

**WATER AND SCIENCE ADMINISTRATION
TIDAL WETLANDS DIVISION**

Wetland Report and Recommendation

State Wetlands Case No:

20-WL-0470

Applicant:	Chesapeake Utilities C/o Garth Jones 500 Energy Lane Dover, Delaware 19901 (303) 213-7455 Via email: gjones@chpk.com	Agent:	Geo-Technology Associates, Inc. C/o Justin Weber 3445-A Box Hill Corporate Ctr Dr. Abingdon Maryland 21009 (410) 515-9446 Via email: jweber@gtaeng.com
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Date Application Received: May 7, 2020 Public Notice Required? Yes

Comment Period Closing Date: September 15, 2020

Maryland Coordinates: 69130 x 518010

Book Map Coordinates: Somerset Co. ADC Map Num: 0 Ed: N/A Coord: N/A

Location of Proposed Work: Extending from the intersection of Merser Road and Ocean Highway (U.S. Route 13) southwest to the intersection of U.S. Route 13 and Revells Neck Road, in the Princess Anne area of Somerset County, Maryland.

Purpose of Proposed Work: The purpose of this project is to extend natural gas to Eastern Correctional Institution (ECI) and the University of Maryland Eastern Shore (UMES) and residents and businesses along the line.

Description of Authorized Work: Install approximately 140 linear feet of new 8-inch diameter buried natural gas pipeline, within a total of 140 linear feet of pipeline crossing three tidal tributaries using horizontal directional drill (HDD) as depicted on plans dated July 7, 2020 and described below:

1. Install an 8-inch diameter natural gas pipeline within a 12-inch boring across 69 linear feet at a minimum depth of 27.5 feet below the bottom surface of the Manokin River;
2. Install an 8-inch diameter natural gas pipeline within a 12-inch boring across 21 linear feet at a minimum depth of 28 feet below the bottom surface of Taylor Branch; and
3. Install an 8-inch diameter natural gas pipeline within a 12-inch boring across 50 linear feet at a minimum depth of 27.5 feet below the bottom surface of Kings Creek.

Waterbodies: Manokin River, Taylor Branch and Kings Creek

Is a Water Quality Certification required?: Yes, the project qualifies for coverage under the Maryland State Programmatic General Permit-5 (MDSPGP-5), for which a Water Quality Certification has been issued.

Qualifies for Maryland State Programmatic General Permit?: Yes, the project was reviewed as a Category B project under the MDSPGP-5 and a separate authorization was issued by the United States Army Corps of Engineers directly to the applicant under NAB-2020-60583 (Chesapeake Utilities Somerset Co Exp/Gas Service). See Attachment C.

Area of Vegetated Wetland Impacts Requiring Mitigation: 0 square feet

Area of Wetlands Created: 0 square feet

Was the Applicant's Original Project Modified?: Yes, the application was submitted for a 6-inch diameter pipeline but was revised to an 8-inch diameter pipeline.

Monetary Compensation Recommended: Yes. The Department recommends that compensation be made to the State of Maryland for three 8-inch diameter pipeline crossings of tidal wetlands totaling 140 linear feet in an amount to be determined by the Maryland Board of Public Works.

Department Comment:

Chesapeake Utilities is a natural gas distribution company located in Delaware and a fully-owned subsidiary of the Chesapeake Utilities Corporation. Chesapeake Utilities is proposing to construct, own, and operate approximately 10.75 miles of a new 8-inch diameter buried natural gas pipeline beginning at a metering and regulation station to be constructed at Merser Road, near Eden and extending southwest along U.S. Route 13 to the intersection of U.S. Route 13 and Revells Neck Road. The purpose of the project is to meet the natural gas demand from agri-industry, businesses, including Eastern Correctional Institute (ECI) and University of Maryland Eastern Shore (UMES), and residential growth. The pipeline route generally follows US Route 13 within the road and railroad rights-of-way within 5 feet off of the roadway. All proposed tidal and non-tidal wetland crossings are to be done using Hydraulic Directional Drilling (HDD) methods. The nontidal wetland review under 20-NT-2033 resulted in the determination that no nontidal wetlands would be impacted and an authorization was not required. The crossing of tidal wetlands, which are state owned, requires an authorization through the Board of Public Works and compensation.

This Report and Recommendation addresses three tidal tributary crossings at Manokin River, Taylor Branch and Kings Creek, which the pipeline will cross using HDD methods.

As required by § 5-204(b) of the Environment Article, the Department drafted and issued a public notice by posting the public notice on its website from August 15, 2020 to September 15, 2020 and publishing the public notice for the proposed project in the *Somerset Herald* on August 26, 2020. In addition, the public notice was provided to adjacent property owners listed on Attachment A.

The applicant proposed to include notice of a public hearing within the public notice. A virtual public hearing was held on September 17, 2020 from 6:00 pm to 9:00 pm using GoToWebinar. Information was placed on a dedicated website beginning on August 21, 2020 to explain the process to register and participate in the live virtual hearing by internet, to call in by phone, and to provide information to MDE by September 10, 2020 to be read on behalf of the interested person. The website link is <https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/chesapeake-utilities-pipeline-project.aspx>.

On September 17, 2020 the virtual hearing was held from 6:00 pm to 9:00 pm. 158 people registered to attend the hearing and 83 actually signed-in and participated. The hearing officer explained that the purpose of the public informational hearing was for the applicant to present the proposed project and tidal wetland impacts associated with the proposed activity. After the introduction, the agent for the project, Justin Weber, gave a presentation about the proposed gas line. Participants were then given an opportunity to ask questions about the project by typing questions which were read by MDE staff, or by "raising their hand" and being un-muted and allowed to ask their question directly. Many questions were about broader impacts not directly related to the three tidal crossings. People whose questions were not answered during the hearing but which related to information about which Chesapeake Utilities would be in the best position to answer were referred to a website managed by Chesapeake Utilities to submit their questions. These questions involved issues such as the engineering and design criteria that led to the increase the diameter of the pipeline to 8

inches, methods used to calculate claims of greenhouse gas reductions, and monitoring schedules and procedures. After the question and answer session, the participants were given the opportunity to provide comments about the project. MDE was requested to read a comment on behalf of one commenter. The hearing was closed with information about how to provide written comments regarding the project. The comment period for the public informational hearing closed on October 1, 2020.

Letters in favor of the project were received from Senator Mary Beth Carozza of the Maryland State Senate, Delegate Charles Otto of the Maryland House of Delegates, Craig Mathies, Sr., President of the Commissioners of Somerset County, Daniel Thompson, Executive Director of Somerset County Economic Development Commission, and Gregory Padgham, Executive Director of the Tri-County Council for the Lower Eastern Shore. Support was expressed for the expected benefit to air emissions, with an expected reduction in CO₂ emissions from the conversion of ECI and UMES to natural gas. It was also mentioned by Senator Carozza that the gas infrastructure will support the development of a facility that will produce renewable natural gas (RNG) while reducing nutrient run-off from poultry waste. The availability of natural gas was thought to be a key factor to attract potential businesses to locate in Somerset County which will potentially bring new jobs to the area as evidenced by several businesses that are proposing expansion or development in the county pending the availability of natural gas.

Several letters and emails were received questioning this project, with one letter from the Sierra Club including 540 signatures and 204 individual comments, and another letter from several environmental organizations including Chesapeake Climate Action Network, Environmental Integrity Project, and the Sierra Club. One letter requested a minimum 30-day extension to the comment period to allow time for review of requested information. Supplemental information was requested about the methods used to calculate anticipated reduced greenhouse gas emissions referenced in the application and information regarding potential impacts to historic properties in the area. MDE responded in a letter that provided information about the review requirements, referred the commenter to websites to obtain additional information, and denied the request for an extension to the comment period. In accordance with Wetlands and Waterways Program procedures, the concerns that were submitted were summarized and sent to the Chesapeake Utilities' agent on October 15, 2020. The agent responded to the concerns in a letter to MDE dated October 26, 2020.

Summarized Concerns and Chesapeake Utilities responses

1. There is insufficient need or public benefit to support a gas line to extend into Somerset County.

There were concerns that the applicant had not provided evidence of a public need for natural gas. It was stated that the current economics do not support the need for a pipeline, that new construction has been shown to be cheaper with electric heating, and older buildings are easier to retrofit with electric rather than changing to natural gas. The point was made that a Maryland Environment Service request for proposals, Project ID No. 1-19-4-01-8, was a request for proposals to provide engineering, procurement, and construction of a natural gas pipeline to supply ECI and the UMES campus and was not open to all energy providers, only a gas solution. The public benefit of this project cannot be accurately calculated since the bidding process to provide energy to ECI and UMES did not include alternative energy sources. Since green energy and electricity were not given an opportunity to bid, it is not known whether the proposed natural gas project is a least-cost approach. Concerns were expressed that the pipeline will contribute to the use of fossil fuels and lead to an increase in greenhouse gas (GHG) emissions. This is contrary to the Greenhouse Emissions Reduction Act of 2016 which was passed for the benefit of the public. The increase in global warming from resulting greenhouse emissions would be detrimental to the tourism, hunting, and agricultural industries causing a negative economic impact. The pipeline and associated safety concerns could have a potential negative impact to historical properties in the area. There was concern that gas companies are going bankrupt leaving stranded assets, and that a pipeline will become a financial burden that will need to be addressed in the event of bankruptcy. The recommendation was made that a Wetland License, if issued, contain the requirement for Chesapeake Utilities to obtain a bond to secure compliance with tidal statutes

and regulations and to ensure that funds are available to correct any negative impacts to water quality and regulated resources.

Chesapeake Utilities Response

Chesapeake answered that they responded to a request for proposal (RFP) issued by the Maryland Environmental Service (MES), and they were not involved in crafting the RFP. Chesapeake Utilities estimates that by transitioning to natural gas, the Eastern Correctional Institution and the University of Maryland Eastern Shore will reduce their site CO2 emissions by 65% and 38%, respectively. In answer to concerns about historic properties, Chesapeake Utilities noted that the Maryland Historical Trust, which functions as Maryland's State Historic Preservation Office (SHPO), determined that the proposed project would have "no adverse effect" on historic properties. Regarding questions of liability for stranded assets, Chesapeake Utilities pointed out that this is difficult to answer since numerous unknown factors would determine how the natural gas line would be treated. They noted that Chesapeake Utilities has been safely and reliably distributing natural gas to customers on the Delmarva Peninsula for over 160-years. If the decision is made that a bond is required for this proposal, it will be added as a special condition to the Wetland License that would be granted by the Maryland Board of Public Works (BPW) and Chesapeake Utilities would abide by those conditions.

2. This application is not for a single and complete project.

Comments were received that the transmission line submitted by Eastern Shore Natural Gas (ESNG) (19-WL-1043) and this project should be submitted as a single and complete project so it is evaluated to determine whether the impacts of the proposed extension outweigh the impacts. It was noted that both segments had the same project purpose which cannot be accomplished without both segments. For example, since this section of the extension is not considered part of the interstate DEL MAR Pathway and does not cross state lines, it was not subject to the Federal Energy Regulatory Commission (FERC) Review. It was thought that, if the Chesapeake Utilities section of pipeline is considered separate, the Open Season conducted for Eastern Shore Natural Gas and the FERC evaluation should not be applied to this section and an evaluation was requested to ensure that this part of the pipeline is in the public interest. It was noted that Chesapeake Utilities and ESNG are subsidiaries of Chesapeake Utilities Corporation and that this application is for a segment of a larger project.

Chesapeake Utilities Response

Chesapeake Utilities responded that the "single and complete project" is a standard applied by the U.S. Army Corps of Engineers under Federal law concerning the applicability of the Clean Water Act to proposed water crossings by certain utility projects. They pointed out that the U.S. Army Corps of Engineers has reviewed the application submitted by Eastern Shore Natural Gas and the application submitted by Chesapeake Utilities and considered them separate projects. This is verified by the fact that the Chesapeake Utilities project is authorized under the Maryland State Programmatic General Permit-5 (MDSPGP-5) and was issued by the U.S. Army Corps of Engineers on October 13, 2020. They explained that Chesapeake Utilities is a natural gas distribution company that delivers natural gas to residential, commercial, and industrial customers, regulated by the Maryland Public Service Commission. Since this section is not an interstate natural gas pipeline system, it does not fall under FERC's jurisdiction and did not require their review.

3. This project is contrary to Maryland's goal of increasing renewable energy.

The comment was made that the Greenhouse Emissions Reduction Act of 2016 requires that Maryland reduce GHG emissions by 40% by 2030 and that this project seems to contradict these goals. Questions were raised regarding the reported benefits from the project in reduction of sulfur oxides by 99.9%, nitrogen oxides by 59%, carbon dioxide by 25% and methane by 65%. The method used to calculate these reductions was requested and it was stated that these numbers are based on a comparison of propane to gas without looking at renewable electric generation and electric heating. Additionally, upstream emissions caused by the process of extracting gas to be provided by this pipeline were not considered in the calculation.

Chesapeake Utilities Response

Chesapeake Utilities responded that they do not anticipate that the proposed project will result in a significant increase of greenhouse gas emissions. They believe that the project supports the development of renewable waste to energy projects in Somerset County and supports GHG site emission reductions at UMES and ECI. In the review of the emission reductions for the anchor customers, Chesapeake Utilities used standard emission factors found on the U.S. Energy Information Administration web site and the existing onsite fuel type and quantity used, which was provided in Maryland Environmental Service's request for proposals.

4. **The project will contribute to climate change**

The project was thought to be contributing to climate change which will lead to more flooding, storms and sea level rise. There were concerns about the release of methane which is a more potent greenhouse gas than carbon dioxide.

Chesapeake Utilities Response

Chesapeake Utilities does not anticipate that the proposed project will result in a significant increase of greenhouse gas emissions, and will therefore not contribute to climate change. They anticipate that the proposed project will result in a net decrease in methane emissions of approximately 65%. Chesapeake Utilities will be constructing this project with state-of-the-art materials and modern construction practices and will follow monitoring practices outlined by the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Code of Maryland Regulations (COMAR).

5. **The pipeline will degrade wetlands.**

There was concern that the project would contribute to sedimentation from heavy rainfall events, and that the current soil erosion and sediment control practices are outdated and will not be adequate to keep sediment out of the wetlands. The applicant was asked to demonstrate that its proposed pollution control will take current rainfall patterns into consideration. The potential impacts from an inadvertent release during the HDD process were of concern. The Chesapeake Utilities Horizontal Directional Drilling Inadvertent Surface Release Contingency Plan was thought to be inadequate. Suggestions for special conditions were made to address frac-outs. There were concerns that the increase in use of natural gas would have potential impacts to wetlands from climate change and that impacts from flooding, storm surges, and sea level rise would have a potential impact on the pipeline once constructed. There were concerns that wildlife habitat will be degraded and that salt water intrusion and changes in substrate depth would occur.

Chesapeake Utilities Response

During construction, Chesapeake Utilities will follow the State of Maryland and/or local Erosion and Sedimentation regulations and Best Management Practices (BMPs). Additionally, the natural gas line would be installed beneath the tidal waterways utilizing horizontal directional drilling (HDD) construction methods. For these reasons, they do not anticipate discharge of sediment to wetlands. Chesapeake Utilities responded that they will adhere to conditions specified in the MDE and/or BPW Wetland License. They anticipate that the proposed project will result in a net decrease in methane and other greenhouse gas emissions as a result of fuel switching at ECI, UMES and other expected customers. Therefore, they do not expect the project to contribute to climate change or related impacts to wetlands. The proposed natural gas line would be located beneath the ground surface; therefore, it is not anticipated that flooding, storm surges, or sea level rise would impact the line. Chesapeake Utilities does not anticipate tree clearing or other significant impacts to wildlife habitat. The HDD sending and receiving pits will be located outside of the waterways in upland areas. Therefore, the proposed project is not anticipated to result in salt water intrusion or changes in substrate depth.

6. Procedural Concerns

Concerns were raised about the increase in the diameter of the pipeline between the time of application and the public hearing. The need for the increase was questioned as well as the potential increase in impacts. There was a request that the Federal Energy Regulatory Commission (FERC) review this Chesapeake Utilities section of pipeline and the ESNG section of pipeline together before MDE authorizes the project. An environmental justice review was requested. There were concerns expressed about the public hearing and the lack of experts to answer questions during the hearing. The process of referring questions to a website was not considered appropriate for a public information hearing.

Chesapeake Utilities Response

The shift from 6-inch to 8-inch diameter pipe was made in the normal course of planning and engineering. MDE was informed of the change in a timely manner and the geotechnical report, which is posted on the MDE website, included consideration of the 8-inch pipe. Importantly, in terms of impacts to tidal wetlands, the HDD bore hole size did not change as a result of the change from 6-inch to 8-inch diameter pipe. Regarding the request for a FERC review, Chesapeake Utilities explained that they are a natural gas distribution company that delivers natural gas to residential, commercial, and industrial customers. It is not an interstate natural gas pipeline system, and therefore does not fall under FERC's jurisdiction. The proposed project will deliver natural gas service to Somerset County. It will extend natural gas service to the Eastern Correctional Institution and the University of Maryland Eastern Shore, helping to improve each facility's environmental profile while offering significant economic benefits to the area. Residents and businesses along the line will also have the choice to use environmentally beneficial and less expensive natural gas service. The natural gas line will be primarily located within public road rights-of-way, and will therefore have minimal environmental impacts. During the public informational hearing, representatives from Geo-Technology Associates, who prepared the "Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland" and associated materials, were available to answer questions regarding the proposed project related to wetlands and waterways. Chesapeake Utilities provided the website located at <https://somersetnaturalgas.com/> to present additional information about the project, and to allow members of the public to ask additional questions that may not be related to wetlands and waterways.

MDE Responses to Key Issues Raised in Public Comments

Key issues:

1. There is insufficient need or public benefit to support a gas line to extend into Somerset County.

MDE Response: Maryland's tidal wetlands regulations require MDE to take into account the ecological, economic, developmental, recreational, and aesthetic value of tidal wetlands and consider, among one of 19 separate factors, the degree to which the activity benefits the public (when a project has public benefits). Somerset County officials, the Tri County Council, and local politicians have advocated for this project based on the anticipated benefits to greenhouse gas emissions from the change of ECI and UMES to natural gas, as well as the businesses that plan to expand or locate in Somerset County pending the availability of natural gas. An increase in jobs and an improvement in the local economy as well as a less expensive fuel option are anticipated public benefits. Somerset County has entered into a Franchise Agreement with Chesapeake Utilities which specifies responsibilities for each entity.

2. This application is not for a single and complete project.

MDE Response: The stated purpose of this project is to provide natural gas to Somerset County. The new distribution line will begin at a metering and regulation facility at Merser Road near Eden, Maryland which is proposed to be built by a separate company. Since these are two different companies and two types of natural gas lines (i.e., transmission and distribution), the two segments can be considered separately.

Chesapeake Utilities will be solely responsible for the operation and maintenance of the distribution pipeline installed under this permit.

The Army Corps of Engineers (ACOE) reviewed this project as a Category B project under the MDSPGP-5 and also determined that it was a single and complete project. The ACOE defines a single and complete linear project to be a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point. The ACOE authorized the project on October 13, 2020 under NAB-2020-60583 (Chesapeake Utilities Somerset Co Exp/Gas Service). See Attachment C.

3. The proposal is contrary to Maryland's goal of increasing renewable energy.

MDE Response: Under MD tidal wetlands regulations, MDE is required to ensure that projects designed to achieve a particular purpose are designed in a manner that avoids and then minimizes the loss of tidal wetlands. The basis for a MDE recommendation to allow impacts to tidal wetlands must take into account the value of the impacted tidal wetland and the degree to which the impacts can be avoided or minimized while still meeting the purpose for the project. In this case, the purpose of the project is to distribute natural gas from a location near Merser Road and US 13 near Eden, and extending to the intersection of US 13 and Revells Neck Road near Princess Anne in Somerset County, MD. The purpose of this project is defined by the applicant and is not subject to revision by MDE. MDE supports renewable energy policies and projects but the relevant scope of review for this particular gas distribution project is whether it can avoid or minimize impacts to tidal wetlands. The Department needs to determine whether the project purpose--which is to distribute natural gas---can be achieved in a manner which avoids or minimizes impacts to tidal wetlands.

Chesapeake Utilities is a natural gas distribution company that connects to the transmission pipeline at a metering and regulation facility and transports that gas to the customer. Chesapeake Utilities, as a natural gas distribution company, receives natural gas from a transmission company that receives natural gas from interconnects with three upstream natural gas interstate pipelines and further transports that gas to customer delivery points throughout the Delmarva Peninsula. Natural gas transported through interstate commerce comes from multiple sources, including natural gas derived through fracking. Chesapeake Utilities is proposing to construct, own, and operate approximately 10.75 miles of a new 8-inch diameter buried natural gas pipeline beginning at a metering and regulation station to be constructed at Merser Road, near Eden and extending southwest along U.S. Route 13 to the intersection of U.S. Route 13 and Revells Neck Road. The purpose of the project is to meet the natural gas demand from agri-industry, businesses, including Eastern Correctional Institute (ECI) and University of Maryland Eastern Shore (UMES), and residential growth. This project is a natural gas distribution project to provide entities which are currently using timber biofuel with the option of choosing natural gas. There are no impacts to vegetated tidal wetlands or submerged aquatic vegetation associated with the tidal wetlands portion of this project.

4. The project will contribute to climate change.

MDE Response: Under Maryland's tidal wetlands regulations, MDE is required to ensure that projects designed to achieve a particular purpose--such as the distribution of natural gas--are designed in a manner that avoids and minimizes the loss of tidal wetlands. Although it is well recognized that fossil fuel use contributes to climate change, the focus of MDE's review is on avoiding and minimizing tidal wetlands impacts for a project whose purpose is to distribute natural gas. Chesapeake Utilities is a natural gas distribution company that connects to the transmission pipeline at a metering and regulation facility and transports that gas to the customer. Vegetated tidal wetlands and submerged aquatic vegetation are not directly impacted by the proposed HDD. The impacts to tidal wetlands associated with this project will not contribute to flooding, storm surges, and sea level rise or reduce the ability of these tidal wetlands to function as a carbon sink. Moreover, installing a 140 foot-long 8 inch diameter natural gas pipeline 27.5 to 28 feet under the river bottom of the Manokin River, Taylor Branch and Kings Creek using HDD minimizes adverse impacts to tidal wetlands at these locations. These are stable waterways making it unlikely for channel migration. HDD is a trenchless construction method which eliminates the need for equipment to enter the

waterways. There is no surface disturbance or activity in the waterway and bank stability is not adversely impacted. The use of HDD minimizes adverse impacts to tidal wetlands. The environmental risks posed by potential frac-outs can be reduced to acceptable levels by requiring the applicant to adhere to the guidelines set forth in HORIZONTAL DIRECTIONAL DRILLING (HDD) Good Practices Guidelines 4th Edition [authors: David Bennett, Ph.D., P.E., et al.]. In addition, Chesapeake Utilities will perform recurring visual and integrity surveys of the pipeline in compliance with the U.S. Department of Transportation Minimum Federal Safety Standards in 49 Code of Federal Regulations (CFR) Part 192 to ensure pipeline safety. Chesapeake Utilities has a division, Gas Control, which is capable of monitoring the status and condition of the distribution system's pressures and changes in flow seven days a week, 24 hours a day. Gas Control is able to see changes in gas flow and pressure and will alert the operator to changing conditions.

Special Conditions E, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, and Y have been recommended regarding this comment.

5. The pipeline will degrade wetlands.

MDE Response: The impacts to tidal wetlands associated with the proposed HDD will not contribute to flooding, storm surges and sea level rise or reduce the ability of these tidal wetlands to function. Moreover, this emplacement of a total of 140 linear feet across three tidal tributaries 27.5 to 28 feet under the bottom using HDD minimizes adverse impacts to tidal wetlands at these locations. HDD is a trenchless construction method which eliminates the need for equipment to enter the waterways. There is no surface disturbance or activity in the waterways and riverbank stability is not adversely impacted. The use of HDD minimizes adverse impacts to tidal wetlands. The applicant must comply with sediment and erosion control plans and implement measures during the construction process to minimize the movement of sediment into the waterway. The environmental risks posed by potential "frac outs" can be reduced to acceptable levels by requiring the applicant to adhere to the guidelines set forth in HORIZONTAL DIRECTIONAL DRILLING (HDD) Good Practices Guidelines 4th Edition [authors: David Bennett, Ph.D., P.E., et al.].

Concerning groundwater contamination, natural gas is lighter than air, and therefore, if a leak occurred, it would rise to the ground surface and enter the atmosphere, and would not be expected to contaminate groundwater. In order to ensure that any potential contaminated groundwater is addressed, a Special Condition is recommended that requires the applicant to offer pre- and post-construction well yield and water quality testing to landowners with potable water wells located within 150 feet of the construction work areas. If it is determined that a well is impacted from the construction of the proposed facilities, the applicant will coordinate the level of repair and ensure a temporary source of water is provided until the damaged well is restored to its original capacity/quality. In addition any horizontal directional drilling crossings of the Manokin River, Taylors Branch and Kings Creek for the pipeline during the period of 1 March through 15 June of any year is prohibited to minimize impacts to spawning fish species.

Special Conditions D, E, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, and Z have been recommended regarding this comment.

6. There are several procedural concerns raised by commenters.

There were concerns that treating the ESNG pipeline and the Chesapeake Utilities pipeline as separate projects may have had the effect of changing the type of review or authorizations that is required. There was a request that the Federal Energy Regulatory Commission (FERC) review this section of pipeline and the ESNG section of pipeline together before MDE authorizes the project. There was also a request from a private citizen inquiring if an environmental justice review was completed. Concerns were raised about the increase in the diameter of the pipeline between the time of application and the public hearing. The need for the increase was questioned as well as the potential increase in impacts. There were concerns expressed about the format of the public hearing and the lack of experts to answer all the questions raised during the

hearing. The process of referring questions to a website was not considered appropriate for a public information hearing.

MDE Response:

MDE's review is focused on ensuring that the project--which is intended to meet an applicant-defined purpose and need--is designed in a manner that avoids and then minimizes impacts to tidal wetlands. With regard to the concerns raised about the regulatory implications of not combining the ESNG and the Chesapeake Utilities project in a single review process, MDE has ample authority under COMAR Title 26, Subtitle 24 to ensure that any environmental and public health risks posed by the projects are effectively managed and mitigated whether reviewed separately or as a single project. MDE does not have the authority to require FERC review of this project. Since this application is for a pipeline that does not cross state lines, a FERC review is not required. Chesapeake Utilities did submit an application for authority to exercise a franchise to provide natural gas services in Somerset County to the Maryland Public Service Commission on March 31, 2020. The Maryland Public Service Commission does not require greenhouse gas or environmental review; however, the Commission's Engineering Division will conduct inspections of this project once construction begins. The Office of Staff Counsel evaluated the application and recommended that the application be approved. The increase in the diameter of the pipeline is not considered a significant change in the wetland impacts since the diameter of the bore hole remained the same. It is not unusual for work parameters to be modified during an application review and the changes were made prior to advertising the public notice and holding the public hearing.

With regard to the public comment requesting an environmental justice review, MDE has considered the potential environmental and public health impacts of the construction and operation of this pipeline to people in proximity to this project. As a general matter, natural gas pipelines and associated facilities can impose a variety of environmental burdens on the communities that they cross. Potential impacts include: visual impacts; adverse effects on sensitive flora and fauna; damage to water supply sources during construction activities; intensive water usage during construction; wetland impacts (primarily during construction); forest fragmentation; noise impacts from compressor stations and meter and regulating stations; air quality impacts and related health concerns resulting from compressor station emissions; and increased risk to life and property in the event of a pipeline explosion.

In this case, the project involves the placement of approximately 10.75 miles of a new 8-inch diameter buried natural gas pipeline beginning at a metering and regulation station to be constructed at Merser Road, near Eden and extending southwest along U.S. Route 13 to the intersection of U.S. Route 13 and Revells Neck Road. This is a relatively short gas pipeline project to be constructed using HDD at 27.5 and 28 feet below 3 tidal waterbodies and within existing road and railroad rights-of-way. As such, the environmental burdens of the project are minimal. For example, there is no indication of adverse impacts on sensitive flora or fauna, there is little risk of damage to water supply sources, and there will not be intensive water usage during construction. Wetlands impacts have been minimized due to the use of HDD and the pipeline route generally follows U.S. Route 13 within the road and railroad rights-of-way within 5 feet off of the roadway, which means that there is no forest fragmentation associated with this project.

Because natural gas pipelines do pose some (albeit relatively low) risk of leaks and explosions, people who live or work proximate to such pipelines are at a greater risk of impacts from gas pipeline fires and explosions than people who do not live proximate to natural gas pipelines. At a minimum, a community that hosts a pipeline faces heightened risk of accidents during construction and operation. According to statistics from the U.S.D.O.T. Pipeline and Hazardous Materials Safety Administration (PHMSA), the annual rate of serious incidents per million miles of gas distribution pipelines between 2005 and 2019 has fluctuated, with an overall downward trend. In 2019, there were 11 serious incidents (defined as involving a fatality or injury requiring inpatient hospitalization) per million miles of gas distribution pipelines. Based on these statistics applied to the Chesapeake Utilities 10.75 mile long gas distribution pipeline, one can estimate that this pipeline would be expected to have 0.0001 serious incidents per year. PHMSA statistics on leaks of natural gas from distribution pipelines indicate a steady rate of about 50 leaks per 1,000 miles of distribution

pipeline per year. For the Chesapeake Utilities 10.75 mile long gas distribution pipeline, one can project based on PHMSA statistics that there would be 0.53 leaks per year. Through various mitigation efforts, pipeline impacts can be reduced, but not entirely eliminated.

Special Conditions D, E, G, H, I, J, K, L, N, O, P, Q, R, S, T, U, V, W, X, Y, and Z have been recommended regarding this comment

Comments from Other State Agencies

In addition to the public notice and public hearing, the application was shared with interested agencies for comments related to their missions.

MDNR

The Maryland Department of Natural Resources (DNR) made the following comment related to protection of spawning fish species from any potential inadvertent release (frac-out) of drilling fluids: If the proposed project is permitted, the proposed HDD crossings of the various waterways in the pipeline corridor should not be performed during the period 1 March through 15 June of any year to minimize impacts to spawning fish species from any potential inadvertent release (frac-out) of drilling fluids.

A Special Condition, D, has been recommended to address the requested time of year restriction.

DNR also noted that the proposed pipeline route will be primarily within public road right-of-way and asked that the applicant be made aware that any tree that originates within a public road right-of-way is considered a roadside tree under the Maryland Roadside Tree Care Law (NRA 5-406) and Regulations (COMAR 08.07.02) and any proposal to remove, trim, or plant trees within the public right-of-way will required an authorization from the Maryland Department of Natural Resources Forest Service.

Special Condition W has been recommended to make the applicant aware of this requirement.

DNR's comments are included as Attachment D.

MHT

The Maryland Historical Trust determined that there are no historic properties affected by this undertaking.

MHT's comments are included as Attachment E

MDE Conclusions and Recommendations Regarding Special Conditions

The evaluation of this project has taken into account ecological, economic, recreational, developmental, and aesthetic considerations appropriate for the purpose of this project as well as other requirements set forth in the Code of Maryland Regulations. To ensure that impacts to resources are avoided and minimized to the maximum extent possible while meeting the project purpose and need, and, to ensure that all work is performed in accordance with critical area and local regulations, the Department has recommended a number of special conditions. Provided all general and special conditions are adhered to, the work proposed will not cause significant deleterious impacts to marsh vegetation, submerged aquatic vegetation, finfish, shellfish, or navigation.

Project Justification: In consideration of the project purpose and need, the site characteristics and the nature of the proposed work, the Department concludes that the application represents a reasonable exercise of riparian rights.

SPECIAL CONDITIONS:

- A. The Maryland Department of the Environment has determined that the proposed activities comply with, and will be conducted in a manner consistent with the State's Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended.
- B. The Licensee shall comply with all Critical Area requirements and obtain all necessary authorizations from local jurisdiction. This License does not constitute authorization for disturbance in the 100-foot Critical Area Buffer. "Disturbance" in the Buffer means clearing, grading, construction activities, or removal of any size of tree or vegetation. Any anticipated Buffer disturbance requires prior written approval, before commencement of land disturbing activity, from local jurisdiction in the form of a Buffer Management Plan.
- C. If the authorized work is not performed by the property owner, all work performed under this Tidal Wetlands License shall be conducted by a marine contractor licensed by the Marine Contractors Licensing Board (MCLB) in accordance with Title 17 of the Environment Article of Annotated Code of Maryland. A list of licensed marine contractors may be obtained by contacting the MCLB at 410-537-3249, by e-mail at MDE.MCLB@maryland.gov or by accessing the Maryland Department of the Environment, Environmental Boards webpage.
- D. The Licensee shall not perform any horizontal directional drilling crossings of the waterway for the pipeline during the period 1 March through 15 June of any year to minimize impacts to spawning fish species from any potential inadvertent release (frac-out) of drilling fluids.
- E. Licensee shall adhere to the guidelines set forth in HORIZONTAL DIRECTIONAL DRILLING (HDD) Good Practices Guidelines 4th Edition [authors: David Bennett, Ph.D., P.E., et al.].
- F. Before work begins, Licensee shall contact the United States Coast Guard, Fifth Coast Guard District, to determine if Coast Guard approval is required for the authorized work.
USCG, Federal Building, 431 Crawford Street, Portsmouth, VA 23705 Phone: 757-398-6486
- G. At least 30 days before starting the authorized work, Licensee shall provide current geotechnical data including, but not limited to, soil logs, soil borings, or well logs, to MDE's Water and Science Administration Compliance Program and the Wetlands Administrator.
- H. Before starting the authorized work, Licensee must complete and sign the enclosed frac-out Contingency Plan and return it with the signed license.
- I. Prior to the start of construction, the Licensee shall retain a qualified full-time Independent Environmental Monitor (Monitor) that is independent from the Licensee, design consultants, and construction contracts working on the project. The Licensee shall retain a Monitor to assess compliances with all conditions of this and other applicable permits, licenses and environmental regulations. The Licensee shall develop a project-specific Monitor Manual detailing all Monitor responsibilities and procedures and submit the manual to MDE for review and approval prior to implementation. MDE and the BPW Wetlands Administration shall be provided with the opportunity to review the qualifications of the Monitor proposed by the Licensee and shall provide concurrence that the candidate is qualified to perform the Monitor role. The Monitor shall:

1. Review design submittals and construction activities for compliance with all conditions of this License and other applicable permits and environmental regulations;
 2. Report findings directly and concurrently to MDE's Tidal Wetlands Division and BPW Wetlands Administration, notifying them and the Licensee immediately of any reported or observed violations or non-compliance issues within the terms or conditions of the Wetlands License or approved plans and specifications;
 3. Document impacts to regulated resources by developing and maintaining a detailed tracking list of impacted resources; and
 4. Assist with identification of ongoing opportunities for further avoidance and minimization of impacts to regulated environmental resources and protection of water quality.
 5. The Monitor must be present at the site when authorized work occurs in, under, or over State tidal wetlands or State tidal Waters of the U.S.
- J. Before drilling commences, Licensee shall either:
1. Provide the Delft Geotechnics method calculations used to estimate the drilling fluid maximum formation pressure to BPW Wetlands Administration and the IMC, or
 2. Require the drilling contractor to provide their own drilling fluid maximum formation pressure calculations (stamped by a MD professional engineer) meeting the requirements of the design engineer and provide to BPW Wetlands Administration and the IMC.
- K. Before drilling commences, Licensee shall set:
1. Specific limits for the drilling contractor for formation pressure maximum levels based on provided calculations, and
 2. Directives for actions the drilling contractor shall take if pressure maximum levels are reached or exceeded. These limits and actions shall be adhered to by the drilling contractor and reported to the drilling contractor, BPW Wetlands Administration, and the IMC.
- L. The IMC shall monitor the drilling contractor's adherence to the maximum formation pressure limits and resultant actions and incorporate the contractor's pressure tool report into their IMC report.
- M. A pre-construction meeting shall be held with the Registered Marine Contractor, the Monitor, the Wetlands Administrator, the MDE Compliance Inspector, and the Licensee's representative, to provide the opportunity for all to review and discuss the construction plans and Wetland License conditions. All meeting participants shall be notified of this meeting a minimum of 14 days prior to the date of the meeting.
- N. **If an inadvertent return (frac-out) occurs in tidal wetlands or waters, HDD operations must cease immediately.** The Monitor shall immediately contact the Wetlands Administrator and MDE's Water and Science Administration Compliance Inspector within TWO hours of the inadvertent return and document that the HDD Contingency Plan was implemented. The Monitor shall coordinate with the drilling contractor until the problem is corrected. Drilling can resume only when the frac-out has been contained and cleanup completed.
1. MDE/Water and Science Administration Compliance: 410-901-4020 (business hours)
 2. MDE/Water and Science Administration Compliance: 410-517-3600 (evenings, weekends and holidays)
 3. Wetlands Administrator: 410-260-7791, 410-260-7764 (business hours)
- O. The Monitor shall provide daily visual monitoring of the drilling route and surrounding area.

- P. The Monitor shall prepare and submit weekly reports to the Wetlands Administrator and MDE's Water and Science Administration Compliance Inspector when drilling is in, under, or over State tidal wetlands or State tidal Waters of the U.S. The weekly reports must include volume of drilling material used and recovered, method of material disposal, and depth of bore below the bottom.
- Q. The Monitor shall prepare and submit a summary report to the Wetlands Administrator and MDE's Water and Science Administration Compliance Inspector.
- R. Licensee shall seal each abandoned drill hole with bentonite or other approved material upon withdrawing the drill stem. Licensee shall submit an abandonment report to MDE's Water and Science Administration Compliance Inspector within 48 hours after sealing is complete.
- S. Licensee shall affirmatively demonstrate that its proposed pollution control measures take current rainfall patterns into account and will adequately control sedimentation and prevent excessive turbidity levels and, prior to commencement of activities authorized by this License, submit to MDE's Water and Science Administration, Tidal Wetlands Division, one complete set of the final, approved Soil Erosion and Sediment Control Plans.
- T. The Licensee is required to offer pre- and post-construction well yield and water quality testing to landowners with potable water wells located within 150 feet of the construction work areas. If it is determined that a well is impacted from the construction of the proposed facilities, the Licensee shall coordinate the level of repair and ensure a temporary source of water is provided until the damaged well is restored to its original capacity/quality. The Licensee shall submit this information to the Wetlands Administrator and MDE's Water and Science Administration, Tidal Wetlands Division within 30 days of completion of the data collection and any planned or actual corrective action.
- U. The drilling fluid used in HDD operations shall consist of water and bentonite clay. No additives are permitted without prior approval from the Administration. The Licensee 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. In the event of an inadvertent release of drilling fluid or a pollution event occurs in the Manokin River, Taylor Branch, or Kings Creek, the Licensee will provide water quality monitoring downstream from the release until water quality satisfies the requirements of COMAR 26.08.02 for a Use I stream or match the levels found immediately upstream from the release.
- W. The Licensee shall report to MDE's Water and Science Administration, Compliance Program within one business day any citizen making a complaint to the Licensee reporting leaking gas or any other release from the construction or operation of the pipeline. This can be made by phone or email. The Licensee shall provide to the MDE's Water and Science Administration, Compliance Program and Wetlands Administrator in writing the completed or planned response and any planned or actual corrective action to address the citizen complaint within 3 business days.
- X. If the Licensee transfers ownership or operation of this pipeline after completion, the Licensee shall, at the time of transfer, notify the Wetlands Administrator and MDE's Water and Science Administration, Tidal Wetlands Division and shall advise the new owner/operator in writing of the conditions that must be met for continued operation and provide a copy of such notification to Wetlands Administrator and MDE's Water and Science Administration, Tidal Wetlands Division.

- Y. Prior to hydrostatic testing of the gas line, Licensee must provide the Wetlands Administrator and MDE's Water and Science Administration, Compliance Program, with specific information relative to the source of test water and the manner and location in which the water will be disposed. If the source or waste location of the water involves other than municipal water and sewer systems, the Department must approve the plan prior to line testing. Additional Conditions may be imposed if the water is drawn directly from, or returned to Waters of the State.
- Z. The Licensee shall obtain an authorization from the Maryland Department of Natural Resources Forest Service prior to the removal, trimming, or planting trees within the public right-of-way.
- AA. The Licensee shall pay monetary compensation for tidal wetlands impacts as determined by the Board of Public Works.

DEPARTMENT OF THE ENVIRONMENT APPROVAL:

Mary Phipps-Dickerson
 Mary Phipps-Dickerson, Natural Resource Planner
 Tidal Wetlands Division

November 5, 2020
 DATE

Tammy K Roberson
 Tammy Roberson, Division Chief
 Tidal Wetlands Division

11/5/2020
 DATE

D. Lee Currey
 D. Lee Currey, Director
 Water and Science Administration

November 5, 2020
 DATE

WETLANDS ADMINISTRATION CONCURRENCE:

William Morgante, Wetlands Administrator
 Board of Public Works

DATE

Attachment A

Adjacent Property Owners

First Baptist Church of Princess Anne
11765 Crisfield Lane
Princess Anne, Maryland 21853

Adam and Andrea Filbert
30550 Libby Lane
Princess Anne, Maryland 21853

State Roads Commission
10980 Market Lane
Princess Anne, Maryland 21853

Wilson's Real Estate
Ocean Highway
4050 Crisfield Highway
Crisfield, Maryland 21817

State Roads Commission
707 N. Calvert Street
Baltimore, Maryland 21202

Somerset County Department of Planning & Zoning
Somerset County Office Complex, Room 211
11916 Somerset Avenue
Princess Anne, Maryland 21853

Town of Princess Anne
30489 Broad Street
Princess Anne, Maryland 21853