COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Memorandum

To: Members of the State Water Control Board

From: Melanie D. Davenport
Director, Water Permitting Division

Date: March 26, 2018

Subject: 401 Water Quality Certification No. 17-001 - Mountain Valley Pipeline, LLC Report to the Board on the Supplemental Karst Evaluation Plan, Annual Standards and Specifications, and Erosion and Sediment Control and Stormwater Management Plans

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Background

On December 7, 2017, the State Water Control Board (Board) approved issuance of a Section 401 water quality certification (Certification) for upland activities for the Mountain Valley Pipeline (MVP). The Certification was issued and became effective on December 8, 2017 (Attachment A).

In order to ensure the protection of Virginia's environmental resources, the Department of Environmental Quality's (DEQ) review of MVP has been one of the most rigorous for any pipeline previously constructed in Virginia. DEQ has developed this report on MVP to provide additional information to the Board and the public on the adequacy of MVP's Supplemental Karst Evaluation Plan, Annual Standards and Specifications, and Erosion and Sediment Control and Stormwater Management Plans. Each of these documents has been subject to a thorough and comprehensive review process prior to receiving final approval from DEQ. Although the Board did not require this report when it approved the 401 Water Quality Certification No. 17-

001 for MVP, DEQ has prepared this report to be consistent with what the Board required when it issued the 401 Certification for the Atlantic Coast Pipeline (ACP) project.[1]

Supplemental Karst Evaluation Plan

In Virginia, the Department of Conservation and Recreation (DCR) administers the Virginia Cave Protection Act (Virginia Code § 10.1-1000 *et seq.*). This act created the Virginia Cave Board, whose statutory authority is to advise individuals, organizations, and public agencies on cave and karst related matters; provide cave management expertise; prepare and present educational material; identify significant caves; and recommend conservation and preservation measures for cave resources within Virginia. DEQ has worked closely with DCR's staff to the Cave Board to carefully evaluate challenges associated with constructing a pipeline in karst terrain.

With over 2,000 miles of existing gas pipelines currently constructed within the karst terrain of Virginia, Tennessee, Kentucky, and West Virginia, it has been demonstrated that pipeline construction can be safely accomplished in karst terrain. In its October 13, 2017 order granting MVP a Certificate of Public Convenience and Necessity, the Federal Energy Regulatory Commission (FERC) requires MVP to implement a number of activities before, during and after construction that are designed to greatly reduce the potential for impacts to karst related water resources. These include field identification and confirmation of sensitive features (springs, sinkholes, sinking streams, outcroppings); implementation of best work practices; deployment of onsite karst specialists, and in-field inspections and monitoring during construction. MVP has also made several major, and numerous minor, route adjustments to avoid karst features and sensitive water resources that were identified by MVP in its *Karst Hazard Assessment.*

FERC also required MVP to develop and implement a *Karst Mitigation Plan* which calls for minor adjustments within the approved right-of-way to avoid karst features encountered

[1] 401 Water Quality Certification No. 17-001 issued to MVP does not contain a delayed effective date. 401 Water Quality Certification No. 17-002 issued to ACP on December 20, 2017 has a delayed effective date and does not become effective until after the submission, review and final approval as required by law of the Karst Mitigation Plan (Supplemental Karst Evaluation Plan), Annual Standards and Specifications, and Erosion and Sediment Control Plans and Stormwater Management Plans, and a report to the Board and the public by DEQ on the adequacy of these materials.

during construction if and when necessary. MVP will implement multiple avoidance and protective measures during construction to prevent impacts to karst and water resources. Best management practices required by Virginia's erosion and sediment control program and FERC's requirements in MVP's *Spill Prevention, Control, and Countermeasure (SPCC) Plan* and the *Karst Mitigation Plan* are designed to prevent uncontrolled releases to surface waters and karst features in order to protect underlying aquifers. MVP will deploy karst experts as on-site inspectors during all phases of construction in karst terrain to monitor karst resources, identify potential connectivity to the subterranean environment, prevent uncontrolled surface water releases, prevent impacts to karst features, and ensure that prescribed measures are in-place to protect karst features, surface water, and groundwater resources.

Certification No. 17-001 issued to MVP requires submission and approval of a Supplemental Karst Evaluation Plan prior to initiating land disturbing activities in karst terrain. Specifically, Condition 3.c. requires "*To further evaluate flow paths for karst features in the vicinity of the project, the Owner shall develop a Supplemental Karst Evaluation Plan to be submitted to the Department for review and concurrence prior to initiation of land disturbing activities in karst terrain. The Department, with assistance from the Virginia Department of Conservation and Recreation (DCR) identified areas of concern in Attachment B of the Department's June 15, 2017 request letter. The Owner will conduct contingency planning in accordance with the findings and conclusions of the Supplemental Plan, as appropriate, in order to monitor and mitigate a potential accidental release or spill during construction in Virginia's karst terrain.*"

In response to DEQ's June letter (cited in the above condition) and in advance of the issuance of the Certification, on July 14, 2017, MVP submitted its Supplemental Karst Mitigation Plan (Plan), which was developed with guidance provided by DCR. The Plan described additional dye testing that would be conducted in order to evaluate flow paths in karst areas which had not been previously studied. This information would be used by MVP to facilitate the development of appropriate spill response and recovery measures (also referred to as "contingency plans") in the event substances are accidentally released in an area that could affect sensitive karst features during the construction or operation of the MVP project. The supplemental Plan is consistent with discussions and understandings reached among MVP's

consultants, DEQ and DCR staff at a karst work session on June 8, 2017, as well as various follow up consultations regarding the issues. DEQ and DCR reviewed the Plan and by letter dated March 13, 2018, DEQ concurred that the Plan would evaluate the flow paths for karst features identified in Attachment B of DEQ's June 15, 2107 request for information, as required by Condition 3.c of Section 401 Water Quality Certification No. 17-001.

MVP elected to retain DCR to conduct the dye tracing and evaluate flow paths that are included in the Plan. DCR conducted the field studies between August and November 2017. In a report dated February 27, 2018, DCR provided MVP and DEQ the results of the field studies. Information in this report will be used by MVP's Karst Specialist Inspectors who will be on-site in karst terrain during all phases of land disturbance, as required by the Mountain Valley Karst Mitigation Plan.

Finally, MVP consulted with DCR and prepared a field manual[2] consistent with the February 2018 report from DCR. This field manual identifies all milepost sections of the MVP Project limit of disturbance that overlie or are connected to karst terrain to assist MVP's Karst Specialist Team in responding to any accidental releases that may occur in those areas. This document (Attachment B) provides designation by route segment as defined by construction mileposts of karst waters (spring or springs, cave streams) potentially at risk for impact from construction activities or operation. Such segments will necessarily overlap in areas near spring basin boundaries (*e.g.*, the north slope of Sinking Creek Mountain). Pre-designation of and association of these corridor segments will be used in contingency planning to identify specific karst locations that require monitoring and any potential mitigation in the event of an accidental spill during construction and operation in karst terrains.

The field manual will also assist the Karst Specialists in identifying appropriate surface water locations in other areas of karst terrain outside the identified mileposts shown in the manual. This will be an additional resource to utilize along with other studies and plans such as the Karst Hazards Assessment, Karst Mitigation Plan, Erosion and Sediment Control Plan, and SPCC, for deployment of recovery and mitigation measures in the event of an accidental release during construction activities or operation.

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[2] MVP has titled this manual as the Karst Area Contingency Guide.

Annual Standards and Specifications

Virginia Code § 62.1-44.15:52 provides that Virginia's erosion and sediment control program and regulations shall be designed to prevent unreasonable degradation of properties, stream channels, waters, and other natural resources by providing for effective control of soil erosion, sediment deposition, and nonagricultural runoff from regulated land-disturbing activities. The Virginia Erosion and Sediment Control Program (VESCP) is authorized by the Virginia Erosion and Sediment Control Law and implemented through the Virginia Erosion and Sediment Control Regulations. These regulations specify the "minimum standards" that must be followed on all regulated activities including: erosion and sediment control design criteria, techniques, practices and policies.

Virginia Code § 62.1-44.15:25 provides that the Virginia Stormwater Management Program (VSMP) shall be designed to ensure the general health, safety, and welfare of the citizens of the Commonwealth, and to protect the quality and quantity of state waters from the potential harm of unmanaged stormwater. The VSMP is authorized by the Virginia Stormwater Management Act and implemented through the Virginia Stormwater Management Program Regulations. The VSMP addresses stormwater management at three critical phases: before construction starts through the review and approval of plans to ensure that local and state regulatory design criteria have been satisfied to protect state waters from unmanaged stormwater; during construction through the inspection of erosion and sediment control practices, pollution prevention measures, and the installation of stormwater best management practices that are used to prevent or reduce the pollution of state waters after construction is complete; and after construction through the inspection of BMPs to ensure proper maintenance is being performed by the owner.

State law requires natural gas pipeline utilities (and certain other utilities) to meet the requirements for the VESCP and VSMP under a DEQ-approved Annual Standards and Specifications (AS&S) Program. The Virginia Stormwater Management Program law and regulations establish that land disturbance associated with pipeline construction activities must satisfy the requirements of the stormwater and erosion and sediment control laws and regulations.

Specifically, Virginia Code § 62.1-44.15:31 states:

State entities, including the Department of Transportation, and for linear projects [including construction, installation, or maintenance of electric transmission, natural gas, and telephone utility lines and pipelines, and water and sewer lines], electric, natural gas, and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies shall ... annually submit a single set of standards and specifications for Department approval that describes how land-disturbing activities shall be conducted. Such standards and specifications shall be consistent with the requirements of this article and associated regulations, including the regulations governing the General Virginia Stormwater Management Program (VSMP) Permit for Discharges of Stormwater from Construction Activities and the Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq.) and associated regulations. ... The standards and specifications shall include:

1. Technical criteria to meet the requirements of this article and regulations developed under this article;

2. Provisions for the long-term responsibility and maintenance of stormwater management control devices and other techniques specified to manage the quantity and quality of runoff;

3. Provisions for erosion and sediment control and stormwater management program administration, plan design, review and approval, and construction inspection and enforcement;

4. Provisions for ensuring that responsible personnel and contractors obtain certifications or qualifications for erosion and sediment control and stormwater management comparable to those required for local government;

5. Implementation of a project tracking and notification system to the Department of all land-disturbing activities covered under this article; and

6. Requirements for documenting onsite changes as they occur to ensure compliance with the requirements of the article.

Virginia law, in § 62.1-44.15:31, affirmatively gives authority that would normally be delegated to a locality for the review, approval and enforcement of erosion control and stormwater management plans to the utility, with limited oversight by DEQ through review and approval of annual standards and specifications.

MVP worked for approximately eighteen months to develop, revise and refine AS&S in order to meet Virginia's legal and technical requirements. MVP's Annual Standards and

Specifications that address both erosion and sediment control and stormwater management were approved by DEQ on June 20, 2017 (Attachment C).

Mountain Valley Pipeline Project Specific Erosion and Sediment Control and Stormwater Management Plans

Due to the scope and scale of this project, concerns from local governments, legislators, and the public, DEQ required MVP to submit project specific erosion and sediment control (ESC) and stormwater management (SWM) plans for DEQ review and approval even though the plans are not required when approved AS&S are followed. Virginia Code § 62.1-44.15:55.D states that: "Individual approval of separate projects within subdivisions 1 and 2 is not necessary when approved specifications are followed". Subdivision 1 applies to construction, installation, or maintenance of electric transmission, natural gas, and telephone utility lines and pipelines, and water and sewer lines. DEQ does retain compliance and enforcement authority over any project specific erosion and stormwater plans and practices but DEQ in general does not review specific plans or construction. Requiring the submittal of ESC and SWM plans provides an additional measure to ensure protection of state waters. These project specific plans address every foot of land disturbance related to pipeline construction, including the path of the proposed pipeline right-of-way (ROW), access roads, construction lay-down areas and construction activities that will occur in streams and wetlands.

In order to provide a transparent review process and to receive public input, DEQ went beyond state law requirements and required MVP to post the plans on its website so that the public could review them and provide technical input on technical and engineering requirements of the draft ESC and SWM plans. The opportunity to provide input lasted at least 30 days.

DEQ contracted with an outside engineering consulting firm to assist in reviewing the ESC and SWM plans to ensure that they meet the design requirements contained in Virginia's regulations, including post-construction stormwater water quality and quantity requirements. DEQ worked very closely with the consulting engineers and remained the approval authority.

Project specific ESC and SWM plans have been in development since October 2016. DEQ (and its contractors), as well as MVP have spent tens of thousands of person-hours in designing and reviewing the plans. MVP and DEQ conducted approximately eleven (11) in-

person work sessions and meetings, supplemented by approximately seventeen (17) conference call work sessions between July 2017 and March 2018. This intensive review, comment, revision and collaboration resulted in project plans that meet the technical standards and criteria set out in the ESC and SWM regulations.

DEQ approved MVP's project specific erosion and sediment control and stormwater management plans by letter dated March 26, 2018 (Attachment D). Further information regarding the criteria for and review of the ESC and SWM Plans is included below.

Erosion and Sediment Control Plans

Virginia's Erosion and Sediment Control Regulation requires the development of a plan that demonstrates compliance with the criteria, techniques and methods described in nineteen (19) minimum standards. The Virginia Erosion and Sediment Control Handbook (Handbook) establishes minimum design and implementation standards for these practices that are utilized to achieve the minimum standards. The Handbook states that it is intended to serve as a technical guide but that innovative modifications to the control measures or design procedures are acceptable and encouraged, particularly to improve mitigation of sediment loss. Inherent in the development and approval of an erosion and sediment control plan is the application of best professional judgment and definition of underlying assumptions. In approving these project specific plans DEQ has deliberately applied a host of conservative assumptions in its design requirements.

MVP will utilize a number of erosion and sediment control practices during construction. The most frequent practices are: clean water diversions (CWD), enhanced inspection frequency, installation of temporary water bars, dry ditching of stream crossings (unless directional drilling is utilized), perimeter controls, temporary seeding/mulching of all disturbed areas within seven days of inactivity, top soil segregation and reuse, soil decompaction specifications and native seed mix for permanent revegetation.

The approved ESC plans require MVP to install approximately 1,050 individual CWDs during right-of-way construction. CWDs prevent clean water from running onto the construction right-of-way and picking up sediment. CWDs also reduce the volume of water that has come in

contact with disturbed land and allow for installed erosion control features to operate more effectively. MVP will also install temporary water bars, which are a ridge or channel constructed diagonally across the right-of-way to convey water off the construction site. Also known as slope breakers, they break the flow into smaller volumes to control the velocity of the water coming off of the site. All temporary water bars will have compost filter sock outlet protection and an excavated sump for additional capacity to filter runoff. MVP will utilize a variety of perimeter controls during the construction process, including: silt fence, super silt fence, compost filter sock, and belted silt retention fence on all downslope edges based on contributing slope lengths. These perimeter controls protect water bodies from sediment-laden runoff.

The ESC plans include a stream crossing restoration detail, which depicts the restoration sequence and mitigates erosion of streambanks during the operational life of the pipeline. Permanent water bars will be installed within 25 feet of all water body banks.

The specifications for both soil decompaction and top soil segregation are designed to improve plant growth and vitality and reduce runoff after stabilization. The specification for the permanent seed mix includes use of a native seed mix, which was developed to return the limits of disturbance to native habitat and provide suitable habitat for wildlife in the permanent right of way.

The approved ESC plans provide a variance to Minimum Standard 16, which states in part that for construction of underground utility lines no more than 500 linear feet of trench may be opened at one time. The Erosion and Sediment Control Regulation, 9VAC25-840-50, provides that a variance may be granted when any technical requirement is inappropriate or too restrictive for site conditions. The regulation requires that a project applicant explain the reasons for the requested variance in writing and any allowed variances must be documented in the ESC plan. The regulation also provides that in considering the request, DEQ is to consider the need of the applicant to maximize cost effectiveness and the need to protect off-site properties and resources from damage.

DEQ has evaluated a number of factors in providing this variance including the construction techniques that will be utilized, the equipment required for construction, the length

of the project, the diameter of the pipe involved and the need to create safe working conditions for all employees involved in the Project. The variance allows MVP to have five (5) cumulative miles of trench open in each construction spread, with interruptions required at regular intervals based on the terrain. Specifically, continuous open trench lengths are limited based on slope conditions: (i) in steep slope areas (where the slope exceeds thirty three (33) percent), the open trench must be interrupted every 2,500 feet; (ii) in areas where slopes range from ten (10) percent to 33 percent, the trench must be interrupted every 5,000 feet; and, (iii) in low slope areas (less than 10 percent slope), the maximum continuous length cannot exceed 7,000 feet.

Post-Construction Stormwater Management Plans

Similar to the erosion and sediment control plans, DEQ also required MVP to submit detailed, project-specific post-construction stormwater calculations and plans for every aspect of the project including the right-of-way, access roads, and valve pads. These post-construction stormwater management plans must comply with Virginia's stormwater regulations that are designed to protect water quality after construction by meeting both the water quality and quantity requirements (including channel, flood, and sheet flow requirements) in accordance with the Virginia Stormwater Management Program Regulation, 9VAC25-870.

In order to meet the post-construction water quality and quantity requirements of Virginia's Stormwater Program Regulation, MVP will install approximately 3,800 permanent water bars across the stabilized right-of-way (ROW). A water bar is a small ditch or ridge of material that is constructed diagonally across the right-of-way to divert stormwater runoff. These permanent features will provide treatment at the end of each water bar. This end of bar treatment is designed to ensure stormwater runoff from the ROW will be converted to sheet flow and will not occur at such velocities to cause erosion.

Additionally, thirteen valve pads located on the mainline and the permanent access roads needed to reach these valve pads will also utilize stormwater features that reduce post construction runoff quantity in accordance with the regulation.

Conclusion

As shown in this report, the oversight process for MVP has been more rigorous than any other pipeline in Virginia history. DEQ has carefully reviewed MVP's Supplemental Karst Evaluation Plan, Annual Standards and Specifications, and Erosion and Sediment Control and Stormwater Management Plans. By letter dated March 13, 2018, DEQ concurred on the Supplemental Karst Evaluation Plan. By letter dated June 20, 2017, DEQ determined that the Annual Standards and Specifications were in compliance with the State Water Control Law and applicable, duly-promulgated regulations and were approved by DEQ. By letter dated March 26, 2018, DEQ determined that the Erosion and Sediment Control and Stormwater Management Plans were in compliance with the State Water Control Law and applicable, duly-promulgated regulations and were approved by DEQ.

Attachment A

COMMONWEALTH of VIRGINIA

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Molly Joseph Ward
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December 8, 2017

Certified Mail

John Centofanti
Corporate Director, Environmental Affairs
Mountain Valley Pipeline, LLC
EQT Plaza, Suite 1700
625 Liberty Avenue
Pittsburgh, PA 15222-3111

Re: Issuance 401 Water Quality Certification
No. 17-001

Dear Mr. Centofanti:

Enclosed is Section 401 Water Quality Certification No. 17-001 issued to Mountain Valley Pipeline, LLC (MVP) on December 8, 2017.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternatively, any owner aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may petition in writing for a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in 9VAC25-230-130 (Procedural Rule No. 1 – Petition for formal hearing). In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

If you have any questions about this Certification, please contact me at (804) 698-4038 or Melanie.Davenport@deq.virginia.gov.

Sincerely,

Melanie D. Davenport

Melanie D. Davenport, Director
Water Permitting Division

Enclosure 401 Certification No, 17-001

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

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CERTIFICATION No. 17-001

401 Water Quality Certification Issued To

Mountain Valley Pipeline, LLC
625 Liberty Avenue, Suite 1700
Pittsburgh, PA 15222

Pursuant to Guidance Memo No. GM17-2003
Interstate Natural Gas Infrastructure Projects -
Procedures for Evaluating and Developing Additional Conditions for Section 401 Water Quality Certification Pursuant to 33 USC § 1341 ("401" Certification)

I. CERTIFICATION

The State Water Control Board finds that, subject to the additional conditions set out in Section V below, there is reasonable assurance that the Mountain Valley Pipeline, LLC activities covered by this Certification will be conducted in a manner that will not violate applicable Water Quality Standards in 9 VAC 25-260-5, *et seq.*, and will comply with the applicable provisions of 33 U.S.C. §§ 1311, 1312, 1313, 1316, and 1317.

II. DEFINITIONS

The following terms as used in this Certification shall have the following meaning:

"Annual Standards and Specifications" means the program for linear utility projects implementing the requirements of the Stormwater Management Act (Va. Code § 62.1-44.15:24, *et seq.*) and Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*).

"Board" means State Water Control Board.

"Certification" means Clean Water Act Section 401 Water Quality Certification developed in accordance with Guidance Memo No. GM17-2003, Interstate Natural Gas Infrastructure Projects – Procedures for Evaluating and Developing Additional Conditions for Section 401 Water Quality Certification Pursuant to 33 USC § 1341 ("401" Certification).

"Construction material or waste material" means solid waste as defined in the Solid Waste Management Regulations (9 VAC 20-81-95).

"Corps" means U.S. Army Corps of Engineers.

"Department" means the Virginia Department of Environmental Quality.

"Environmental Impact Statement" or "EIS" means the Final Environmental Impact Statement (FEIS) issued by FERC on June 23, 2017.

"FERC" means the Federal Energy Regulatory Commission.

"Guidance" means Guidance Memo No. GM17-2003, Interstate Natural Gas Infrastructure Projects - Procedures for Evaluating and Developing Additional Conditions for Section 401 Water Quality Certification Pursuant to 33 USC § 1341 ("401" Certification) dated May 19, 2017.

"Karst feature" means any sinkhole, sinkhole lineament, cave, cavern, swallet, spring, or similar feature found in an area identified as an area of karst geology characterized by the presence of soluble bedrock such as limestone, dolomite, marble or gypsum. Karst features shall include all such features identified in Appendix L of the EIS and any subsequently identified features in areas of karst geology.

"Owner" means Mountain Valley Pipeline, LLC (MVP) a joint venture between EQT Midstream Partners, LP and affiliates of NextEra US Gas Assets, LLC; Con Edison Gas Midstream, LLC; WGL Midstream; and RGC Midstream, LLC.

"Project" means the Virginia portion of a pipeline project approximately 303 miles in length and 42-inches in diameter to transport up to 2.0 MMDth/d of natural gas from an interconnect point in Wetzel County, West Virginia, to an interconnect with an existing pipeline in Pittsylvania County, Virginia including approximately 106 miles of pipeline, 58 miles of Project access roads, and appurtenances which will be located within Virginia and traverse portions of Giles County, Craig County, Montgomery County, Roanoke County, Franklin County and Pittsylvania County. The 401 Water Quality Certification applies to the location of pipeline right of way, access roads, and appurtenances as described in the EIS and any changes thereto subsequently approved by FERC.

"Riparian buffer" means a vegetated area near a stream, usually forested, which helps shade and partially protect a stream from the impact of adjacent land uses.

III. SCOPE OF CERTIFICATION

This Certification addresses Project activities in upland areas outside of the Corps jurisdictional areas under 33 U.S.C. § 1344 and water withdrawal activities that are exempt from coverage under the Virginia Water Protection Permit Program Regulation (9 VAC 25-210-10, *et seq.*). In the manner and to the extent described herein, this includes all proposed upland activities associated with the construction, operation, maintenance, and repair of the pipeline, any components thereof or appurtenances thereto, and related access roads and rights-of-way as well as certain project-related surface water withdrawals. This Certification covers all relevant upland Project activities within the route identified in the Environmental Impact Statement.

As this Certification and the conditions contained in Section V are intended to address Project activities that are outside the jurisdictional scope of the Virginia Water Protection Permit Program Regulation, this Certification shall not be interpreted as limiting or otherwise relieving the Owner of any conditions for any portion of the Project that are imposed pursuant to the Virginia Water Protection Permit Program Regulation, to any permit issued by the Corps or Virginia Marine Resources Commission in response to the February 26, 2016 joint permit application, or to any other separate state or federal permit, license, or approval required for the Project.

In addition, this Certification operates in conjunction with other regulatory actions including: (a) regulations adopted for land disturbing activities pursuant to the Stormwater Management Act (Va. Code § 62.1-44.15:24, *et seq.*) and Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*); and, (b) all requirements of the Annual Standards and Specifications applicable to the Project approved by the Department on June 20, 2017. These completed regulatory actions remain in full force and effect, and this Certification shall not be interpreted as limiting, modifying, or otherwise relieving the Owner of any conditions imposed pursuant thereto.

Pursuant to 33 U.S.C. § 1341 (a)(3), the Board reserves the right to impose further conditions if any existing plans and/or mitigation measures are amended by the Owner and/or FERC that may materially reduce the water quality protection provided thereunder.

IV. INFORMATION EXAMINED

In developing this Certification and the additional conditions imposed herein, the Board and Department have considered the record relevant to water quality considerations associated with the Project, including but not limited to:

1. All applicable FERC documents, including Draft and Final Environmental Impact Statements issued by FERC and the associated docket materials including all Appendices, and the FERC order granting a Certificate of Public Convenience and Necessity (Certificate) on October 13, 2017;
2. The Department's initial Request for Information (RFI) dated May 19, 2017 in accordance with the Guidance, the Department's subsequent June 15, 2017 RFI

and the Owner's June 1, 2017, and June 22, 2017 responses including but not limited to requested supplemental responses dated August 8, 2017, October 27, 2017, and November 2 and 6, 2017;

3. Proceedings of the multi-agency technical work session held June 6-7, 2017 (Lexington, Virginia);
4. Documents submitted for approval by the Department pursuant to requirements of the Stormwater Management Act (Va. Code § 62.1-44.15:24, *et seq.*) and Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*);
5. Corps Nationwide Permit 12 and Norfolk District Regional Conditions;
6. Guidance Memo No. GM17-2003, Interstate Natural Gas Infrastructure Projects-Procedures for Evaluating and Developing Additional Conditions for Section 401 Water Quality Certification Pursuant to 33 USC § 1341 ("401" Certification); and,
7. Public comments submitted during the public comment period, including both written (electronic or paper copy) and oral comments provided during the August 8 and 9, 2017 public hearings.

V. CONDITIONS

In consideration of the recommendations of the Department, the Board finds that there are additional reasonable and prudent conditions that will provide the Commonwealth with an increased degree of assurance that upland Project activities which may result in a discharge to surface waters will be conducted in a manner that will not violate applicable water quality standards. This Certification is only valid provided the Owner complies with the following conditions, limitations, and/or requirements:

1. The Owner shall follow the measures detailed in its June 1, 2017 and June 22, 2017 responses to the Department's May 19, 2017 and June 15, 2017 Requests for Information including but not limited to requested supplemental responses dated August 8, 2017, October 27, 2017, and November 2 and 6, 2017.

2. Riparian Buffer Requirements

   a. Removal of riparian buffers not directly associated with the Project's construction activities is prohibited. Disturbance and removal of riparian buffers from Project-related upland land disturbing activities that would occur within 50 feet of any perennial, intermittent, or ephemeral surface waters shall be avoided where possible, and minimized to the maximum extent practicable if 50 feet is not possible. The Owner shall notify the Department of any and all instances in which it believes 50 feet is not possible and shall proceed only where the Department concurs with the Owner's use of less than 50 feet of buffer. Removal of riparian buffers not associated with crossings shall not be allowed where stream bank stability under normal flow conditions would be compromised.

b. The construction limit of disturbance (LOD) in upland areas approaching waterbody and wetland crossings shall be reduced from 125 feet to 75 feet wide and shall apply 50 feet from each side of the stream or wetland crossing to minimize the extent of riparian buffer disturbance. For any upland area approaching a waterbody or wetland crossing where this reduced LOD is not possible, notification of FERC approval (and Corps approval, if required) shall be provided to the Department prior to initiating land disturbing activity in that area.

c. No refueling, hazardous materials storage, equipment maintenance, or equipment parking will take place within 100-feet of the waterbody or wetland crossing, except as allowed by the approved Annual Standards and Specifications.

3. Karst Terrain Requirements

a. An addendum to the Karst Hazard Assessment (February 2017), and any subsequent revisions or addenda to the same approved by FERC, will be provided to the Department upon completion of field survey activities and final pipeline alignments, and prior to land disturbing activities, that address those properties in Virginia where the Owner could not previously conduct karst surveys due to land access restrictions.

b. The Owner shall follow the measures as detailed in the Karst Mitigation Plan (March 2017), and any subsequent revisions or addenda to the same approved by FERC.

c. To further evaluate flow paths for karst features in the vicinity of the project, the Owner shall develop a Supplemental Karst Evaluation Plan to be submitted to the Department for review and concurrence prior to initiation of land disturbing activities in karst terrain. The Department, with assistance from the Virginia Department of Conservation and Recreation (DCR) identified areas of concern in Attachment B of the Department's June 15, 2017 request letter. The Owner will conduct contingency planning in accordance with the findings and conclusions of the Supplemental Plan, as appropriate, in order to monitor and mitigate a potential accidental release or spill during construction in Virginia's karst terrain.

d. The Owner shall: (1) conduct a survey to identify wells, cisterns, springs, and other surface waters within 1,000 feet of the project centerline in areas known to have karst topography; and, (2) conduct one water quality sampling event to evaluate wells and springs used for human consumption and located between 500 feet to 1000 feet from the project centerline. The sampling shall include the parameters identified in the Water Resources Identification and Testing Plan (February 2017), and any subsequent revisions or addenda to the same approved by FERC. The survey and/or water quality sampling event shall be conducted by the Owner at the request of a property owner and only if the property owner provides permission for access. This survey and/or water quality sampling event shall be conducted before the pipeline is placed into operation. The Owner must complete any survey and water quality evaluation requests received at least 30 days prior to placing the project in service.

e. The Owner shall provide a financial responsibility demonstration to the Department in the amount of five million dollars ($5,000,000), to support the Complaint Resolution Process contained in the Water Resources Identification and Testing Plan (February 2017) in the event a private water supply used for human consumption is impacted from project construction activities.

This demonstration requirement may be satisfied by any of the financial assurance mechanisms that are set forth in 9 VAC 25-650-90 through 9 VAC 25-650-130. The mechanism or combination of mechanisms shall not be accessible by third parties and shall be used by the Department to implement the Water Resources Identification and Testing Plan when necessary due to the Owner's failure to do the same.

The mechanism or combination of mechanisms shall be submitted to the Department for review and approval and must contain such wording and terms as specified by the Department to satisfy this condition.

The demonstration, having been approved by the Department, shall be made available prior to initiation of land disturbing activities in karst terrain and shall be maintained until 180 days after all land disturbing activity associated with the construction of the pipeline, and related access roads and rights-of-way have achieved final stabilization as required by the Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*). The Department will notify the Owner when the conditions to release the financial demonstration have been met.

4. Surface Water Withdrawals

a. Any surface water withdrawals for the purposes of hydrostatic testing shall not violate applicable Water Quality Standards and shall be managed so that no more than 10% of the instantaneous flow rate from the channel is removed; the intake screens shall be designed so that screen openings are not larger than 1 millimeter and the screen face intake velocities are not greater than 0.25 feet per second.

b. Any surface water withdrawals for the purposes of horizontal directional drilling or dust control that do not exceed 10,000 gallons per day from non-tidal waters or two million gallons per day from tidal waters shall not violate applicable Water Quality Standards and shall be managed so that no more than 10% of the instantaneous flow rate from the channel is removed and the intake screens shall be designed so that screen openings are not larger than 1 millimeter and the screen face intake velocities are not greater than 0.25 feet per second.

c. Daily withdrawals from horizontal directional drilling or dust control activities that exceed 10,000 gallons per day from non-tidal waters and two million gallons per day from tidal waters must comply with the requirements of the Virginia Water Protection Permit Program Regulation. The Owner shall record and track the daily volumes of water withdrawn for horizontal directional drilling or dust control activities and make such records available during inspection or upon request by the Department.

d. Hydrostatic test water shall be released to upland areas through energy dissipating dewatering devices. The energy dissipating dewatering devices must be sized to accommodate the rate and volume of release and be monitored and regulated to prevent erosion and over pumping of the energy dissipating dewatering devices. There shall be no direct point source discharge or intentional indirect discharge of hydrostatic test water to surface waters. The upland discharge of hydrostatic test waters shall be monitored in accordance with the General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests (9 VAC 25-120-10, *et seq.*) ("VPDES General Permit"). The Owner shall record and track the daily volumes of water withdrawn for hydrostatic testing activities and make such records available during inspection or upon request by the Department. In the event of an inadvertent indirect discharge to surface waters, the Owner shall be responsible for ensuring that such discharge complies with all requirements of the VPDES General Permit, including the requirement to notify the Department within 14 days.

5. The Owner shall implement water quality monitoring in accordance with the Upland Construction Water Quality Monitoring Plan (May 31, 2017, revised June 19, 2017).

6. The Owner shall implement the measures identified in the Spill Prevention, Control, and Countermeasure (SPCC) Plan (submitted with the June 1, 2017 response to the Department and additional information submitted June 22, 2017), and any subsequent revisions or addenda to the same approved by FERC.

7. All construction and installation associated with the Project, except as permitted by the Corps, shall be accomplished in such a manner that construction material or waste material shall not be placed into any perennial, intermittent, or ephemeral surface waters or karst features.

8. The Owner shall implement the measures intended to minimize the potential for discharges of soil or rock as detailed in the General Blasting Plan (February 2017) and the Landslide Mitigation Plan Revision 4 (February 2017), and any subsequent revisions or addenda to the same approved by FERC. The Owner shall notify the Department immediately, but no later than 24 hours after discovery, if blasting or landslide activity results in unpermitted discharges of soil or rock to any perennial, intermittent, or ephemeral surface waters. Any potential impacts to karst features will be addressed in accordance with the Karst Mitigation Plan.

9. The Owner shall follow the measures intended to minimize the potential for impacts as detailed in the Acid Forming Materials Mitigation Plan (May 2017), and any subsequent revisions or addenda to the same approved by FERC.

10. The Project, including all relevant records, is subject to inspection at reasonable hours and intervals by the Department or any authorized representative of the Department to determine compliance with this Certification.

11. The Owner shall provide the Department with written or electronic notification at least 10 business days prior to any planned Construction Spread pre-construction conferences.

12. The Owner shall immediately notify the Department of any modification of this Project and shall demonstrate in a written statement that said modifications will not violate any conditions listed in this Certification. If such demonstration cannot be made, the Owner shall apply for a modification of this Certification.

13. The Owner shall comply with the requirements of the Stormwater Management Act (Va. Code § 62.1-44.15:24, *et seq.*) and Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*) and the Virginia Water Protection Permit Program Regulations (9 VAC 25-210-10, *et seq.*). The enforceability under this Certification is in addition to the independent enforcement authority of each individual program and/or permit.

14. This Certification is subject to revocation for failure to comply with the above conditions after a proper hearing. Any unpermitted or unauthorized direct or indirect discharge to State waters shall be subject to enforcement under the State Water Control Law.

15. The terms and conditions of this Certification shall remain in effect until 180 days after all land disturbing activity associated with the construction, operation, maintenance, and repair of the pipeline, and related access roads and rights-of-way have achieved final stabilization as required by the Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51, *et seq.*).

16. This Certification is binding on the Owner and any successors in interest, designees and assigns, jointly and severally.

VI. CONCLUSION

The additional conditions contained in Section V of this Certification along with the requirements imposed by the VWP regulation, the Corps Section 404 permitting requirements, and prior regulatory actions associated with the approval and requirements of the June 2017 Annual Standards and Specifications, and the April 7, 2017 Section 401 Water Quality Certification of the Corps Nationwide Permit 12 provide reasonable assurance that water quality standards will not be violated. The conditions included in this Certification for upland areas are in addition to any other federal or state permit or regulatory requirements with which the Project must comply, including federal resource agency requirements embodied in the FERC certificate.

This Certification constitutes the Commonwealth's final decision on the upland activities associated with the construction, operation, maintenance, and repair of the Project under the requirement of Clean Water Act § 401. The provisions of this Certification are severable and

should any provision(s) of this Certification be declared invalid or unenforceable, the remainder of the Certification, including without limitation any additional conditions imposed hereunder, shall continue in full force and effect. The Commonwealth reserves its right to review this certification decision and take any appropriate action in accordance with 33 U.S.C. § 1341(a)(3). This Certification applies solely to upland activities authorized by FERC and shall not waive or otherwise impair or affect the authority of the Board to require additional certification under state or federal law.

By: Melanie D. Davenport Date: December 8, 2017

Attachment B

Draper Aden Associates
Engineering • Surveying • Environmental Services

Memorandum

To:	Bill Balfour, P.G., Karst Specialist Manager
From:	Billy Newcomb, Andrea Futrell
Date:	March 23, 2018
Project Name:	Mountain Valley Pipeline, Karst Inspection Services
Project Number:	B14188B-14F, B14188B-14G, B14188B-14H, B14188B-14I
Subject:	Karst Area Contingency Guide
cc:	Mike Futrell

This memorandum comprises the Karst Area Contingency Guide (Guide) to supplement the Mountain Valley Karst Mitigation Plan (latest update October 2017) during karst inspection of land disturbing activities conducted by Mountain Valley and its contractors within karst terrain. The Guide incorporates a series of publicly-available dye trace study results that assist in defining karst watershed boundaries, as well as inferred information from the Mountain Valley Karst Hazards Assessment (latest edition February 2017).

The intent of this Guide is to be used as part of contingency planning to identify specific karst locations that will require monitoring and potentially mitigation in the event of an accidental spill during construction and operation in karst terrain. This Guide contains the following information:

1.0 OVERVIEW OF KARST WATERSHEDS 2
- 1.1 Regional karst watersheds that are defined by dye tracing studies 2
- 1.2 Regional karst watersheds that are inferred 3
- 1.3 Other karst areas in the vicinity of the route 3

2.0 MONITORING AND MITIGATION 3

3.0 REFERENCES 4

Figure 1 of 1 **Karst Watershed Areas in Vicinity of Route**

Table 1 **Karst Watershed Areas in Vicinity of Route (Refer to Figure 1 of 1)**

Karst terrain in Virginia begins at approximately Mile Post (MP) 196.5 in Giles County and ends at approximately MP 235.7 in Montgomery County, Virginia along a corridor within which the MVP alignment is proposed for construction (**Figure 1 of 1**). Note that karst terrain is not contiguous throughout the karst zone illustrated in **Figure 1 of 1**. The Appalachian Plateau and Valley and Ridge geologic provinces are characterized by Mississippian to Cambrian age sedimentary bedrock, with folding and ancient thrust faulting resulting in a complicated distribution of rock types through this region. Siliciclastic sedimentary bedrock that does not form karst terrain is interbedded, or otherwise in contact with karst-forming carbonate bedrock sub sections.

1.0 OVERVIEW OF KARST WATERSHEDS

For the purposes of this Guide, there are three types of karst areas in the vicinity of the route:

1. Regional karst watersheds that are defined by dye tracing studies;
2. Regional karst watersheds that are inferred;
3. Other karst areas with unknown watershed boundaries.

Refer to **Figure 1 of 1** for an illustration of the approximate karst watershed boundaries (labeled A through N) defined above. The watersheds A through N are also cross-referenced in **Table 1** as described below.

In the event of an accidental release within the referenced mile posts in **Table 1** that reaches, or potentially may reach, a known or suspected karst feature (e.g., sinkhole, swallet), the Karst Inspectors will immediately notify the Mountain Valley Environmental Inspector, and refer to **Table 1** and **Figure 1 of 1** of this Guide to identify the karst watershed designation that is affected, and implement contingency plans (i.e., monitoring and mitigation if necessary) at the identified downstream areas. Accessing the locations noted in **Table 1** will require coordination with Mountain Valley Land Agents in order to access properties that have not been party to negotiations and access agreements with Mountain Valley.

1.1 Regional karst watersheds that are defined by dye tracing studies

Watersheds **C, D, E, F, H, I, J** and **M** (**Figure 1 of 1; Table 1**) comprise watershed boundaries that are defined by the results of dye trace studies (see discussion below for references).

The Virginia Department of Conservation and Recreation, Natural Heritage Program, Karst Program, performed dye tracing studies to delineate several karst watersheds in the vicinity of the route (Virginia

Department of Conservation and Recreation, 2018). Other studies used to delineate karst watersheds include Fagan and Orndorff, 2008; Holsinger, 1975; Saunders et al, 1981; and Schwartz and Orndorff, 2003.

The dye trace results identified specific spring locations that would be monitored, and mitigated if needed, in the event of an accidental release during construction and operation of the pipeline within the range of mileposts listed in Table 1 that correspond to the above-referenced watersheds.

1.2 Regional karst watersheds that are inferred

Watershed **N** is inferred from local geology and surface topography, and results of the Karst Hazards Assessment. Johnson Spring (**Figure 1 of 1**) is the location within Watershed **N** for monitoring and potential mitigation in the event of an accidental release during construction or operation within **MP 227.2 and 228.1**

1.3 Other karst areas in the vicinity of the route

Finally, watersheds **A, B, G, K, L and O** have not been delineated by dye tracing studies. These watersheds do not have known springs that would be considered resurgence points for subsurface drainages. Contingency planning efforts for these watersheds culminate in the Karst Hazards Assessment, which will be available to the Karst Specialists conducting inspections, and based upon the experience of the Karst Specialist Team, defined in the Karst Mitigation Plan.

2.0 MONITORING AND MITIGATION

The Mountain Valley Erosion and Sediment Control Plan identifies specific karst features that require implementation of Best Management Practices to protect the features and local drainages and watersheds leading to the feature.

The approved Spill Prevention, Control, and Countermeasure (SPCC) Plan and Unanticipated Discovery of Contamination Plan for Construction Activities in Virginia provides Contingency Plans and Emergency Procedures. Follow the SPCC Plan requirements for notifications and emergency procedures.

- Section 4 of the SPCC Plan (Karst Area Erosion and Sediment Control) includes specific measures to support MVP construction in karst terrain. Follow the specific measures in Section 4.

The Karst Mitigation Plan includes measures to avoid impacts to the karst aquifer and environment (Section 4). These measures include compliance with the requirements of the Erosion and Sediment Control Plan, and the SPCC Plan.

3.0 REFERENCES

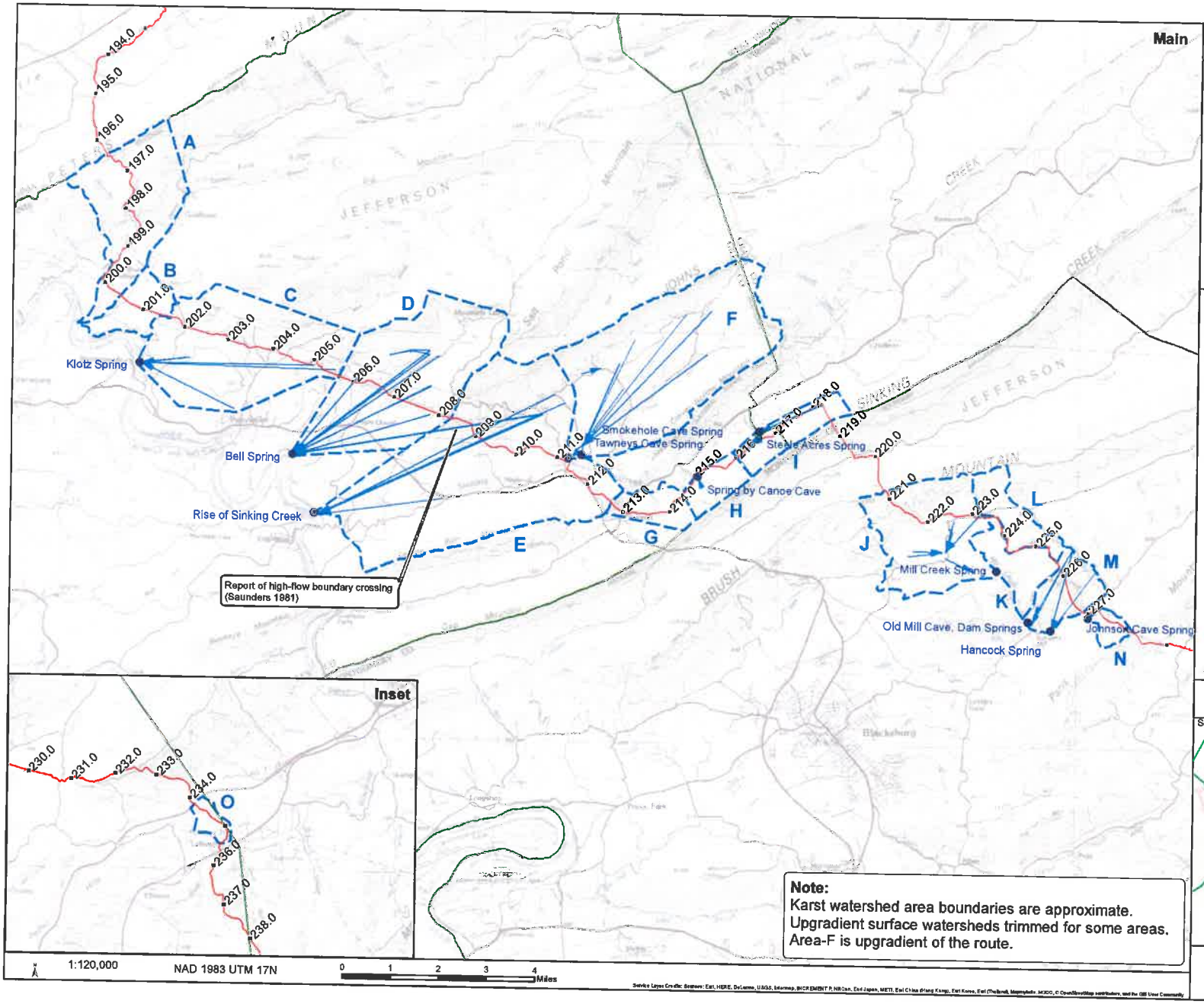
Fagan, J.F. and Orndorff W.D., 2008, Karst Hydrology Investigations in the Cambrian Elbrook and Conococheague Formations of Pulaski and Montgomery Counties, Virginia, presented at the Second Appalachian Karst Symposium, May 7-10, 2008, East Tennessee State University, Johnson City, Tennessee.

Holsinger, J., 1975, Descriptions of Virginia Caves: Maps. Virginia Division of Mineral Resources, vol. 85.

Saunders, J. W., Ortiz R. K., and Koerschner, W. F.,III,1981, Major Groundwater Flow Directions in the Sinking Creek and Meadow Creek Drainage Basins of Giles and Craig Counties, Virginia, USA. Proceedings of the Eighth International Congress of Speleology, Americus, Georgia, Georgia Southwestern College, vol. 1, p. 398-400.

Schwartz, B.S., and Orndorff, Z. W., 2003, Conservation Sites for Virginia's Significant Caves, unpublished report to the Cave Conservancy of the Virginias, Virginia DCR: Radford, VA. Pages 1-47, Appendix II.

Virginia Department of Conservation and Recreation, Karst Program, 2018, Dye trace report along portions of the FERC approved corridor for the Mountain Valley Pipeline, Giles County, Virginia.



Mountain Valley Pipeline Project

Mountain Valley PIPELINE

Karst Watershed Areas in Vicinity of Route

Figure 1 of 1

03-20-18

Draper Aden Associates
Engineering • Surveying • Environmental Services

Legend

- Karst Springs
- Dye Vectors
- Karst Watersheds and Karst Areas
- MVP Approve Route Milepost
- MVP Approved Route

Table 1. Karst Watershed Areas in Vicinity of Route (Refer to Figure 1 of 1 for illustration of Karst Area)

Regional Karst Watersheds Defined by Dye Tracing Studies in Vicinity of Route				
Karst Area	**Spring Name**	**Mile Post Range***	**County**	**Headwaters Area**
C	Klotz Spring	MP-202 to MP-205.7	Giles	Dry Branch area, Southwest half of Doe Mountain
D	Bell Spring	MP-205.7 to MP-208, possibly to MP-210	Giles	Doe Creek area to nose of Salt Pond Mountain
E	Sinking Creek Spring (or Bell Spring; Karst Area D)	MP-209 to MP-211	Giles	Southwest end of Johns Creek Mountain
F	Smokehole Spring	MP-211	Giles	Clover Hollow (area upgradient of route)
H	Canoe Cave Spring	MP-214.5 to MP-216	Giles	Northwest flank of Sinking Creek Mountain
I	Steele Acres Spring	MP-216 to MP-218.5	Giles/Craig	Northwest flank of Sinking Creek Mountain
J	Mill Creek Spring via Slussers Chapel Cave	MP-220.8 to MP-224	Montgomery	Mount Tabor Sinkhole Plain
M	Old Mill Cave Spring, Dam Spring, Hancock Spring	MP-225.8 to MP-226.9	Montgomery	Lower Dry Branch
Regional Karst Watersheds Inferred in Vicinity of Route				
Karst Area	**Spring Name**	**Mile Post Range***	**County**	**Headwaters Area**
N	Johnson Cave Spring	MP-227.2 to MP-228.1	Montgomery	Northwest flank of Paris Mountain
Other Karst Areas in Vicinity of Route				
Karst Area	**Spring Name**	**Mile Post Range***	**County**	**Headwaters Area**
A	unknown along Big Stony Creek	MP-196.5 to MP-200.4	Giles	Southeast flank of Peters Mountain
B	unknown along Big Stony Creek or in Kimballton mines	MP-200.4 to MP-202	Giles	Nose of Butt Mountain
G	unknown along Greenbrier Branch or Sinking Creek	MP-211 to MP-214.5	Giles	Newport area
K	unknown along Mill Creek	MP-224 to MP-225.8	Montgomery	Hillside north of Mill Creek
L	unknown along Mill Creek or Dry Branch	MP-224 to MP-225.7	Montgomery	Hillside west of Dry Branch
O	unknown along Sawmill Hollow or Roanoke River	MP-234.2 to MP-235.5	Montgomery	Hillside north of Roanoke River

*Mile post ranges are approximate and represent inherent uncertainty in subsurface drainages as well as gaps of non karst areas.

Attachment C

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

June 20, 2017

Mr. Brian M. Clauto
Senior Environmental Coordinator
EQT Corporation
555 Southpointe Blvd, Suite 200
Canonsburg, PA 15317

Subject: Mountain Valley Pipeline LLC – Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management

Dear Mr. Clauto:

The Virginia Department of Environmental Quality (DEQ) hereby approves the Annual Standards and Specifications for Erosion & Sediment Control (ESC) and Stormwater Management (SWM) for Mountain Valley Pipeline (MVP) LLC as revised June 2017.

Please note that your approved Annual Standards and Specifications include the following requirements:

1. In addition to MVP's internal review process, the site specific ESC (9VAC25-840-40) and SWM (9VAC25-870-55) plan is required to be submitted to DEQ for review and approval;
2. ESC variance requests must be submitted to DEQ and will be reviewed in accordance with ESC (9VAC25-840-50) requirements;
3. SWM exception requests must be submitted to DEQ and will be reviewed in accordance with SWM (9VAC25-870-57) requirements;
4. The initial draft and final site specific ESC and SWM plan, and supporting documents must be posted on MVP's website for public view;
5. Inspection reports conducted by MVP as well as complaint logs and complaint responses must be submitted to DEQ in accordance with Section 2.0 General Requirements of your Annual Standards and Specifications; and
6. The following information must be submitted to DEQ at least two weeks in advance of the commencement of land-disturbing activities for each separate land disturbance construction area spread for this project. Notifications shall be sent by email to: linearprojects@deq.virginia.gov
   - i: Spread number;
   - ii: Spread location (including nearest intersection, latitude and longitude, access point, traversed localities);
   - iii: On-site project manager name and contact information;

iv: Responsible Land Disturber (RLD) name and contact information;
v: DEQ-Certified ESC and SWM Inspector name and contact information;
vi: Spread description;
vii: Acreage of disturbance for spread; and
viii: Spread start and finish date.

To ensure compliance with approved specifications, the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act, DEQ staff will conduct random site inspections, respond to complaints, and provide on-site technical assistance with specific erosion and sediment control and stormwater management measures and plan implementation. Please contact Hannah Zegler (804-698-4206) or Larry Gavan (804-698-4040) should you have any questions concerning your Annual Standard and Specifications requirements.

Sincerely,

Frederick K. Cunningham, Director
Office of Water Permits

Cc: Michael Rolband, WSSI
Michael Elander, WSSI
Justin Curtis, AquaLaw
Melanie Davenport, DEQ-CO
Ben Leach, DEQ-CO
Larry Gavan, DEQ-CO
Hannah Zegler, DEQ-CO

Case Decision Information:
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Attachment D

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

March 26, 2018

Mr. Brian Clauto
Senior Environmental Coordinator
EQT Corporation
555 Southpointe Blvd, Suite 200
Canonsburg, PA 15317

Transmitted electronically to: BClauto@eqt.com

Re: Mountain Valley Pipeline, LLC
Project Location: Mile Post 196.35 through 303.4 and Supportive Ancillary Areas
DEQ SWM #: MVP-17-01
Erosion and Sediment Control (ESC) and Stormwater Management (SWM) Plans

Dear Mr. Clauto:

The Department of Environmental Quality (DEQ) received combined Stormwater Management and Erosion & Sediment Control Plans for the project on June 19, 2017. DEQ has reviewed approximately 100 revised plan sets over the past nine months. The plans received March 26, 2018 are found to be in accordance with the *Virginia Stormwater Management Act and Regulations* and the *Virginia Erosion and Sediment Control Law and Regulations* and are approved. This approval authorizes MVP to begin land disturbing activities consistent with these plans. **No modifications, updates or additions may be made to the approved Plans without obtaining prior approval from DEQ. Additionally, approval of the ESC and SWM Plans does not relieve the owner and/or operator of complying with all other federal, state, or local laws and regulations.**

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date you received this decision within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Virginia Department of Environmental Quality.

It is the responsibility of the owner and/or operator to ensure that the project is constructed in accordance with the approved Plans and accompanying specifications. Upon completion of the project, the owner and/or operator will be required to submit construction record drawings for all

permanent stormwater management facilities (i.e., post-development best management practices) constructed in accordance with the approved Plans.

Please contact Mr. Benjamin Leach at 804-698-4037 or Benjamin.leach@deq.virginia.gov if you have any questions about this letter.

Sincerely,

Jaime B. Robb

Jaime B. Robb, Manager
Office of Stormwater Management

Cc: Benjamin Leach, DEQ-CO
Jerome Brooks, Water Compliance Manager

Enclosure