

**SUMMARY OF THE BASIS FOR MDE'S DECISION TO ISSUE NONTIDAL WETLANDS
& WATERWAYS PERMIT NO. 17-NT-3089/201760592**

Columbia Gas Transmission LLC
Name of Applicant

17-NT-3089/201760592
Application Number

Paul Busam/Matthew Radcliffe
Project Manager(s)

March 16, 2018
Date of Decision

I. COLUMBIA'S APPLICATION

A. Description of Proposed Project

On March 23, 2017, the applicant, Columbia Gas Transmission LLC (Columbia), submitted an application to the Maryland Department of the Environment (MDE or the Department) requesting authorization to conduct regulated activities in nontidal wetlands, nontidal wetland buffers, the 100-year nontidal floodplain, and streams, as a result of its Eastern Panhandle Expansion Project. Specifically, Columbia proposes to construct approximately 3.06 miles of new 8-inch diameter natural gas pipeline in Maryland as part of a 3.37 mile pipeline originating at an interconnection at Columbia's 1804 and 10240 pipelines in Fulton County, Pennsylvania and extending south to a proposed point of delivery meter station in Morgan County, West Virginia (Project).

The Project includes one main line valve at approximately STA 133+50, which is associated with the crossing of the CSX Railroad line in West Virginia. Columbia proposes to cross the Potomac River, a tributary to the Potomac, and the C & O Canal as well as the Little Tonoloway Creek and a tributary to that creek, by using horizontal directional drill (HDD) operations. Open-cut trenching will be used at other waterway crossings. The Project will be constructed within Washington County.

B. Project Purpose and Need

Project purpose means the principal reason for conducting all regulated activities and other activities on a project site. The purpose of Columbia's Eastern Panhandle Expansion Project is to increase natural gas supply options and system reliability options, thereby reducing the risk of interruption. The Project is intended to meet the market demand growth and benefit both projected

and existing shippers by creating an additional point of delivery and providing operational flexibility. (See Permit Application.)

II. PUBLIC PARTICIPATION PROCESS

Once an application is complete, the Department issues a public notice, providing an opportunity to submit written comments or to request a public informational hearing. Public notice was issued on November 15, 2017, and Columbia provided the Department with certification that the notice of the Project was served on all contiguous property owners, interested persons, and appropriate local officials (approximately 30 people). In addition, the Department arranged for the public notice to be published in *The Herald-Mail* on November 15, 2017. The public notice was placed on the Department's website on November 15, 2017, mailed to the interested persons list for the application (including those who contacted the Administration directly, approximately 400 persons), and mailed to the general subscription mailing list maintained by the Department.

The notice announced the opening of the public comment period, which ran from November 15, 2017 to January 16, 2018. The notice also announced the public informational hearing – held on December 19, 2017 at Hancock Middle High School in Washington County. Due to the number of persons who signed up to testify, the Department scheduled a continuation of the hearing on January 22, 2018 at the same location, and extended the comment period through January 25, 2018. Approximately 300 people attended the hearings. The Department received more than 2,400 written public comments before and during the public comment period.

The Department received the following categories of comments during the application review process:

- General: need for project not demonstrated; no benefit to residents in the area; general opposition to the project; general support for the project; easement agreement required by Columbia; construction techniques to be used;
- Water Use and Water Quality: impacts on drinking water; impacts on wells; impacts on downstream drinking water sources; sedimentation/contamination of local streams; violation of federal and state water quality regulations; Clean Water Act Section 401 Certification; potential for pipeline to transport material other than natural gas;
- Soils: karst geology; impacts during and after construction;
- Other Environmental / Land Use: climate change, not consistent with fracking ban in Maryland; impacts in other states; impedes development of renewable energy; impacts from tree clearing; impacts to aquatic species, wildlife, and vegetation; impact to visual landscape and cultural resources; noise impacts;

- Safety: public safety during construction; impacts from blasting; potential leaks; pipeline failure; Columbia's safety record; maintenance and inspection of pipeline;
- Economic: impact on property values; and
- Alternatives: use alternatives such as attaching to existing bridges or construct a new bridge.

It is important to note that the Department's decision is based on Maryland nontidal wetlands and waterways statutes and regulations as discussed in detail in the appropriate sections below. Certain issues raised during the public comment period are not directly within the scope of the Department's review.

III. APPLICABLE STATUTES AND REGULATIONS

An applicant submits one application to the Department encompassing its request for all proposed impacts to nontidal wetlands, nontidal wetland buffers, the 100-year nontidal floodplain, and streams. The Department considers the project under the Nontidal Wetlands Protection Act and the Waterway Construction Act. If the Department determines that the applicant has met the requirements of the relevant statutes and implementing regulations for the proposed project impacts, the Department issues a permit for all of those impacts.

A. Nontidal Wetlands Protection Act and Regulations

Under criteria provided in Title 5, Subtitle 9 of the Environment Article, Annotated Code of Maryland and COMAR 26.23, the Department evaluates permit applications for projects proposing to conduct a regulated activity within a nontidal wetland or nontidal wetland buffer. The Department may not issue a nontidal wetlands permit for a regulated activity unless the Department finds that the applicant has demonstrated that:

- The proposed project, which is not water-dependent, has no practicable alternative;
- The regulated activity will first avoid and then minimize adverse impacts to nontidal wetlands and buffers;
- The regulated activity does not cause or contribute to a degradation of surface or ground waters; and
- The proposed project is consistent with any Department-approved comprehensive watershed management plan. (Note: This criteria is not applicable here because there are no Department-approved comprehensive watershed management plans for the watersheds where the Project is taking place.)

B. Waterway Construction Act and Regulations

Under criteria provided in Title 5, Subtitle 5 of the Environment Article, Annotated Code of Maryland and COMAR 26.17.04, the Department evaluates permit applications for projects that propose to change the course, current, or cross-section of a stream or body of water within the State including any changes to the 100-year nontidal floodplain of free-flowing waters. (Free-flowing waters do not include State or private wetlands or areas subject to tidal flooding.) As the basis for approval, denial, or modification of a waterway construction permit, the Department shall weigh all public advantages and disadvantages. The Department shall grant the permit if project approval is in the best public interest and the plans for the project provide for the greatest feasible utilization of the waters of the State, adequately preserve the public safety, and promote the general welfare. The Department may deny a waterway construction permit if the Department determines that the proposed construction is inadequate, wasteful, dangerous, impracticable, or detrimental to the public interest.

IV. APPLICATION CRITERIA EVALUATED

A. The Project Has No Practicable Alternative.

For projects such as this one, that are not water-dependent, the Department may not issue a permit for a regulated activity unless the Department first finds that the applicant has demonstrated that the proposed project has no practicable alternative. Practicable means available and capable of being done after taking into consideration costs, existing technology, and logistics in light of the overall project purpose. Under the practicable alternatives analysis, the Department shall consider:

- Whether the basic project purpose cannot be accomplished using one or more sites in the same general area as the proposed project that would avoid or result in less adverse impacts to nontidal wetlands;
- Whether the applicant has made a good faith effort to accommodate site constraints that caused an alternative to be rejected; and
- Whether the regulated activity is necessary for the project to meet a demonstrated public need.

Columbia first performed an alternative site analysis to support its application to FERC for a Certificate under the Natural Gas Act. Based on Columbia's evaluation, FERC concluded that Columbia's proposed route constituted the most feasible alternative for accomplishing the demonstrated purpose and need for the Project.

Columbia submitted the same alternative site analysis to the Department when it applied for this wetlands and waterways permit. (See Permit Application) In that initial analysis, Columbia evaluated:

i. No Action Alternative

- Failed to meet Project objectives

ii. System Alternatives

- Changes to the existing gas distribution system such as increasing the compression of gas in the pipelines would increase the supply but would fail to provide supply options or alternate means of delivery.

iii. Four Major Alignment Alternatives

- Columbia did a preliminary analysis for three major alternative alignments in Washington County east of the proposed route. All of these alternatives had greater environmental impacts to wetlands and waterways as well as increased engineering constraints due to residential impacts and road crossings as well as terrain issues.

iv. Three Variations of the Proposed Alternative

- Variation A was a change in alignment at the Potomac to follow a more southerly direction which would allow more efficient pipeline stringing and pullback length without bends. This variation was incorporated into the proposed route.
- Variation B was an attempt to take advantage of an existing powerline crossing. This route was eliminated from consideration because it was longer and brought the pipeline closer to high consequence areas (Hancock Middle / Senior High School, Church of the Nazarene, and Fort Tonoloway State Park).
- Variation C was an attempt to avoid the crossing under the Potomac by using the existing bridge at Route 522. This route was determined to have safety and constructability issues as well as impacting residential and historical/cultural sites on the West Virginia side.

Columbia's Alternatives Analysis concluded that the proposed route most feasibly meets the Project's purpose and need and, to the greatest extent, minimizes the overall impacts to the environment.

The Department was satisfied with the analysis provided by Columbia and determined that Columbia made a good faith effort to accommodate the site constraints that caused an alternative to be rejected. Given that the purpose of this Project is to increase system reliability and operational flexibility, and that the alternative site analysis demonstrated that an alternative alignment would not result in less adverse impacts to wetlands and waterways, the Department determined that the proposed regulated activity has no practicable alternative.

B. The Regulated Activity Will Avoid and Minimize Adverse Impacts to Wetlands and Waterways.

After the Department is satisfied that there is no practicable alternative to the proposed regulated activity, an applicant must demonstrate that adverse impacts to nontidal wetlands, their regulated buffers, waterways, and the 100-year floodplain are necessary and unavoidable.

i. Pre-Application Avoidance & Minimization

Even before applying to the Department for this permit, Columbia had undertaken certain avoidance and minimization measures. The applicant performed extensive field investigations to determine a route which minimized impacts to jurisdictional resources. The shortest route through the state was chosen. The alignment remains in upland areas to the extent possible. A nearby quarry was identified for use in storing construction equipment and materials to minimize the construction disturbance along the alignment. The use of Horizontal Directional Drilling (HDD) rather than open cut trenching at the crossing of the C & O Canal and Potomac River as well as at the crossing of the Little Tonoloway Creek and a nearby tributary, avoids significant impacts to regulated resources. (A more detailed discussion of HDD is below.) The locations for HDD were chosen such that each drilling operation would avoid impacts to multiple regulated resources.

ii. Avoidance and Minimization During Application Review

In its application, Columbia proposed to cross five waterways, including the Potomac River and Little Tonoloway Creek using HDD. Other stream crossings included two open cut utility crossings, two temporary vehicle crossings, and three culvert replacements. The original application listed temporary stream impacts of 269 linear feet (2,683 square feet), temporary floodplain impact of 10,134 square feet, temporary impact of 1,885 square feet of emergent nontidal wetland, 715 square feet of temporary wetland conversion of scrub-shrub nontidal wetland, and 8,345 square feet of 25-foot nontidal wetland buffer.

Corrections made to the stream and floodplain delineations, redefining parts of the culvert replacements as permanent impacts, and revisions to the plans resulted in permanent stream impacts of 127 linear feet (923 square feet), temporary stream impacts of 95 linear feet (1,130 square feet), and temporary floodplain impacts of 14,885 square feet.

After corrections to the wetland and buffer delineations and revisions to the plan, temporary wetland and buffer impacts will occur at two of the fourteen identified wetland areas. Impacts result from trenching for the installation of cathodic protection at one location and trenching for pipeline installation at the other location. Total impacts include temporary impact to 2,642 square feet of emergent nontidal wetland and temporary impact to 8,829 square feet of 25-foot nontidal

wetland buffer. Temporarily impacted resources will be restored in accordance with the permit best management practices and the approved plans.

In addition to eliminating impacts, Columbia will implement a number of measures to minimize its impacts during and after construction of the pipeline. Columbia will use temporary construction access bridges to span streams and nontidal wetland areas for needed access. Columbia will use timber mats in regulated areas and not drive directly on or through nontidal wetlands or streams. Columbia will place its construction material and equipment staging locations outside of nontidal wetlands and streams. The Project plans incorporate best management practices (BMPs) for work in regulated areas and waterway construction guidelines, which provide for further minimization.

Through these measures, Columbia minimized the extent of temporary and permanent impacts to every category of regulated resources.

iii. Horizontal Directional Drilling

Trenchless pipeline construction methods, such as HDD, are generally considered in areas where conventional construction is not feasible or to minimize impacts to sensitive resources (e.g., locations with identified rare, threatened, or endangered species, cultural resources, and major waterway/wetland crossings, major road crossings, etc.).

Columbia proposed the use of HDD at the Little Tonoloway Creek and Potomac River stream crossings.

The HDD activities avoid multiple regulated resources. Each HDD operation is designed to avoid impacts to the main stream, nearby tributaries and wetlands, and in the case of the Potomac crossing, multiple historic/cultural resources. The HDD operations do not increase the environmental impacts to wetlands or waterways due to entry and exit pits or pipe stringing and pull back areas. The area of forest removal at the HDD exit point south of Little Tonoloway Creek will be increased by approximately 0.8 acres which will be stabilized and allowed to reestablish after construction.

The remaining stream crossings will be done by the open-cut method. The Department did not require HDD at these crossings because the need for larger workspaces, longer construction schedules, increased noise, and expense associated with HDD, outweigh the environmental benefits in these locations. Open-cut trenching will result in minimal stream impacts in these areas.

iv. Summary and Conclusion

In conclusion, the Department was satisfied with Columbia's submissions regarding avoidance and minimization of regulated resources. Because Columbia is avoiding additional impacts to regulated resources by the use of HDD for the two largest stream crossings, and also minimizing its impacts by incorporating all of the guidelines, standards, and BMPs requested by the Department, the Department is satisfied that Columbia has avoided and minimized impacts to regulated resources.

C. The Regulated Activity Does Not Cause or Contribute to a Degradation of Surface or Ground Waters.

There are a number of different ways that the Department ensures that the regulated activities do not cause or contribute to a degradation of surface or ground waters.

i. Erosion and Sediment Control Measures; Stormwater Management Practices

Erosion and sediment control measures and stormwater management practices are designed to prevent the degradation of ground and surface water quality. Sediment pollution is addressed under Maryland's Erosion and Sediment Control Act. The law mandates local Soil Conservation Districts to review and approve erosion and sediment control plans developed in accordance with State standards. The Department's programmatic responsibilities are limited to promulgating regulations, and developing standards, ordinances, and other criteria necessary to administer an erosion and sediment control program, including program oversight and delegation of enforcement authority to local governments. As a result, the Washington County Soil Conservation District is responsible for the review and approval of erosion and sediment control plans for the Project.

Stormwater discharges are addressed under Maryland's Stormwater Management Act. The law requires counties and municipalities to "adopt ordinances necessary to implement a stormwater management program." The Department's programmatic responsibilities are limited to promulgating regulations defining the minimum features of a stormwater ordinance and program oversight. The Department also reviews the stormwater management program of the counties and municipalities and their field implementation and requires corrective action where a program is found deficient. For most projects, compliance with the County-issued stormwater management approval ensures that the project will not degrade water quality.

During the application review process, the Department verifies that appropriate BMPs are incorporated into the erosion and sediment control plans and the stormwater management plans to protect the State's water resources. In order to ensure that these practices are contained in the project's final design plans, Columbia is required to submit approved erosion and sediment control

plans and stormwater management plans to the Department prior to the commencement of construction activities authorized by the permit.

ii. Use of Pesticides

The Maryland Department of Agriculture requires that applicators of certain pesticides obtain a certification. The Maryland Department of the Environment issues a Toxic Material Permit for applications that may enter waters of the State. Columbia is required as a condition of the permit to comply with those regulations.

iii. Horizontal Directional Drilling Contingency Plan (HDDCP)

Because there is the potential for inadvertent releases to occur during HDD activities, which could cause the release of drilling mud, containing bentonite (fine clay) and (possibly) additives, into the waterways, the Department required Columbia to develop a Horizontal Directional Drilling Contingency Plan. Columbia's plan, which MDE approved, includes:

- Training the contractor in the provisions of the HDDCP;
- Job briefings to be held daily;
- Monitoring of the drill pressure and drilling fluid returns;
- Monitoring of the site including a visual inspection of the surface areas;
- Response equipment available on-site in case of a release;
- Response procedures; and
- Notification and reporting procedures.

Columbia will notify MDE in the event of any inadvertent release of drilling materials. In addition, if the release occurs in the Potomac River, Columbia will notify the operators of downstream public water intakes. (See HDD Contingency Plan and Special Conditions)

iv. Drilling Fluid and Additives

A drilling fluid which consists of water and bentonite clay is used in HDD operations to lubricate and cool the drill bit and carry rock cuttings to the surface. Commenters were concerned about the addition of other materials to the drilling fluid; additives which might pose some risk to public health and/or the environment. The permit contains a special condition stating that no additives are permitted without prior approval from the Administration. Columbia may submit for pre-approval a list of thickening additives to be stored on site in order to prevent delays in the drilling operation. Any additive must be certified in conformance with ANSI/NSF Standard 60 (Drinking Water Treatment Chemicals - Health Effects) and used in the manner indicated in the certification of the additive.

v. *Hydrostatic Testing and Drilling Fluid Discharges*

Columbia anticipates using 65,600 gallons of water for hydrostatic testing, which would be trucked to the Project location from a municipal source (City of Hancock). After testing is completed, water would be discharged into tanks to be hauled off site and disposed of at a municipal water treatment facility or an approved hydrostatic discharge location, in accordance with the applicable discharge permit requirements. Columbia anticipates the use of approximately 1.5 million gallons of water for drilling operations (water and bentonite clay) during the HDD process. Columbia would obtain this water from a municipal source (City of Hancock) and dispose of it at a licensed disposal facility. (See FERC Environmental Assessment, January, 2018)

vi. *Drinking Water Wells*

Commenters were concerned about environmental impacts that could result from a pipeline rupture. The pipeline will be constructed with pipe that has a thicker wall and higher yield strength than required under Department of Transportation, Pipeline and Hazardous Materials Safety Administration standards. The pipeline inspection and testing is discussed below. (See FERC EA, January 2018 & Columbia Gas letter dated February 7, 2018). In addition, although there have been some cases where natural gas has traveled through subsurface fissures, generally, in the event of a rupture of a pipeline under a body of water, natural gas would likely move up and ultimately dissipate into the air. Natural gas would be unlikely to sink into the ground and, therefore, would be unlikely to adversely affect wetlands, waterways, or groundwater.

In addition, commenters asserted that wells and water supply could be adversely impacted during the construction of the Project. Columbia, after consultation with Washington County, MDE, and the West Virginia Department of Health, did not identify any Wellhead Protection Areas which would be crossed by the Project. The FERC Environmental Assessment recommends Columbia be required to test any at-risk wells before and after construction and Columbia is responsible for replacing or repairing any damaged wells. Columbia identified several wells within 150 feet of the construction workspace/limits of disturbance. After further consideration, the Department determined that it would be prudent for Columbia to test wells within 500 feet of the workspace/limits before and after construction. The permit also includes a special condition requiring Columbia to repair or replace any wells damaged during construction. The Department does not anticipate any impacts to groundwater as a result of this Project. (See FERC EA, January 2018 & Special Conditions)

vii. *Downstream Water Supply*

The Department received comments asserting that the Project could degrade downstream waters during construction and operation, including water supplies to Hagerstown, Berkeley County,

Sharpsburg, Shepherdstown, Harpers Ferry, Brunswick, Frederick, Leesburg, Fairfax, WSSC, Rockville, and the District of Columbia. The distance downstream to the nearest public water intake from the Project is approximately 25 river miles. The Department is requiring measures to minimize the potential for a significant adverse impact to downstream water supplies, including the following:

- Restriction and approval for the use of additives in the drilling fluid;
- The use of an independent environmental monitor, selected in consultation with the Administration, to be on site at all times during construction activities, and report directly to the Administration's Compliance Program;
- Visual monitoring of the Potomac from a boat during all daylight hours; and
- Notification of the operators of all downstream drinking water intakes of any inadvertent release of drilling fluid or pollution event.

Due to the requirements the Department is placing on Columbia during construction and operation, the Department does not anticipate this Project having any significant adverse impacts on downstream water supplies.

Summary and Conclusion

Given all of the measures incorporated into the plans and specifications for this Project, including erosion and sediment controls, stormwater management, HDD Contingency Plan, and special conditions, the Department is satisfied that the Project will not cause or contribute to a degradation of surface or groundwater.

D. The Project Complies With All Relevant Waterway Construction Regulatory Criteria.

Although the standards are articulated differently in the Nontidal Wetlands Protection Act and the Waterway Construction Act, the objective of both statutes is the same – to protect the regulated resources from unnecessary adverse impacts. The purpose and need for the Project, the practicable alternatives analysis, and the avoidance and minimization analysis described above are applicable to both wetlands and waterways impacts and, therefore, will not be duplicated in this section. This section discusses only the waterway-specific criteria the Department considered and evaluated for this Project.

i. Hydrologic and Hydraulic Analysis

Typically, an applicant is required to submit hydrologic and hydraulic computations for projects which permanently change the course, current or cross-section of waters of the State to assure compliance with the waterway construction regulations (COMAR 26.17.04). For this Project,

Columbia was required to submit a detailed hydrologic and hydraulic analysis of all the roadway stream crossings it is upgrading/replacing. Three roadway culvert replacements were analyzed and were determined to comply with the waterway construction regulations. (Final H & H calculations were submitted by Arcadis U.S., Inc. on behalf of Columbia Gas on August 21, 2017 with corrections on September 21, 2017 in response to MDE Comments.)

ii. Erosion and Sediment Control Plans

Columbia submitted the final erosion and sediment control plans approved by the Washington County Soil Conservation District in accordance with the Waterway Construction regulatory requirements (COMAR 26.17.04). The approved plans detail the methods of erosion and sediment control during construction and the methods of stream diversion to be used during construction. The Department verified that appropriate BMPs and the Department's Guidelines for Waterway Construction were incorporated into the plans, and that all temporary access crossings and temporary sediment-trapping devices satisfy the waterway regulations. Columbia also submitted the sequence of construction details and has delineated all temporary staging and stockpiling areas in accordance with the Department's requirements.

iii. Time of Year Restrictions

In order to protect fisheries, aquatic and terrestrial habitat, and their related flora and fauna, time of year restrictions will be in place for all in-stream work. The time of year restrictions will also apply to HDD operations.

iv. Summary and Conclusion

In conclusion, the Department evaluated the application in light of the applicable waterway construction regulations and criteria. The Department considered public comments and determined that the Project meets the applicable regulatory requirements.

V. Additional Considerations Relevant to the Department's Decision

A. Rare, Threatened, or Endangered Species

All applications are screened to determine whether there are designated resources in the area such as rare, threatened or endangered species. If rare, threatened, or endangered species are indicated, the Department sends the application to DNR for review and comment.

When the screening process for Columbia's application detected potential impacts to rare, threatened, or endangered species, the Department forwarded it to DNR's Wildlife and Heritage

Service for comments. DNR's comment letter stated that there are no State or federal records for rare, threatened, or endangered species within the boundaries of the Project. DNR did however identify a listed freshwater mussel in the Potomac which requires a fish host as part of its life cycle. The time of year restriction for in-stream work was extended to also include HDD operations as a precautionary measure to address this issue. (See DNR letter dated November 9, 2017.)

B. Historical and Archeological Resources

An application is also screened to determine whether there are historical or archeological resources in the area, and, if so, the Department forwards the application to the Maryland Historical Trust (MHT) for review and comment. When the screening process for Columbia's application detected potential impacts to historical or archeological resources, the Department forwarded the application to MHT. On May 15, 2017, MHT requested information demonstrating the avoidance of certain historical properties. Columbia provided the information and revised site plans. In their letter of July 25, 2017, MHT concurred that the Project would have no adverse effects on cultural resources.

C. Forest Interior Dwelling Species (FIDS)

Forest interior dwelling species (FIDS) require large forest areas to breed successfully and maintain viable populations. FIDS are an integral part of Maryland's landscape and have depended on large forested tracts, including streamside and Bayside forests, for thousands of years. Forest fragmentation results in both direct and indirect impacts to FIDS by reducing both the quantity and quality of forest habitat available to FIDS. According to DNR's Wildlife and Heritage Service information, there is FIDS habitat in upland areas of the alignment. DNR urged minimizing forest removal where feasible. Columbia provided information to the Department justifying the area of the forest removal in the right-of-way based on federal standards for pipeline construction including access, safety, and inspection. (See the Record of Meeting between the Applicant and MDE, September 25, 2017.)

D. Forest Conservation

This Project must comply with the Maryland Forest Conservation Act (FCA). The objectives of the FCA are to minimize the loss of forest land from development and ensure that priority areas for forest retention and forest planting are identified and protected prior to development. For impacts to State-owned land, DNR is responsible for implementing the requirements of the FCA. Washington County has been delegated by the State to oversee and implement the requirements of the FCA for non-State-owned land. This Project must, therefore, have Forest Conservation Plans approved by DNR, and Washington County.

E. Mitigation

Mitigation is only a consideration in a permit decision after steps have been taken to avoid and minimize impacts to nontidal wetlands and their regulated buffers, and nontidal waterways, including the 100-year floodplain. No mitigation is required for temporary wetland or buffer impacts in accordance with COMAR 26.23.04.02.A.

VI. RESPONSE TO ADDITIONAL PUBLIC COMMENTS

The following section discusses additional comments received by the Department.

A. Demonstrated Public Need and Benefit to Maryland

Commenters expressed a concern that the Project has no demonstrated public need and that the Project will not benefit Maryland. Interstate natural gas pipelines are regulated by the Federal Energy Regulatory Commission and that agency provides the Certificate of Public Convenience and Necessity. While not directly intended as the purpose and need, Columbia did assert that the operational flexibility provided with this Project could increase the supply of gas available to Maryland and that the economic opportunities which may result from the Project could be regional. (See Columbia Gas letter dated February 7, 2018)

B. Water Quality Certification under Clean Water Act

Commenters requested MDE to require an individual water quality certification (WQC) for the Project. Under Section 401 of the Clean Water Act, a project which requires a federal license for construction, which may result in any discharge into waters of the United States, shall be certified by the State in which the discharge originates, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act.

The U. S. Army Corps of Engineers, as the federal agency responsible for regulating discharges of fill to waters of the U.S. pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, is reviewing this Project under the Maryland State Programmatic General Permit - 5 (MDSPGP-5), Category B. The Water Quality Certification for activities authorized under the MDSPGP-5 was issued by the Department on October 1, 2016.

Although MDE did not conduct an individual WQC for this project, MDE did evaluate potential impacts of the project on water resources and water quality and put in place conditions in its Nontidal Wetlands and Waterways Permit to help ensure that water resources and water quality will be protected. These conditions include: the Conditions of Permit, the Special Conditions of Permit, the Best Management Practices, the HDD Contingency Plan, the Spill Prevention Control and Countermeasures, and the Erosion and Sediment Control Plan.

C. Safety Issues

Commenters expressed concerns about the safety of gas pipelines generally. FERC states that the U.S. Department of Transportation (DOT) has exclusive authority to promulgate federal safety standards used in the transportation of natural gas. Pipelines must be designed, constructed, operated, and maintained in accordance with the DOT Minimum Safety Standards in Title 49 CFR Part 192.

Columbia has committed under 49 CFR 192 – Subpart O to conduct regular surveys and inspections of its facilities through monthly aerial inspections, annual line patrol, annual leak detection surveys, and cathodic protection rectifier reading six times per year.

D. Blasting

Commenters raised concerns with a statement in Columbia's application to FERC that pipeline construction may require blasting in areas if shallow bedrock is encountered. They stated that blasting in close proximity to wells could rupture the well casing and increase the likelihood of contamination. Blasting could also open pathways to underground voids, if any exist, and has the potential to affect the habitat of rare species in the area.

As a condition of this permit, no blasting is permitted without prior written approval from the Department's Wetland and Waterways Program. If blasting is required, it will be performed under the supervision of a Maryland-certified blaster who is familiar with local ordinances and guidelines for blasting. The handling and use of explosives in Maryland is regulated by the Department's Bureau of Mines and the federal Bureau of Alcohol, Tobacco, Firearms, and Explosives. Blasting activities would be required to strictly adhere to all local, state, and federal regulations applying to controlled blasting and blast vibration limits concerning structures and underground or aboveground utilities.

E. Karst

Karst is a type of landscape underlain with soluble rock such as limestone or dolomite. It is characterized by caves, sinkholes, and underground drainage features. Commenters expressed concern regarding the potential impacts of trenching operations or HDD in an area where there might be karst geology. The concerns centered around the potential for these activities to interrupt or contaminate the underground aquifer.

Columbia conducted field geological surveys along the entire Project alignment and did not encounter soft-rock or bedrock that is indicative of karst. The information from the subsurface

investigation was reviewed by the Maryland Geological Survey which confirmed for MDE the appropriateness and adequacy of the findings.

Nevertheless, requirements to remediate voids uncovered while trenching are included as a condition of the permit. The permit also requires the testing of wells within 500 feet of the workspace, before and after the construction. Inadvertent release of drilling fluids during the HDD operations is addressed under the HDD Contingency Plan. Columbia is required to replace or repair any well which is damaged or degraded as a result of work done under this permit.

F. Issues Beyond the Scope of the Administration's Wetlands and Waterways Review

Commenters expressed a number of other concerns which are beyond the scope of the review for a Nontidal Wetlands and Waterways Permit. These concerns included the potential for the Project to:

- Affect climate change;
- Facilitate other projects in West Virginia which would have impacts to their wetlands and waterways and could ultimately impact Maryland waters;
- Facilitate other projects in West Virginia which could result in the exercise of eminent domain to secure the right-of-ways;
- Encourage hydraulic fracking as a natural gas extraction method in Pennsylvania;
- Change the appearance of the landscape;
- Create noise during construction or operation: and
- Affect local property values.

The Department defers to other state, federal, and local governments and other regulatory bodies as appropriate, to assess and take any appropriate action regarding such matters.

VII. CONCLUSION

Based on the Department's review of the application and all additional submissions from Columbia, the Department has determined that the Project satisfies all of the relevant requirements of the Nontidal Wetlands Protection Act and its implementing regulations as well as the Waterway Construction Act and its implementing regulations. Therefore, it is the Department's decision to issue Nontidal Wetlands and Waterways Permit Number 17-NT-3089/201760592 to Columbia for the regulated activities associated with this Project.

