property. In addition, groundwater at all these locations is deep enough that it will not be encountered.

Since the likelihood of encountering existing contamination from a known active or unresolved site identified in Resource Report 2 – Table 2.2-3 and Resource Report 2 – Appendix 2D is low, site-specific soil and groundwater management plans are not required. Should soil and/or groundwater contamination be encountered during construction of the Project, Mountain Valley will adhere to the provisions of its Spill, Prevention, Control, and Countermeasures Plan, Unanticipated Discovery of Contamination Plan (Resource Report 1 - Appendix 1-G) as well as applicable federal and state regulations.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 8 – Land Use, Recreation, and Visual Resources

22. Provide a discussion of the potential impacts on hunting activities within the Project area during construction, including tree clearing activities. Verify that Mountain Valley would coordinate with landowners regarding hunting on private property during active construction. Also, evaluate any potential safety concerns associated with the overlap of hunting seasons and construction activities. Discuss safety measures that would be employed such as a requirement that all construction workers wear safety vests during hunting seasons and education of workers regarding the timing of hunting seasons.

Response Submitted June 21, 2019:

Construction periods could coincide with a variety of hunting seasons in Virginia and North Carolina, as noted in the table below, and therefore potential safety concerns may arise. To date, the Project has not received any explicit requests regarding accommodation of private hunting from landowners that have signed easements. The Project confirms that it will coordinate with landowners if conflicts with planned hunting activities arise.

The Project will educate workers about hunting seasons, require workers to wear highly visible vests and hard hats, and would conduct daily safety meetings to inform workers of relevant conditions. If applicable, the Project will coordinate with landowners about hunting restrictions on private property and actively communicate those restrictions to any field crews in the area. It should be noted that all employees or contractors for the Project have "stop work" authority if an unsafe situation presents itself.

Virginia Hunting Seasons (2019 – 2020)	North Carolina Hunting Seasons (2019 – 2020)
Bear - Firearms: December 3 rd – December 8 th Deer - Archery: October 6 th – November 16 th and December 2 nd – January 5 th . Muzzleloader: November 3 rd – November 16 th and December 15 th – January 5 th . Firearms: November 17 th – January 5 th .	Bear - Firearms: November 10 th – January 1 st Deer - Archery: September 8 th – October 26 th . Muzzleloader: October 27 th – November 9 th . Firearm: November 10 th – January 1 st
Turkey - Archery: October 6 th – November 9 th . Firearms: October 27 th – November 9 th , November 22 nd , December 3 rd – December 29 th , January 12 th – January 26 th , and April 13 th – May 18 th .	Turkey - Firearm: Youth Season – April 6 th – April 12th, April 13 th – May 11 th Grouse – October 14 th – February 29 Pheasant – November 23 rd – February 1 Quail – November 23 rd – February 29
Squirrel - Firearms: June 1st – June 15th and September 1st – February 28th. Grouse - Firearms: October 27th – February 9th. Quail/Pheasant - Firearms: November 10th – January 31st.	Squirrel – October 14 th – February 29 (Red/Gray) / October 14 th – January 31 st (Fox)

Specific dates of opening and closing of hunting seasons are set by the individual states and subject to change.

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 8 – Land Use, Recreation, and Visual Resources

- 23. Provide the following information regarding site-specific Residential Construction Plans:
 - a. plans for the unoccupied residences/cabins within 25 feet at MP 22.2 (house) and at MP 58.6 (cabins);
 - b. a description of the noise and vibration mitigation that would be implemented to protect residences;
 - c. for the residences at MP 69.6 and 69.65, describe other construction techniques that could be used to decrease the distance/impacts on those structures; and
 - d. agreement information for residences (both occupied and unoccupied) that are crossed by the centerline and would be removed.

Response Submitted June 21, 2019:

a. Residential site-specific drawing RSS-H650-041 for the 1-story, unoccupied dilapidated house at MP 22.2 is included in Attachment 23-1. Additionally, residential site-specific drawing RSS-H650-042 for the unoccupied cabin at MP 58.6 is included in Attachment 23-1.

Due to Project changes, two additional residential site-specific plans have been added (H650-043 and H650-044). The entire set of drawings is being refiled for completeness.

b. - d. Information for items b. through d. are included Table 23 in Attachment 23-1.

Name of Respondent: Mr. Alex Miller

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 8 - Land Use, Recreation, and Visual Resources Description

24. In regards to the table included in Mountain Valleys' May 13, 2019 response to the FERC April 23, 1019 EIR#2 item #32 part h, which includes the current status of negotiations related to construction areas within 10 feet of a residence, update this table with information regarding easement negotiations. Due to the close proximity, include residences that are within 11 feet of construction workspaces.

Response Submitted June 21, 2019:

Please reference EIR #23 response, part d for landowner agreement status for residences within 15 feet of the construction workspaces.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 9 – Air Quality and Noise

25. Pursuant to the February 13, 2019 EIR item #127, Mountain Valley's March 28, 2019 supplemental filing, and the April 23, 2019 EIR item #34, provide recent correspondence that has occurred since April 23, 2019 with the VADEQ regarding the Virginia air permit application and its completeness. In addition, provide the revised criteria pollutant and formaldehyde dispersion modeling analyses that was not previously included in Mountain Valley's response to the April 23, 2019 EIR:

Response Submitted June 21, 2019:

The VADEQ is currently reviewing the revised air permit application submitted on April 25, 2019. The Project is waiting to conduct modelling until it receives feedback from the VADEQ on the revised permit application. The Project will provide the revised criteria pollutant and formaldehyde dispersion modeling analyses to the FERC after it receives feedback from VADEQ, expected in July 2019.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 9 – Air Quality and Noise

- 26. Pursuant to the February 13, 2019 EIR item #129 and April 23, 2019 EIR item #35, provide an assessment of applicability with the Pittsylvania County Noise Ordinance for the following:
 - a. 24-hour construction of the Lambert Compressor Station/Interconnect;
 - b. 24-hour construction of Railroad Crossings 1 and 2;
 - c. Maintenance blowdown at the Lambert Compressor Station; and

If applicable, include the calculated noise level at the property line and compare to the associated limit to assess compliance. Include mitigation measures as needed.

Response Submitted June 21, 2019:

The Project has completed noise modeling related to activities EIR items 26 a. through c. The Project continues to discuss applicability of the Pittsylvania County Ordinance with county officials.

Name of Respondent: Mr. Alex Miller

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

27. Identify the number of total pipeline route variations and/or workspace variations that were incorporated from landowner/stakeholder input.

Response Submitted June 21, 2019:

The pipeline route variations and/or workspace variations that were incorporated from landowner/stakeholder input are shown in Attachment 27-1. Those highlighted in yellow within the table represented specific changes incorporated based on a landowner request. In total there are 38 total pipeline route variations and/or workspace variations that were incorporated from landowner/stakeholder input.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

- 28. The following requests pertain to the comparison tables for route alternatives and route variations in Resource Report 10.
 - a. If applicable, provide revised comparison tables of the proposed route and alternatives based on project modifications filed by Mountain Valley on May 22, 2019.
 - b. Provide total number of residences within 25 feet and total number of residences within 50 feet in each of the comparison tables for the proposed route and each route alternative and route variation (if applicable).
 - c. Provide data source and methodology for determining Environmental Justice Areas reported in comparison tables provided in Mountain Valley's May 22, 2019 supplemental filing.
 - d. Some of the comparison tables for alternative routes and route variations present the length of the route adjacent to existing rights-of-way, while other comparison tables present the length of the route parallel or adjacent to existing rights-of-way. Clarify Mountain Valley's use of the terms "parallel" and "adjacent" providing typical offsets from existing rights-of-way.

Response Submitted June 21, 2019:

- a. Revised comparison tables are included in Attachment 28-1. The tables compare the current pipeline route (May 2019) with alternatives and variations. The Project has changed "Preferred Route" to Current Route (May 2019) in the titles of the comparison tables.
- b. Total number of residences within 25 feet and total number of residences within 50 feet in each of the comparison tables were included in all comparison tables except tables 10.5-1, 10.5-2, 10.5-3, and 10.5-10. Those tables have been updated to include this information (see Attachment 28-1).
- c. To determine potential impacts on minority and low-income populations, the Southgate Project used the following demographic index criteria to identify environmental justice communities: census block groups that have a minority population of more than 50 percent; census block groups that have a household poverty rate of more than 20 percent; and census block groups that have a household poverty rate or minority population that is 10 percent higher than their respective county.
 - This criteria used was the Environmental Protection Agency's ("EPA") Environmental Justice Interagency Working Group Promising Practices for Environmental Justice Methodologies in NEPA Reviews)[1] as recommended by the North Carolina's Department of Environmental Quality (NCDEQ). Please note, the minority population of more than 50 percent remain the same as the same criteria was used. However, the low-income populations has changed significantly since the recommended criteria uses populations whose household income is below once the federally defined poverty threshold (Table B17017) whereas, prior results were reported using population whose household income was below twice the federally defined poverty threshold (e.g., EJSCREEN).
- d. The Revised comparison tables have been changed to use the term "adjacent to" to existing right-of-way.

Post-Application Environmental Information Request #3 Dated June 11, 2019

Name of Respondent: Mr. James Sabol

Title: Project Manager

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

29. For minor route variations that were assessed based on landowner comments to avoid septic systems and ground water wells, provide a comparison of wells and septic systems within 150 feet for each of the route variations (i.e, add a row to the comparison tables that indicates how many wells or septic systems would be within 150 feet). If information is still not available due to survey access, indicate as such.

Response Submitted June 21, 2019:

The Project has received two landowner requests (Shambley and Strader) to avoid septic systems and groundwater wells in which Mountain Valley proposed a route variation.

In its May 13, 2019 Responses to Environmental Information Request #2, the Project evaluated the Shambley Variation 1 and Shambley Variation 2 to avoid or reduce impacts for a planned residence and septic system. Rows pertaining to the number of potable water wells and septic systems within 150 feet of the proposed centerline have been added to the comparison tables in Attachment 28-1 for both Shambley Variations (Tables 38-1a and 38-1b). To date, the Project has not completed field surveys to identify water wells or septic systems within the Shambley property or the associated variations, and public information on water wells and septic systems is not available. The Project has recently obtained survey permission and anticipates completing surveys in third quarter 2019 to obtain survey information related to the construction of the house and septic system.

In the May 13, 2019 Responses to Environmental Information Request #2, the Project indicated that it adopted a route modification on the Strader property that addresses issues related to groundwater wells and septic systems. The Project team was able to meet on site with the property owners to accurately locate the facilities.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Post-Application Environmental Information Request #3 Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

30. For the Pollok Hill View Farms Variation, provide a comparison between the proposed route and the variation regarding the amount of construction impacts there would be on the property (i.e., add a row to the comparison table that shows the length of pipeline/acres of construction impacts that would occur on the property for the proposed route and the variation). Additionally, specify if the comparison table shows the original proposed route or the revised route that incorporated parts of the route variation.

Response Submitted June 21, 2019:

In Revised Table 10.6-1 the Project added two rows in the table that show the length of pipeline/acres of construction impacts that would occur on the Robert Pollok-Hill View Farms property (see Attachment 28-1).

Revised Table 10.6-1 compares the current pipeline route (as filed in the May 22 2019 supplement), which incorporates changes along the route, with the route variation.

As included in the May 22, 2019 supplemental information, the Project incorporated several changes as requested by the landowner. The Project calculates that overall impacts have been reduced by 0.77 acres on the Pollok Hill properties with the revised project footprint when compared to the previous route.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Post-Application Environmental Information Request #3

Dated June 11, 2019

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

31. For the Martin Marietta and Haw River variations filed by Mountain Valley in the May 22, 2019 supplemental information, provide additional information including the rationale for the development of the alternatives, synopsis for each proposed alternative, and documentation of coordination with the East Alamance Quarry regarding the development of the alternatives.

Response Submitted June 21, 2019:

The Martin Marietta Variations were developed in order to minimize potential impacts to future mining operations on their parcel. As depicted in the May 22, 2019 supplemental information, the Project adjusted the route in this area to minimize impacts to the Martin Marietta parcels, including elimination of a major temporary access road (TA-AL-179A) that was previously routed through several Martin Marietta properties. The variations were developed due to the close proximity to the Martin Marietta property and a private landowner residence.

The Project has been communicating with Martin Marietta since April 2018. A correspondence record with Martin Marietta is included in Attachment 31-1 and labeled **CUI/PRIV – DO NOT RELEASE**." The Project continues to work with Martin Marietta to obtain survey permission on their East Alamance Quarry property. To date, no formal coordination has occurred, but rather discussion and responses to requests for information regarding survey purpose and protocol.

The Town of Haw River route variation was developed by the Project in an attempt to minimize impacts to the Town during the construction phase. The route variation closely resembles the Project's footprint during the pre-filing process and was surveyed during that timeframe. The current route extends directly behind the Municipal Building and Fire Station was implemented after early discussions with Town of Haw management regarding future potential development near the pre-filed route. The Project continues to review and discuss the alternative route with the Town of Haw River due to the potential impacts and inconveniences that may arise during the construction phase in part due to tight construction workspaces, close proximity to residences, and increased construction duration. If FERC adopts the alternative route, the Project is committed to working with any potential developers to minimize impacts to future plans for the area.

As noted in the May 22, 2019 supplemental information, the variation has many benefits to the current route. In summary, the variation will reduce impacts to the Town residences, avoid direct impacts to the Fire Station and Community Center, and is expected to reduce overall construction duration in that area by 66% by diverting directly south to cross Main Street and running west behind former textile mill structures. A railroad crossing is proposed to occur west of the current crossing and away from residences. The variation returns to the current route south of the city near mile post 70.0.

Name of Respondent: Mr. James Sabol

Title: Project Manager

Dated June 11, 2019

Post-Application Environmental Information Request #3

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

32. Expand the evaluation of the Martin Marietta (East Alamance Quarry) variations in the May 22, 2019 supplemental filing by providing a comparison that captures the avoidance/reduction of impacts on the East-Alamance Quarry (e.g., distance between the route and the quarry).

Response Submitted June 21, 2019:

In Attachment 28-1, the Project added the following rows to Table 1 and Table 2:

- Maximum Distance from Center of Easement to Quarry Property line (feet)
- Minimum Distance from Center of Easement to Quarry Property line (feet)
- Construction ROW impacting Quarry Property (acres)
- Permanent ROW impacting Quarry Property (acres)

Name of Respondent: Mr. James Sabol

Title: Project Manager

Post-Application Environmental Information Request #3 **Dated June 11, 2019**

Federal Energy Regulatory Commission

Request:

Resource Report 10 – Alternatives

33. Provide an analysis for the use of an electric motor-driven compressor at the Lambert Compressor Station (e.g. distance to nearest substation).

Response Submitted June 21, 2019:

As discussed in Section 10.7.2 of Resource Report 10, while electric motor-driven compressors can power compressor stations in some instances, this is not feasible for the Project due to the lack of sufficient electricity required for the Lambert compressor station site.

To use electric driven compressor units, electric power at high voltage would need to be supplied by overhead transmission lines to a substation that would be located at the Lambert Compressor Station site. The Lambert Compressor Station is not located near an existing high voltage substation. Based on a preliminary discussion with the Power Company and desktop review the closest high voltage substation is approximately one mile away. In discussions with the power company, this would likely require an upgrade to the existing power company substation, minimum of one mile of new, high voltage power lines, and an additional substation at the Lambert Compressor Station site all of which results in additional tree clearing, land disturbance, land purchases, and right-of-way access. The overall footprint for the Lambert Compressor station would need to increase from its current size.

Additionally, electric driven motors located at the Lambert Compressor Station could require a liquid cooled variable frequency drive, primarily to start the motor and then for speed control of the compressor. For these reasons, the use of electric driven compressor units is not a reasonable alternative for the proposed Lambert Compressor Station.

Name of Respondent: Mr. Neil Florentine Title: Manager, Design Engineering

VERIFICATION

State of Texas)	
)	SS
County of Harris)	

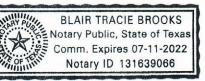
Alex Miller, being duly sworn, upon his oath says that he has read and is familiar with the foregoing responses to the Commission's June 11, 2019 data request for which he has responsibility and has personal knowledge of the matters set forth therein; that the facts stated therein are true and correct to the best of his knowledge, information and belief, and that he has full power and authority to prepare these responses and execute this verification.

Alex Miller

Environmental Manager

Subscribed and sworn before me this 20 day of June, 2019.

Notary Public



VERIFICATION

State of Pennsylvania)	
)	SS
)	
County of Washington)	

James Sabol, being duly sworn, upon his oath says that he has read and is familiar with the foregoing responses to the Commission's June 11, 2019 data request for which he has responsibility and has personal knowledge of the matters set forth therein; that the facts stated therein are true and correct to the best of his knowledge, information and belief, and that he has full power and authority to prepare these responses and execute this verification.

Project Manag

Subscribed and sworn before me this 20 day of June, 2019.

otary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Vanessa Rose Serafini, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires Feb. 24, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

VERIFICATION

State of Pennsylvania)	
)	SS
)	
County of Washington)	

Neil Florentine, being duly sworn, upon his oath says that he has read and is familiar with the foregoing responses to the Commission's June 11, 2019 data request for which he has responsibility and has personal knowledge of the matters set forth therein; that the facts stated therein are true and correct to the best of his knowledge, information and belief, and that he has full power and authority to prepare these responses and execute this verification.

Neil Florentine

Manager, Design Engineering

Subscribed and sworn before me this 20day of June, 2019.

Notary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL Vanessa Rose Serafini, Notary Public City of Pittsburgh, Allegheny County My Commission Expires Feb. 24, 2020

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES