



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304
Telephone Number: (304) 926-0495
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Jim Justice, Governor
Austin Copterton, Cabinet Secretary
dep.wv.gov

July 21, 2017

Shawn Posey
Mountain Valley Pipeline, LLC
555 Southpoint Boulevard, Suite 2000
Canonsburg, Pennsylvania 15317

Re: West Virginia Natural Streams Preservation Act Permit, Mountain Valley Pipeline, LLC, Mountain Valley Pipeline Project, install natural gas pipeline across the Greenbrier River at Mile Point 171.6, north of Pence Springs, Summers County, West Virginia; NSP-17-0001

Dear Mr. Posey:

The West Virginia Department of Environmental Protection-Division of Water and Waste Management (WVDEP-DWWM) in conjunction with the West Virginia Division of Natural Resources - Wildlife Resources Section (WVDNR-WRS), has completed review of the above-referenced permit application.

Mountain Valley Pipeline, LLC (MVP) has proposed to install a 42-inch diameter natural gas pipeline across the Greenbrier River in association with the MVP project. The project is designed to transport natural gas to markets in the Appalachian region and the Mid-Atlantic, southeastern United States. The approximate coordinates are 37.680131 N, -80.731502 W. The Greenbrier River, from its confluence with Knapps Creek to its confluence with the New River, is protected under WV Code Chapter 22, Article 13, also known as the WV Natural Streams Preservation Act, from activities that impound, divert, or flood the body of water.

The temporary crossing is proposed to be an open-cut, dry ditch crossing using a portadam system, which will allow the river to flow continuously throughout construction. A downstream turbidity curtain will be used to prevent sediment from leaving the construction area. The Portadam will create a dry workable area while minimizing stream impacts, and be installed in two stages to allow excavation of the trench and installation of the pipe. It will then be removed and the same process will begin on the other side of the river. The half width

construction method will allow continual downstream flow of the river during construction. When the pipeline crossing is complete, the portadam and turbidity curtain will be removed.

The proposed Greenbrier River crossing will temporarily impact an area 407 feet across and 75 feet wide with 10 ft wide by 10 ft deep trench. The crossing is non-perpendicular which requires approximately 130 feet more in-water construction than would a perpendicular crossing. The non-perpendicular pipeline crossing of the Greenbrier River is necessary to avoid impacts to cultural resources. On the south side of the river, a perpendicular crossing would have directly impacted the National Register eligible Wiseman Residence. Substrate in the channel will be removed and stockpiled separately from other excavated material. Approximately 1,507 cubic yards of the native material will be re-used in restoration of the stream bed. Although no permanent impacts are expected from the Greenbrier River crossing, MVP has agreed to make a onetime payment, prior to construction, of \$50,000 to WVDNR-WRS to be used towards aquatic life enhancement in the Greenbrier watershed to compensate for any temporary impacts during the construction of the crossing.

The Greenbrier watershed is known to contain the candy darter, *Etheostoma osburni*, a designated West Virginia Species of Greatest Conservation Need. The candy darter is an imperiled endemic fish due to the hybridization with variegate darters, *Etheostoma variatum*. In order to prevent impingement or entrainment of the candy darter, screens must be installed on any water withdrawal during the crossing operation. The screen must have openings no larger than 3/16 inches for floating intake structures or 0.10 inches for submerged or buried intakes, as specified in the WVDEP-DWWM's Entrainment and Impingement Prevention Best Management Practices. All screens must be inspected and maintained frequently. The Greenbrier River also contains native freshwater mussel species, therefore, mussel salvage and relocation will be required.

A public hearing was held on March 7, 2017 to hear evidence related to the effects the proposed project will have on the community and the river. After considering all comments on the project, and its effect on the Greenbrier River, it is the opinion of WVDEP-DWWM that this project will not materially alter or affect the free-flowing characteristics of the river and should be permitted, with the following special conditions and attached standard conditions.

Special Conditions:

1. Boat passage must be maintained at all times during construction.
2. In case of severe weather which may induce flooding all materials must be removed from the river until flooding subsides.

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Therefore, a West Virginia Natural Streams Preservation Act Permit, as required by WV Code Chapter 22, Article 13 is issued to Mountain Valley Pipeline, LLC to install a 42-inch natural gas pipeline across the Greenbrier River as referenced above. The permit will be effective thirty (30) days after receipt unless appealed under W. Va. Code §22B-1-7. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It should be directed to: West Virginia Environmental Quality Board, 601 57th Street SE, Charleston, West Virginia, 25304.

Sincerely,



Scott G. Mandirola
Director

SGM/wir

Cc: WVDNR-Wildlife Resources Section, Elkins – Danny Bennett

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CONDITIONS REQUIRED FOR ISSUANCE OF FEDERAL PERMITS AND LICENSES
REQUIRING STATE SECTION 401 CERTIFICATION

Applicant: Mountain Valley Pipeline, LLC

NSP #: 17-0001

Date: July 21, 2017

1. In-stream work in designated warm water streams and their adjacent tributaries during the fish spawning season, April to June and trout waters and their adjacent tributaries during the trout water fish spawning season September 15 to March 31 requires a spawning season waiver from the West Virginia Division of Natural Resources (WV DNR) Coordination Unit, at (304) 637-0245. For information about specific stream designations contact West Virginia Department of Environmental Protection, Water Quality Standards Section at (304) 926-0495. In-stream work may occur during the respective spawning season in ephemeral waters without a waiver if all reasonable measures are taken to minimize turbidity and sedimentation downstream associated with the proposed project.
2. Operation of equipment in-stream is to be minimized and accomplished during low flow periods when practical. Ingress and egress for equipment shall be within the work site. Location of ingress and egress outside the immediate work area requires prior approval of the West Virginia Department of Environmental Protection, Division of Water and Waste Management (WV DEP DWWM) in concurrence with the WV DNR.
3. The permittee will investigate for the presence of water supply intakes or other activities within 1/2 mile downstream, which may be affected by suspended solids and turbidity increases caused by work in the watercourse. The permittee will give notice to operators of any such water supply intakes and such other water quality dependent activities as necessary before beginning work in the watercourse in sufficient time to allow preparation for any change in water quality.
4. Activities permitted by this certification are not authorized in stream mouths, embayments or island backchannels. Stream mouth is defined as the area extending 100 feet upstream and 100 feet downstream on receiving streams that are classified as a Section 10 stream.
5. The permittee will employ measures to prevent or control spills from fuels, lubricants or any other materials used in connection with construction and restrict them from entering the watercourse. Storage areas for chemicals, explosives, lubricants, equipment fuels, etc., as well as equipment refueling areas, must include containment measures (e.g., liner systems, dikes, etc.) to ensure that spillage of any material will not contact surface or ground waters. Storage areas and refueling areas shall be a minimum distance of 100 feet from any surface water body. All spills shall be promptly reported to the State Center for Pollution, Toxic Chemical and Oil Spills, 1-800-642-3074.

6. Upon completion of in-stream operations, all disturbances below the ordinary high water mark will be properly stabilized within 24 hours to prevent soil erosion. Where possible, stabilization shall incorporate revegetation using bioengineering as an alternative to riprap. If riprap is utilized, it is to be of such weight and size that bank stress or slump conditions will not be created due to its placement. Fill is to be clean, nonhazardous and of such composition that it will not adversely affect the biological, chemical or physical properties of the receiving waters. Unsuitable materials include, but are not limited to: copper chromium arsenate (CCA) and creosote treated lumber, car bodies, tires, large household appliances, construction debris, and asphalt. To reduce potential slope failure and/or erosion behind the material, fill containing concrete must be of such weight and size that promotes stability during expected high flows. Loose large slab placement of concrete sections from demolition projects greater than thirty-six inches in its longest dimension and tires are prohibited. Rebar or wire in concrete should not extend further than one (1) inch. All activities require the use of clean and coarse non-erodible materials with 15% or less of like fines that is properly sized to withstand expected high flows.
7. Land disturbances, which are one (1) acre or greater in total area, must comply with the National Pollutant Discharge Elimination System or other state stormwater permit requirements as established by the WV DEP DWWM, if applicable. Any land disturbances are required to use Best Management Practices for Sediment and Erosion Control, as described in the latest West Virginia Department of Environmental Protection's Erosion and Sediment Control Best Management Practice Manual, or similar documents prepared by the West Virginia Division of Highways. These handbooks are available from the respective agency offices.
8. Removal of well-established riparian vegetation not directly associated with the project construction is prohibited. Disturbance and removal of vegetation from project construction area is to be avoided, where possible, and minimized when necessary. Removal of vegetation shall not be allowed where stream bank stability under normal flow conditions would be compromised.
9. All permit modifications must be re-certified.
10. Cofferdams, temporary causeways, stream channel retaining structures and all necessary dikes shall be constructed of or faced with coarse, non-erodible material. Filter cloth will be placed between granular fill and riprap. All activities require the use of clean and coarse non-erodible materials with 15% or less fines that is properly sized to withstand expected high flows.
11. Spoil materials from the watercourse or onshore operations, including sludge deposits, will not be dumped in the watercourse, or deposited in wetlands or other areas where the deposit may adversely affect the surface or ground waters of the State.
12. Excavated material, other than rock or gravel, for use as backfill for the trench will not be stockpiled in the watercourse or wetland.

13. Excavation, dredging or filling in the watercourse will be done only to the extent necessary to achieve the project's purpose, and at each wetland crossing the top 12 inches of topsoil shall be removed and stockpiled separately from other excavated material. In addition, at each stream crossing, substrate in the channel is to be removed and stockpiled separately from other excavated material. This native material must be re-used in restoration of the wetland and/or stream bed.
14. Pipelines should be designed and constructed to prevent flotation and minimize the possibility of leakage or rupture. Also, shutoff valves should be installed on both sides of the channel so that the crossing can be isolated in case of pipe failure. Buried pipeline stream crossings must be designed and constructed to prevent flotation and the possibility of leakage or rupture and the top of pipelines must be buried a minimum of three (3) feet below the stream bottom.
15. Runoff from any storage areas or spills will not be allowed to enter storm sewers without acceptable removal of solids, oils and toxic compounds. Discharges from retention/detention ponds must comply with permit requirements of the National Pollutant Discharge Elimination System permit program of the WV DEP DWWM.
16. Equipment for handling and conveying materials shall be designed and operated to keep particles and dust from entering the watercourse, whether because of clean-up activities, accidental spills, natural runoff or flooding.
17. Temporary sanitary facilities, for use during construction only, will be of a type approved by the County Health Department in which the activity is taking place.
18. Screenings, removed during intake operations, will not be returned to the watercourse.
19. Concrete will not be permitted to enter the watercourse unless contained by tightly sealed forms or cells. Concrete handling equipment shall not discharge waste washwater into wetlands or watercourses at any time without adequate wastewater treatment as approved by the WV DEP DWWM.
20. The permittee will provide written notice of the proposed start-up date to the WVDEP-Environmental Enforcement (EE), fifteen days in advance of initiation of any activity authorized by the certification. The address for EE is 601 57th Street SE, Charleston, West Virginia 25304.
21. Stream activities permitted under the Nationwide Permit Program require that a West Virginia Public Lands Corporation Right of Entry be obtained. Application for Stream Activity should be made to the WV DNR, Office of Lands and Streams, at <http://www.wvdnr.gov/REM/default.shtm> or (304) 558-3225. In addition, any activity within the Federal Emergency Management Agency delineated 100-year floodplain requires approval from the appropriate Floodplain Manager. The following website provides a statewide listing of Floodplain Managers in West Virginia: <http://www.dhsem.wv.gov/MitigationRecovery/Pages/Floodplain-Management.aspx>
www.dhsem.wv.gov/mitigation/floodplain/Pages/default.aspx

22. Should potentially hazardous waste materials be located, the permittee will advise the WV DEP DWWM (Hazardous Waste Section), telephone (304) 926-0495, prior to disturbance of material.
23. The permittee shall provide a copy of the State 401 Certification to the construction contractor. A copy of the State 401 Certification shall be available at the project site until the project is complete.
24. The permittee will comply with water quality standards as contained in the West Virginia Requirements Governing Water Quality Standards, Title 47 of Code of State Regulations, Series 2.