



west virginia department of environmental protection

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Austin Caperton, Cabinet Secretary
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February 1, 2018

Re: WV Permit No. WV0116815
Registration Application No. WVR310872
Columbia Gas Transmission, LLC
Mountaineer Xpress
Responsiveness Summary

Dear Commenter,

The State of West Virginia, Department of Environmental Protection (DEP), Division of Water and Waste Management (DWWM) issued a State General Water Pollution Control Permit to regulate the discharge of stormwater runoff associated with oil and gas related construction activities. This General Permit authorizes discharges composed entirely of stormwater associated with oil and gas field activities or operations associated with exploration, production, processing or treatment operations or transmission facilities, disturbing one acre or greater of land area, to the waters of the State. WV0116815 (Stormwater Associated with Oil and Gas related activities) was issued on May 13, 2013. It became effective on June 12, 2013 and expires on May 13, 2018.

Columbia Gas Transmission, LLC, (Columbia) proposes to construct and operate the Mountaineer XPress Project (Project) consisting of approximately 170.9 miles (3,648 acres) of various diameter pipelines, modifications to three existing compressor stations, the construction of three new compressor stations, three new regulating stations, and a number of other modifications at various aboveground facility sites. Project activities will occur throughout Marshall, Wetzel, Tyler, Doddridge, Ritchie, Calhoun, Wirt, Roane, Jackson, Mason, Putnam, Cabell, Wayne and Kanawha counties in West Virginia (WV).

DWWM published a Class I legal advertisement (public notice) in the Moundsville Daily Echo, the Wetzel Chronicle, the Tyler County News, the Herald Record, the Ritchie Gazette, the Calhoun Chronicle, the Wirt Journal, the Times Record, the Jackson Star, the Point Pleasant Register, the Hurricane Breeze, the Herald Dispatch, the Wayne County News, and the Charleston Gazette. These public notices allowed the DWWM to receive public comments on the proposed project. The public notice/public comment period closed on December 22, 2017.

There were two public hearings held for the Oil & Gas Construction Stormwater General Permit Registration (WVR310872):

- Doddridge County Park on Monday December 11, 2017
- Ripley High School Tuesday December 12, 2017

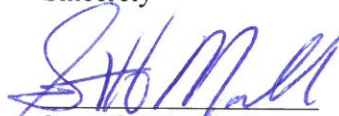
Promoting a healthy environment.

The DWWM would like to take this opportunity to thank those who submitted written comments on this application. The DWWM has made every attempt possible to ensure that all questions/concerns related to the application were addressed. The attached Responsiveness Summary highlights the issues and concerns that were identified through written and oral comments received during the comment period.

The Responsiveness Summary is organized such that comments frequently mentioned, or general in nature, or outside the scope of DEP's authority, are responded to in Section A (General Comments Responses). More specific comments on the Construction Stormwater Permit Registration, and our response, are found in Section B (Construction Stormwater Permit Registration - Specific Comments and Responses). Oral comments received at the Public Hearings are summarized in Section C (Public Comments and Responses).

Thank you for your interest and comments on the Columbia Gas Transmission, LLC, application. If you have any further questions or concerns, please do not hesitate to contact Jon Michael Bosley of my staff at 304-926-0499 ext. 1059 or by email at Jon.M.Bosley@wv.gov.

Sincerely



Scott G. Mandirola
Director

Section A: General Comments Responses

In many cases multiple comments were provided on specific sections or issues, and those responses have been categorized to the extent possible below:

- A. **Water Quality, Tier III, Anti-Degradation Response:** The DEP's approach to construction general permits, whether for NPDES or Oil and Gas, follows the same path as EPA's construction general permit. Both EPA's and DEP's permits rely on best management practices (BMPs) to control the discharge of sediment or sediment-related parameters. EPA has taken this approach and provides a detailed explanation in their 2017 Construction General Permit (CGP) fact sheet and in the previously issued 2012 CGP fact sheet. Notably, the DEP NPDES Construction General Permit is approved by EPA and the Stormwater Associated with Oil and Gas related Construction Activities General Permit (Oil & Gas Construction Stormwater General Permit) is mirrored from it as a state-only permit. It is a state-authority-only issued permit as Oil and Gas activity is exempt from the federal requirement to obtain an NPDES permit.

EPA addresses construction stormwater permitting via a three-pronged approach which includes technology-based effluent limitations, water quality-based effluent limits (WQBELS) and Site Inspection Requirements and frequencies. Although it may sound as if specific limits are assigned to these discharges through technology based limitations or WQBELS, what is addressed in these sections of the permit and explained in the fact sheet are BMP's necessary to stop, minimize and/or control sediment from leaving the disturbed area and discharging into a stream. These non-numeric effluent limitations are designed to prevent the mobilization and stormwater discharge of sediment or sediment-related parameters, such as metals and nutrients, and prevent or minimize exposure of stormwater to construction materials, debris and other sources of pollutants on construction sites. Nationwide, source control through minimization of soil erosion is relied on as a pragmatic and effective way of controlling the discharge of these pollutants from construction activities.

EPA states in section 3.1 of the 2017 CGP that "EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards". In parallel, DEP believes the same rationale applies to a permit, approved by EPA, for use by a state with delegated primacy to implement the NPDES program. Further, applying this same rationale to a state-authority-only issued Oil & Gas Construction Stormwater General Permit is a natural and logical extension.

In the simplest of terms antidegradation involves protecting a stream's designated uses at a Tier 1 level if the stream is impaired for a particular pollutant of concern, keeping high quality streams better than criteria unless a lowering of water quality is justified based on socioeconomic considerations (Tier 2) and providing for only short term degradation of Outstanding National Resource Waters (Tier 3).

EPA's approach, in the 2017 CGP, to address discharges to a water impaired for sediment or sediment-related parameters, and/or nutrients, or to a water that is identified by the state, as Tier 2, or Tier 3 for antidegradation purposes is to comply with increased inspection frequencies and

stabilization deadlines outlined in the permit. As set forth in the EPA permit, the normal inspection frequencies are either to conduct a site inspection once every seven (7) calendar days or conduct a site inspection once every 14 days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. For a discharge to sensitive waters, EPA requires that the operator must conduct inspections once every 7 calendar days and within 24 hours of a storm event of 0.25 inches or greater. The operator must keep a record of rainfall measured in both instances.

The standard stabilization requirements in the EPA approach are to initiate the installation of stabilization measures immediately in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days and complete the installation of stabilization measures as soon as practicable, but no later than 14 calendar days after stabilization has been initiated. For a discharge to sensitive waters EPA requires the completion of the installation of stabilization measures as soon as practicable, but no later than seven (7) calendar days after stabilization has been initiated. The rationale for the more stringent requirements for Tier 2 and 3 designated waters as explained in the EPA 2012 CGP fact sheet is as follows: “As stated in Part 3.1 of the [2012] permit, in the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards (which include state antidegradation requirements). More specifically, by imposing on operators that discharge to Tier 2, Tier 2.5, or Tier 3 waters the requirement to comply with the additional requirements, on top of the permit’s other effluent limits and conditions, to stabilize exposed areas faster and to conduct more site inspections than other sites, it is EPA’s judgment that authorizing these discharges will not result in a lowering of water quality. Thus, EPA has determined that compliance with the CGP generally will be sufficient to satisfy Tier 2 and Tier 3 antidegradation requirements because the controls will not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary.

The Oil & Gas Construction Stormwater General Permit issued by WVDEP requires that stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has permanently ceased. It also requires at a minimum all erosion controls on the site are inspected at least once every seven calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period. These standard requirements are more stringent than the standard requirements for the EPA permit and nearly as stringent and protective as the EPA permit requirements to address discharges to waters impaired for sediment or sediment-related parameters, and/or nutrients, or to waters that are identified by the state, as Tier 2, or Tier 3 for antidegradation purposes. There are no tier 3 waters being directly discharged into any portion of this project but the Stormwater Pollution Prevention Plan (SWPPP) for this project requires that additional protective measures will be employed at crossings of and in proximity to Tier 3 and trout streams. The additional measures watersheds include permanent seeding and mulching must be accomplished within 4 days of reaching final grade; temporary seeding and mulching must be accomplished within 4 days when areas will not be disturbed for more than 14 days; the use of reinforced filtration devices (defined as belted silt retention fence, triple stacked compost filter

sock and/or super silt fence) at all downslope perimeters; stream crossings in these areas will be completed within 72 hours once the crossing has begun; and disturbance will be limited as much as practicable. Additionally, the SWPPP (Stormwater Pollution Prevention Plan) requires at a minimum all erosion controls in these areas are inspected at least once every seven calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period. Columbia Gas Transmission, LLC (Columbia) has also indicated in the SWPPP that the inspection frequency for the entire project located in TMDL watersheds will be seven calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period which exceeds requirements of the Oil & Gas Construction Stormwater General Permit and should help ensure compliance.

Since in EPA's 2012 CGP fact sheet it was determined that by imposing on operators that discharge to sensitive waters additional requirements to stabilize exposed areas faster and to conduct more site inspections than other sites, results in these discharges not resulting in a lowering of water quality, and since the additional requirements to stabilize exposed areas faster and to conduct more site inspections than other sites in the Oil & Gas Construction Stormwater General Permit registration in sensitive waters are equal to or more stringent than those used by EPA, it is DEP's position that following the requirements of the Oil & Gas Construction Stormwater General Permit registration will not result in the lowering of water quality. Thus, compliance with the Oil & Gas Construction Stormwater General Permit will be sufficient to satisfy Tier 2, and the additional controls outlined in the SWPPP associated with this registration, which exceed EPA required controls to satisfy Tier 3 antidegradation, are sufficient to not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary.

Further, specific to West Virginia law pursuant to per Section 3.7 of the Antidegradation Rule 60CSR5, a Tier 2 review is not required for general permit registrations. Section 3.7 states that "On or after July 2, 2001, the effective date of these implementation procedures, new and reissued WV/NPDES general permits will be evaluated to consider the potential for significant degradation as a result of the permitted activity. Regulated activities that are granted coverage by a WV/NPDES general permit will not be required to undergo a Tier 2 antidegradation review as part of the permit registration process." Although EPA has not approved this section for use in federal Clean Water Act NPDES permits the Oil & Gas Construction Stormwater General Permit is a state- only permit issued under the authority of the WV Water Pollution Control Act. As part of 60CSR5, which was passed by the Legislature and signed into law by the Governor in 2008, it is in effect and the law for state only permits.

Additionally, as discussed above the standard requirements in the Oil & Gas Construction Stormwater General Permit addressing stabilizing exposed areas and conducting site inspections are nearly as stringent as EPA's additional requirements that are used to meet a Tier 3 review, which allows no degradation. By implementing these controls on all disturbed area under the permit registration coverage Tier 2 antidegradation is fully addressed and an individual Tier 2 review and its associated baseline water quality is not required.

With respect to waters with Total Maximum Daily Loads (TMDLs) or 303(d) listings for sediment, when TMDLs are developed a waste load allocation for some amount of new construction stormwater acreage is included in the TMDL. This allocation is only for NPDES construction stormwater permits and has previously not been applied to Oil & Gas Construction Stormwater General Permits. TMDLs only directly dictate what happens to activities on the land that have a discharge permit. Activities like farming or logging may disrupt the soil, but are not regulated or given effluent limits. They are considered nonpoint sources in the TMDLs and thus not given a waste load allocation.

In waters with approved TMDLs for sediment, Columbia will be required to operate within the acreage limitations and/or disturbance alternatives as specified in the TMDL. In waters listed as sediment impaired, where TMDLs have not yet been developed, as per the SWPPP commitments, Columbia will utilize controls as described above in the EPA methodology for sensitive waters.

- B. **Wet Trench Stream Crossing Response:** The main objective of any waterbody crossing is to construct the pipeline in a manner which minimizes erosion and subsequent sedimentation into the waterbody. Crossings must be constructed as close as possible to right angles with the waterbody channel. The construction plan that we are approving requires downstream flow rates to be maintained always to protect aquatic life and prevent the interruption of existing downstream uses. Each waterbody crossing must be treated as a separate construction entity, such that trenching, pipe installation, backfilling and temporary stabilization or final restoration are completed in the minimum number of consecutive calendar days possible.

Figures 14, 15, and 16 located in Columbia's Environmental Construction Standards (ECS) illustrate the dry-ditch (flume pipe), dam and pump, or wet ditch techniques to install pipelines across waterbodies. Upland construction techniques may be used for intermittent waterbody crossings without perceptible flow at the time of the crossing, only if a culvert is promptly installed to carry stormwater flow across the trench area, and if the erosion and sediment control devices illustrated in Figure 13 of the ECS are installed.

Minor waterbodies are those which are 10 feet wide or smaller at the top of the bank. For crossings of cold-water, cool water, and warm water fisheries considered significant by the state, the pipeline will be installed using the dry-ditch method or dam and pump method, unless approved otherwise in writing by the appropriate state agency. For other minor waterbody crossings, there will be complete in-stream construction in the waterbody, using the wet ditch method, that must be completed within 24 hours (except for blasting and pneumatic chipping; see Section III.A.6 of the ECS). Columbia is required to limit use of equipment operating in the waterbody to that only needed to construct the crossing.

Intermediate waterbodies are those which are 10-100 feet wide at the top of the bank. The wet ditch method must be used for all intermediate waterbody crossings. Only the equipment necessary for excavating the trench, lowering-in the pipe, and backfilling the trench is allowed in the waterbody. Columbia must attempt to complete trenching and backfill work in the waterbody within 48 hours, unless site-specific conditions make completion within 48 hours infeasible.

For crossings of coldwater, coolwater, and warm water fisheries considered significant by the state (10 to 30 feet in width), the pipeline will be installed using the dry-ditch method or dam and pump method, unless approved otherwise in writing by the appropriate state agency.

The wet ditch method may be used when the following conditions are met:

- When the distance across the flume pipes becomes too wide for a backhoe to dig from both sides and connect the trench underneath the pipes. This measurement would vary according to the number of flume pipes, the height of the stream banks, the size and digging angle of the backhoe, the depth to bed rock, and ease of digging.
- When the crossing can be accomplished within 72 hours, however; every effort should be made to complete the crossing in one working day. All disturbed stream banks will be stabilized the same day the construction is finished. When the crossing is at right angles ($\pm 5^\circ$) to the stream channel.
- If water is pumped during the installation of the pipe it must be treated as per the dewatering specifications indicated in detail.

All waterbody crossings with approaches sloped 5 percent or greater, interceptor diversions will be installed 50 feet from the water's edge to divert surface runoff into a sediment filter device.

- C. **Riprap for Stream Restoration Response:** Following initial stream bank stabilization, Columbia will return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector. If the waterbody banks are such that an unstable final soil grade would result, and vegetative stabilization is inadequate, the Environmental Inspector will require mechanical stabilization of the waterbody banks. Mechanical stabilization includes riprap, gabions, jute netting, etc. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques, such as seeded erosion control fabric. Re-vegetate disturbed riparian areas with conservation grasses and legumes or native plant species, preferable woody species. Application of riprap must comply with the US Army Corps of Engineers (USACE) or its delegated agency permit terms and conditions.
- D. **Engineering calculations Response:** Per Columbia specifications in their ECS, Figure 23B – Drainage Ditch and culvert Notes, culverts will have a minimum inner diameter of 24 inches. Culvert spacing = $400/\% \text{ grade} + 75$ feet. This is a conservative value and will pass a peak discharge from a 2-year/24-hour storm.
- E. **Water Quality Monitoring Response:** Water Quality Monitoring is not required by the General WV Water Pollution Control Permit No. WV0116815 or EPA's Stormwater Construction General Permit.

Section B: Construction Stormwater Permit Registration – Specific Comments and Responses

Comment #1: The applicant has not demonstrated that impacts to water quality have been minimized. Wet trench crossing methods are proposed for minor water bodies causing increased sedimentation in streams. Impaired streams crossed by wet trench methods will exceed water quality standards and be unable to meet their total maximum daily load pollution prevention requirements.

Response #1: See Section A. Response A and Section A. Response B.

Comment #2: The use of riprap is proposed for stream restoration instead of WVDEP's preferred method of restoration using natural stream channel design techniques. Natural stream channel design must be used during restoration instead of riprap.

Response #2: See Section A. Response C.

Comment #3: Engineering calculations for the sizing of culverts are not included in the application. These calculations are site-specific, spacing distances for trench line barriers are not included in the application. Peak discharge from a 2-year/24-hour storm must be calculated for sizing and spacing of specific best management practices.

Response #3: See Section A. Response D.

Comment #4: No water quality monitoring is proposed for the project. The company should install real-time monitors to collect water quality data at sensitive stream crossings. The VA DEQ is partnering with USGS to conduct in-depth monitoring on sensitive stream crossings for the proposed pipelines in their state. The same monitoring efforts should be conducted in WV.

Response #4: See Section A. Response E.

Comment #5: The proposed Best Management Practices (BMPs) and sediment and erosion controls are inadequate which will result in impairment and degradation of water resources and aquatic habitats. No sediment traps or sediment basins are included as BMPs even though they are specified in the WVDEP Erosion and Sediment Control Best Management Practice Manual (2006/Rev. 2016) and in the WVDEP Oil & Gas Construction Stormwater General Permit Fact Sheet (2012).

Response #5: Columbia was required to provide the DWWM with information in accordance with the General Water Pollution Control Permit, Section G.4.e.2.B which includes a description of measures that must be included in both the E&S plans and the SWPPP. In accordance with G.4.e.2.B, the project has been designed using professionally accepted engineering and hydrologic methodologies. These measures must be installed during construction to control pollutants in stormwater discharges during construction and after the project is completed.

Adequate downstream flow rates must be maintained at all times to protect aquatic life and prevent the interruption of existing downstream uses. Each waterbody crossing must be treated as a

separate construction entity, such that trenching, pipe installation, backfilling and temporary stabilization or final restoration are completed in the minimum number of consecutive calendar days possible. All pump intakes must be appropriately screened to prevent entrainment of aquatic species.

In accordance with G.4.e.2.A.ii.e, Sediment basins/traps are not typically used for pipelines or linear projects in general. Linear projects use other regulatory-acceptable best management practices (BMPs). The linear aspect of the disturbance for these projects would make it difficult and generally ineffective to place a sediment basin in a location that would catch the drainage throughout the project sites since they traverse the terrain in a linear fashion.

Comment #6: The applicant has not demonstrated that impacts to water quality have been minimized. Wet trench crossing methods are proposed for most minor and some intermediate water bodies including perennial streams. Open cut wet crossings utilize no water diversions causing increased sedimentation in streams. To minimize impact to stream water quality, dry crossing methods should be utilized. Additionally, there is no site-specific crossing plan for Spring Creek, a major water body crossing. Site specific crossing plans showing all sediment and erosion controls must be included in their permit application.

Response #6: See Section A. Response B.

Additionally, a site-specific crossing plan for Spring Creek has been included in the permit application.

Comment #7: There is no method provided to quantify background stream turbidity. Wet crossing methods will increase sedimentation and turbidity levels in streams. Impaired streams crossed by wet trench methods may exceed water quality standards and be unable to meet their total maximum daily load pollution prevention requirements. The MXP Erosion and Sediment Control Plan (ESCP) does not include any engineering calculations, such as the Revised Universal Soil Loss Equation or stormwater discharge estimates, to evaluate the increased turbidity that would result from the proposed MXP construction. Increased turbidity levels above TMDLs are not in compliance with 47CSR2 – Requirements Governing Water Quality Standards.

Response #7: A turbidity analysis, revised universal soil loss equation or stormwater discharge estimates are not required by the General WV Water Pollution Control Permit No. WV0116815 or EPA's Stormwater Construction General Permit.

To protect stream integrity, prevent degradation and soil loss, during construction, Columbia proposes to install and maintain erosion and sediment control BMPs that are identified on the E&S plans. These BMPs include silt fence, belted silt fence, super silt fence, compost filter sock, diversion berms, water bars, broad-based dips, sumps and rock checks, erosion control blanketing, hydraulically applied seed, enhanced seeding mixes, and landslide mitigation techniques. These devices protect the stream from sediment loads, help reduce turbidity and are used throughout the region for all types of construction projects, including pipeline construction.

Please also see Section A Response A, Section A. Response B and Section A. Response D.

Comment #8: Several streams crossed by the MXP are of special significance to DEP. As stated in the comments on MXP's draft resource report "There are several streams in Marshall and Wetzel counties that have significant importance to WVDEP, as monitoring sites on them have been identified as Reference Sites for use in assessing Aquatic Life Designated use attainment. Sites on Lower Bowman, Middle Bowman, Upper Bowman, and Lynn Camp Run are all identified as Reference and are used to establish expectations for healthy benthic macroinvertebrate communities in the Western Allegheny Plateau Ecoregion." While the main stem of these streams is crossed using dry crossing methods, tributaries of these streams are crossed using wet crossing methods which could cause increases in sedimentation and embeddedness, negatively impacting aquatic habitat. We recommend dry crossing methods on all streams of significant importance.

Response #8: See Section A. Response B.

Comment #9: The use of rip-rap is proposed for stream restoration instead of WVDEP's preferred method of restoration using natural stream channel design techniques. Natural stream channel design must be used during restoration instead of riprap. DEP's comments on MXP's Draft Resource Report specifically state "In order to prevent scouring and ensure a stable channel is constructed, natural stream channel design should be used for restoration of all waterbody crossings. There is the possibility that existing channels are unstable; therefore, returning channels to pre-construction contours would mean building unstable streams. In addition, the use of rip-rap for any purpose associated with channel stabilization is ill- advised. The WVDEP recommends that any waterbodies requiring construction activities to permit crossing be restored by natural stream channel design to restore temporarily impacted channels to the appropriate pattern, profile, and dimension for the hydrogeomorphic setting. The use of hard armoring materials, such as rip-rap, is not recommended in any activities associated with stream restoration."

Response #9: Section A. Response C.

Comment #10: Engineering calculations for the sizing of culverts are not included in the application. The ESCP states "Calculations have not been provided as culvert size has not yet been determined. Engineering calculations for culvert size and flow will be provided to the WVDEP once determined. No other engineering calculations are provided as the Project does not propose any other permanent stormwater control measures. However, the permit requirements clearly state, "The permittee shall submit all calculations, watershed mapping, design drawings, and any other information necessary to explain the technical basis for the stormwater management plan." Given that the required information is not included, DEP should request all calculations be submitted before issuing the permit. Any significant modifications to the permit warrant an additional public notice and comment period.

Response #10: See Section A. Response D.

Comment #11: No water quality monitoring is proposed for the project. While monitoring is not required under the Stormwater permit, the Director can request monitoring as a special condition in the permit. The VA DEQ is partnering with USGS to conduct in-depth monitoring on sensitive stream crossings for the proposed pipelines in Virginia. The same monitoring efforts should be conducted in West Virginia. The Director should request real-time monitors to collect water quality data at sensitive stream crossings.

Response #11: See Section A. Response E.

Comment #12: In a letter sent to the USFWS WV Field Office, FERC states that the final route for the project has not been authorized yet, “Columbia has since identified potential changes in the route and stream crossing methods to reduce impacts on federally listed mussel species.” Given that the final route has not been determined, the ESCP will need to modify to account for changes in the route. Modifications to the permit may be needed warranting an additional 90 days for approval to allow for public comment. The issuance of the stormwater permit should be delayed until FERC approves the final route for the project and the updated ESCP has been submitted with their application.

Response #12: Stormwater Pollution Prevention Plans (SWPPP) for large linear construction projects are often revised during the construction process and this is expected as a part of the typical and desirable best management practices (BMP) implementation process. In many cases immediate action is needed to provide adequate erosion and sediment control. As such, most levels of revision will not require public notice.

Comment #13: I was sorry to receive an email from Jon Bosley that a public hearing would not take place in Putnam County regarding the WVR310872 - Mountaineer Xpress Project. I believe that a significant portion of the affected population lives in this area and should be made aware of the proposed pipeline and be able to easily comment on it. In his email he wrote, “...we believe the two scheduled hearings will be adequate as that number is consistent with what we have done for hearings on other recent pipeline projects.”

1. Having made prior mistakes is not a reason to continue making the same mistake. Perhaps those other recent pipeline projects also needed greater public exposure.
2. The DEP web page makes it user-unfriendly to comment. That is why I am writing and mailing you a paper letter, also. A common platform online that all can read and respond to would be convenient, efficient, and democratic. Please work on that problem.
3. As to the pipeline itself, I am opposed to it based on the history of previous DEP-approved projects. As with strip mining, the theory is great but doesn't work in the real world. Those mountains cannot be (and are not) put back into their original contours, the runoff is not controlled, the streams are polluted, and wildlife killed. And these pipelines do leak or gush, do rupture and rust, are not adequately maintained or inspected.
4. West Virginia's terrain compounds the potential for erosion and sedimentation during pipeline construction. Will the proposed practices truly be effective among the steep slopes of “the Mountain State?”
5. Finally, as the MXP system extends through the more densely populated “downstream” areas of Putnam, Wayne and Cabell counties, are the proposed project's erosion control, water testing, maintenance and monitoring processes sufficient to protect hundreds of thousands of current and future residents from hazardous material and spills? If they are not, who will pay the cost?

Response #13:

- 1. The permit requires public notice for the following conditions: Grading phase of construction will last for 1 year or longer, Disturbance of 100 acres or more and/or discharge into a Tier 3 stream.**
- 2. The mission of the Public Information Office is to provide information to the public about the West Virginia Department of Environmental Protection and its work to promote a healthy environment. We continue to make improvements.**
- 3. Excess soil must be spread on site and disturbed areas must be returned to their approximate original slope and contours. No repositioning of overburden or “mountaintop removal” is being proposed for the Columbia alignment.**

Our reviewers required an Erosion and Sediment Control Plan designed to control project runoff and sedimentation, while providing protection to the aquatic resources within the Limits of Disturbance (LOD) and adjacent to the LOD. The controls include construction procedures: such as minimizing the amount of disturbance, proper grading and restoration, diverting/protecting stream flows during stream crossings, and operating efficiently. These construction techniques are consistent with the State’s construction stormwater requirements. By implementing the procedures, sequencing, and erosion BMPs listed in the Erosion and Sediment Control Plan impacts to the states aquatic resources should be minimal during construction. The permittee must conduct Site inspections during construction and after the project area has been restored and reseeded. If any BMPs are not properly functioning – they must be repaired or replaced to provide the appropriate sediment control and stream protection, minimizing impacts to water quality.

Also see Section A. Response A.

- 4. Portions of the Mountaineer Xpress Pipeline (MXP) will be constructed in steep, mountainous terrain. Slope instability in the form of landslides, landslips, or surficial slumping can present a significant hazard to pipeline routing, design, construction, and operation in steep slope areas if proper planning and mitigation is not considered in advance. By installing the line perpendicularly to topographic contours and minimizing routing on steep slopes to the extent practicable and following construction guidelines in accordance with our BMP Manual, which includes considerations for slip prevention associated with pipeline construction during routing as well as engineering design, preconstruction planning, construction, and post construction.**
- 5. Concerns about spills and leaks were adequately addressed in the SWPPP and GPP. Spills of any amount of petroleum products or polluting materials are to be prevented. All employees handling fuels and other hazardous materials must be properly trained. All equipment must be in good operating order. Fuel trucks transporting fuel to on-site equipment must travel on approved access roads. Rules listed in the ECS must be followed to help avoid spills and minimize the impact of spills which accidentally occur.**

Comment #14:

1. The comments below are all we can manage at this time; we request that DEP extend the comment period as we have not really had sufficient time to review the permit. We repeat our request that DEP host a public hearing on this permit in at least one of the southern-most counties to be impacted by this permit (Putnam, Cabell or Wayne), due to the higher human population density in these counties as compared to the two counties where two hearings took place.
2. Per the final EIS MXP narrative, the land disturbance resulting from MXP totals 3,647.9 acres. That's a massive land disturbance without even adding in all the other under-construction or proposed pipelines (for both wet and dry gas) in West Virginia. DEP should slow down and not issue permits for these pipelines until the agency undertakes an inventory of all the proposed pipelines that includes a cumulative or aggregated impact study of the runoff potentials of these projects. A cumulative impact study of increased runoff potential should also consider the land disturbance from all the increased fracking-related activity that would be required in order to feed gas to these pipelines, as well as the potential for far-more severe storm events (resulting in more runoff) that would result from all the increased greenhouse gas emissions this incredible increase of fossil fuel extraction would generate due to methane emissions and leaks, as well as increased heavy truck traffic.
3. The permit does not meet the requirements of your DEP's Oil and Gas Construction Stormwater General Permit. TransCanada/Columbia Gas Transmission (the applicant) has failed to show that impacts of the potential pipeline's construction to water quality have been minimized.
4. Due to the steep terrain MXP is proposed to traverse, traditional means of erosion control—such as silt fences and “socks”—have largely proven inadequate on multiple other projects, as we have seen with construction of the Rover Pipeline and silt fence failures in Cabell County, near the SM-80 pipeline construction. DEP should learn from the lesson of Rover and other steep-terrain pipeline construction failures and revise this permit so that more effective alternatives are mandated to control erosion.
5. The permit would allow for wet trench crossing methods for minor water bodies. This would cause increased sedimentation in streams, which would cause harm to aquatic life. Wet trench crossing of impaired streams would cause exceedance of water quality standards; these streams would then be exceeding their total maximum daily loads for pollution, which would cause harm to aquatic life.
6. Some of the multiple streams MXP would cross provide habitat to rare and potentially endangered species of mussels. These streams must be surveyed, and the species documented. Rare species of birds, such as the Cerulean Warbler, bats and other species depend upon healthy streams and intact forest tracts along the proposed MXP route; they, therefore, should also be surveyed and measures should be taken to ensure their habitat is unharmed, prior to approval of this permit.
7. For all streams that MXP would traverse, the permit should require the establishment of baseline data prior to any construction. Only by knowing what conditions already exist can we know what impacts construction of MXP would have on water quality. The permit should require at least monthly water testing for (at least) pH levels, turbidity, conductivity, temperature, and heavy metals such as lead, arsenic and selenium. Such testing should take place, as noted, prior to any construction in order to establish

those baselines, but should continue during construction and start-up periods on a monthly basis. Testing should continue for the duration of the pipeline's operation. The applicant should pay the costs for this testing and the data should be available to the public in a timely manner (at minimum two weeks after the data was gathered).

8. The permit should require at least monthly site visits from the DEP on all active construction at stream crossings, and the permit should allow for citizens, upon request, to accompany DEP officials on these visits.

9. We note that the applicants propose to use rip rap for stream restoration, disregarding DEP's preferred method of restoration, which uses natural stream channel design techniques.

10. The permit application fails to include engineering calculations for the sizing of culverts. The DEP and the public need this information to determine if the sizing of culverts is adequate. Other data that would help the DEP and public determine if the permit requirements would protect water quality is missing from the application; that is, there is no mention of site-specific spacing distances for trench line barriers.

11. DEP and vigilant citizens will not be able to determine if construction of MXP is impacting water quality because no water quality monitoring is proposed. The permit should require that water monitors should be installed at sensitive stream crossings, similar to the efforts being conducted along proposed pipeline routes in Virginia.

12. Our state's waters deserve better protection than what would be allowed by this permit. Water is our most precious resource in this state, and the absolute best practices and regulatory enforcement levels are necessary to protect it. After all, the health and wellbeing of West Virginians ultimately depends on clean water.

Response #14:

1. The WVDEP reviewed the route of the proposed pipeline and decided to hold two public hearings. The two locations chosen were Doddridge County Park (6:00 pm – 8:00 pm on Monday December 11, 2017) and Ripley High School (6:00 pm – 8:00 pm on Tuesday December 12, 2017). These two locations were chosen so that individuals from any point along the route would not have to travel an unreasonable distance to provide oral/written comments on the project.

2. Our reviewers required an Erosion and Sediment Control Plan designed to control project runoff and sedimentation, while providing protection to the aquatic resources within the Limits of Disturbance (LOD) and adjacent to the LOD. The controls include construction procedures: such as minimizing the amount of disturbance, proper grading and restoration, diverting/protecting stream flows during stream crossings, and operating efficiently. These construction techniques are consistent with the State's construction stormwater requirements. By implementing the procedures, sequencing, and erosion BMPs listed in the Erosion and Sediment Control Plan impacts to the states aquatic resources should be minimal during construction. The permittee must conduct Site inspections during construction and after the project area has been restored and reseeded. If any

BMPs are not properly functioning – they must be repaired or replaced to provide the appropriate sediment control and stream protection, minimizing impacts to water quality. Also see Section A. Response A.

3. Columbia was required to prepare their plan in accordance with guidelines for the West Virginia General Water Pollution Control Permit for Stormwater Associated with Oil and Gas Related Activities (Permit No. WV0116815).

4. Our reviewers requested, and Columbia agreed to implement enhanced BMPs exceeding minimum requirements to reduce or eliminate potential impacts at all locations in TMDL watersheds, access roads and along the pipeline alignment. For example, silt fence has been replaced with filtering belted silt retention fence or equivalent.

5. Minor waterbodies will be considered those which are 10 feet wide or smaller at the top of the bank. For crossings of coldwater and warm water fisheries considered significant by the state, install the pipeline using the dry-ditch method or dam and pump method, unless approved otherwise, in writing, by the appropriate state agency. For other minor waterbody crossings, complete in-stream construction in the waterbody using the wet ditch method within 24 hours. Limit use of equipment operating in the waterbody to that needed to construct the crossing. See Section A. Response B.

6. This project does not discharge into any stream segment currently listed on the US Fish and Wildlife Service's presence or possible presence of endangered/threatened species.

7. The establishment of baseline data and Water Quality Monitoring is not required by the General WV Water Pollution Control Permit No. WV0116815 or EPA's Stormwater Construction General Permit.

8. The DEP Environmental Enforcement (EE) Office will be monitoring the Mountaineer XPress Pipeline as often as time and resources allow. EE will remain in contact with Columbia, third party inspectors, FERC, etc., for the duration of the project.

9. See Section A. Response C.

10. See Section A. Response D.

11. See Section A. Response E.

12. See Section A. Response A.

Comment #15:

1. The applicant has not demonstrated that impacts to water quality have been minimized;

2. Wet trench crossing methods are proposed for minor water bodies causing increased sedimentation in streams, and impaired streams crossed by such methods will exceed water quality standards and be unable to meet their total maximum daily load pollution prevention requirements;

3. The use of rip rap is proposed for stream restoration, but WVDEP's preferred method of restoration using natural stream channel design techniques should be required;

4. The engineering calculations for the sizing of culverts and site-specific spacing distances for trench line barriers are not included in the application; this information should be requested by the DEP; and

5. Water quality monitoring should be required, with monitors installed at sensitive stream.

Response #15:

1. See Section A. Response A.

2. See Section A. Response B.

3. Section A. Response C.

4. See Section A. Response D.

5. See Section A. Response E.

Comment #16:

1 - The proposed plans for the MXP do not meet the standards required to protect West Virginia's waters from degradation due to the stormwater runoff that will surely accompany construction of this pipeline.

2 - The economic costs to West Virginia outweigh any claimed economic benefits. Even if DEP deems the mitigation plans sufficient, construction of the MXP threatens the health of West Virginia's economy and wastes important natural resources of the State.

My location is in the blast zone.

Response #16:

1. See Section A. Response A.

2. **DEP, via this general stormwater permit, or other authorities, is not empowered to evaluate economic costs benefits of this project relative to West Virginia's economy.**

All drilling and blasting must be done in a cautious manner. Suitable precautions must be taken to avoid injury or damage to persons, livestock, or other property. If blasting is necessary within 150 feet of residential or commercial buildings, an independent contractor must be hired to perform pre- and post-blast structural inspections and, if necessary, seismographic monitoring. In those

instances where blasting has the potential to affect water quantity/quality from domestic or agricultural wells or springs in the proximity of the construction work area, Columbia must conduct pre- and post-blasting (within two months of construction work restoration) testing of water wells within an appropriate distance (typically 150 feet) of the pipeline with landowner permission. These tests may include a pump inspection, flow rate, and bacteriological cultures. If a water well is damaged as a result of Columbia's activities, Columbia must provide a temporary source of water and/or compensate the owner

Section C. Public Comments and Responses

Comment #1: My issue with this stormwater NPDES permit is I have been witnessing the pipelines that have been being put in to this county over the last seven, eight, nine years. One thing that I have noticed is there has been no improvement, or basically, no enforcement to maintain the drainage or the sedimentation issues that are occurring. This year one of the pipelines, Rover, West Virginia DEP did actually do a stop work order that lasted for approximately 30 days.

Response #1: There has been improvement. The State of West Virginia, Department of Environmental Protection, Division of Water and Waste Management has taken the critical and deliberate steps of improving the permitting process by hiring people with detailed knowledge of the permitting process and experience with erosion and sediment control and slope stability. In addition, the DEP Environmental Enforcement (EE) Office will be monitoring the construction of the Mountaineer Xpress Pipeline as often as time and resources allow. EE will remain in contact with Columbia, third party inspectors, FERC, etc., for the duration of the project.

Comment #2: Our area also has endangered mussel and clam species, where the sedimentation that is ending up in these streams is endangering them.

Response #2: This project does not discharge into any stream segment currently listed on the US Fish and Wildlife Service's presence or possible presence of endangered/threatened species.

Comment #3: But my primary concern is the fact that nothing has changed. The silt socks are out there, but they actually act as waterfall kind of things for the rainwater and the erosion to

Response #3: See Section A. Response A.

Our reviewers requested, and Columbia agreed to implement enhanced BMPs exceeding minimum requirements to reduce or eliminate potential impacts at all locations in TMDL watersheds, access roads and along the pipeline alignment.

Comment #4: I personally will be impacted, especially if they're using explosive devices and whatever to clear the right-of-way, et cetera, which will impact my water well.

Response #4: All drilling and blasting must be done in a cautious manner. Suitable precautions will be taken to avoid injury or damage to persons, livestock, or other property. If blasting is necessary within 150 feet of residential or commercial buildings, an independent contractor must be hired to perform pre- and post-blast structural inspections and, if necessary, seismographic monitoring. In those instances where blasting has the potential to affect water quantity/quality from domestic or agricultural wells or springs in the proximity of the construction work area, Columbia must conduct pre- and post-blasting (within two months of construction work restoration) testing of water wells within an appropriate distance (typically 150 feet) of the pipeline with landowner permission. These tests may include a pump inspection, flow rate, and bacteriological cultures. If a water well is damaged as a result of Columbia's activities, Columbia must provide a temporary source of water and/or compensate the owner.

Comment #5: My primary concern is if the stormwater permit is issued will West Virginia DEP actually be on site for inspections, or are you going to do that sporadically? Will you be responding in a timely manner to citizen complaints? Is anyone going to actually be in the county to respond quickly, because when some of this stuff occurs if you guys were coming up from Charleston by the time you get there the event has passed.

Response #5: The DEP Environmental Enforcement (EE) Office will be monitoring the construction of the Mountaineer Xpress Pipeline as often as time and resources allow. EE will remain in contact with Columbia, third party inspectors, FERC, etc., for the duration of the project.

Comment #6: Doesn't take a scientist to know that the large-scale clearing of forests and laying of pipeline on these steep hills will cause major erosion and sedimentation of our surface waters even if everything is done by the book and nothing goes wrong. Which is a big if that can't be relied on. I have 2400 feet of this pipeline coming through the steepest part of my property.

Response #6: Our reviewers required an Erosion and Sediment Control Plan designed to control project runoff and sedimentation, while providing protection to the aquatic resources within the Limits of Disturbance (LOD) and adjacent to the LOD. The controls include construction procedures: such as minimizing the amount of disturbance, proper grading and restoration, diverting/protecting stream flows during stream crossings, and operating efficiently. These construction techniques are consistent with the State's construction stormwater requirements. By implementing the procedures, sequencing, and erosion BMPs listed in the Erosion and Sediment Control Plan impacts to the states aquatic resources should be minimal during construction. The permittee must conduct Site inspections during construction and after the project area has been restored and reseeded. If any BMPs are not properly functioning – they must be repaired or replaced to provide the appropriate sediment control and stream protection, minimizing impacts to water quality.

When routing the MXP on steep slopes, Columbia must follow construction guidelines in accordance with Chapter 8 of WVDEP's Erosion and Sediment Control Best Management Practice Manual, which includes considerations for slip prevention associated with pipeline construction during routing as well as engineering design, preconstruction planning, construction, and post construction.

Please also see Section A. Response A.

Comment #7: On the other hand, however, throughout the permitting process for the MXP, concerned citizens have felt that the process was hurried, and that information was hard to secure. That is, we needed more hearings. A number of groups and individuals did submit requests that stormwater hearings be held in more than two locations. It requires little imagination to think that worried landowners, parents, and other citizens from the 14 impacted counties would have wanted to attend such an event and learn more. But for many, job

constrains and other scheduling difficulties no doubt precluded traveling to Ripley or Doddridge County, the only two hearing locations.

Response #7: The WVDEP reviewed the route of the proposed pipeline and decided to hold two public hearings. The two locations chosen were Doddridge County Park (6:00 pm – 8:00 pm on Monday December 11, 2017) and Ripley High School (6:00 pm – 8:00 pm on Tuesday December 12, 2017). These two locations were chosen so that individuals from any point along the route would not have to travel an unreasonable distance to provide oral/written comments on the project.

Comment #8: Those of us who have tried to do a little homework regarding stormwater concerns have learned that since the waivers for the 401, there will be more frequent inspections of the construction, but those will be done by contracted personnel, not the West Virginia DEP. However, on the positive side, there will be required inspections after one quarter inch of rain rather than a half an inch. We understand that rain gauges will be installed, but they'll be self-inspecting.

Response #8: The DEP Environmental Enforcement (EE) Office will be monitoring the construction of the Mountaineer Xpress Pipeline as often as time and resources allow. EE will remain in contact with Columbia, third party inspectors, FERC, etc., for the duration of the project.

Comment #9: We find that there will be wet stream crossings which has the potential for more sediment. Those other two very controversial projects in eastern West Virginia, the ACP and the MVP they call for dry crossings.

Response #9: See Section A. Response B.

Comment #10: Rip Rap. I'm told that DEP does not look favorably on the use of rip rap for post-construction stream edges. I join any others who are requesting that DEP should insist upon natural stream design rather than rip rap.

Response #10: Section A. Response C.

Comment #11: Some of us are participating in a stream monitoring program along the proposed route of MXP. We've completed training conducted by Trout Unlimited and West Virginia Rivers Coalition. At least once a month we sample and survey a stream that will be crossed by or impacted by this pipeline construction. We log in our data on the CitSci.org website. This is a gratifying action and we're pleased to be able to add to what is currently known about the streams. Alternately, we wish our work with these waters was not prompted by concerns surrounding the streams. We urge DEP to be aware of our data.

Response #11: DEP is aware of the stream monitoring program and the training conducted by Trout Unlimited and West Virginia Rivers Coalition. WVDEP is met with several citizen groups on January 24, 2018. One of the points of topic was how they can assist with project monitoring.

Comment #12: I would especially like to request that the written comment period be extended beyond the holidays. I really haven't had the time to review the permit as much as I would like at this time.

Response #12: Columbia has complied with the terms and conditions of the General Water Pollution Control Permit therefore we cannot extend the written comment period.

Comment #13: I would implore DEP to examine the cumulative effects of this permit, not just as a stand-alone permit. The reason I say this is you know, DEP should really step back and develop a way to look at these types of permits in aggregate, because the myriad of wet and dry gas pipelines that are proposed for our area, coupled with all the increased fracking and related activities that would feed these pipelines, those cumulative impacts have a great effect on the land and water and surely are changing the runoff patterns.

Response #13: Our reviewers required that the Erosion and Sediment Control Plan be designed to control project runoff and sedimentation, while providing protection to the aquatic resources within the Limits of Disturbance (LOD) and adjacent to the LOD. These construction techniques are consistent with the State's construction stormwater requirements. By implementing the procedures, sequencing, and erosion BMPs listed in the Erosion and Sediment Control Plan, impacts to the states aquatic resources and runoff pattern changes should be minimal during construction.

By restoring the topography, installing and maintaining the BMPs, conducting weekly and post rainfall inspections, and implementing the RRP WVDEP believes that maximum protection must be provided to the project area's aquatic resources and any potential long-term cumulative impacts within the project area must be minimized.

Please also see Section A. Response A.

Comment #14: And I would hope that DEP is not depending on citizen watchdogs but rather on inspectors with DEP to provide this data. I don't think it should be on the burden of the citizens, and I'm pretty sure I don't trust the pipeline companies to be providing the inspectors.

Response #14: The DEP Environmental Enforcement (EE) Office will be monitoring the construction of the Mountaineer Xpress Pipeline as often as time and resources allow. EE will remain in contact with Columbia, third party inspectors, FERC, etc., for the duration of the project.

Comment #15: I don't think there's any water quality monitoring proposed. There should be some monitors installed at sensitive stream crossings.

Response #15: See Section A. Response E.

Comment #16: I'm just going to stand because I had to drive two, over two hours to get here from Huntington, West Virginia area because there's not a hearing in our area, even though we are part of the most extensively populated counties that this project will be going through.

Response #16: The WVDEP reviewed the route of the proposed pipeline and decided to hold two public hearings. The two locations chosen were Doddridge County Park (6:00 pm – 8:00 pm on Monday December 11, 2017) and Ripley High School (6:00 pm – 8:00 pm on Tuesday December 12, 2017). These two locations were chosen so that individuals from any point along the route would not have to travel an unreasonable distance to provide oral/written comments on the project.

Comment #17: So first and foremost, I would like to request an extension of time for written comments for this - on this permit. At the very least until January 2nd, after the holidays, and hopefully longer than that, so that people will have a chance to review the extensive nature of the documents for this project. I would like to request again, even though this request has been denied, myself and several others have made it, that there be at least one public hearing scheduled in Putnam, Cabell, or Wayne Counties.

Response #17: Columbia has complied with the terms and conditions of the General Water Pollution Control Permit therefore an extension of time for written comments must not be granted. All information required under this permit has been made available to the public under Section 308(b) of the CWA, General WV Water Pollution Control Permit No. WV0116815 or from EPA's Stormwater Construction General Permit.

The WVDEP reviewed the route of the proposed pipeline and decided to hold two public hearings. The two locations chosen were Doddridge County Park (6:00 pm – 8:00 pm on Monday December 11, 2017) and Ripley High School (6:00 pm – 8:00 pm on Tuesday December 12, 2017). These two locations were chosen so that individuals from any point along the route would not have to travel an unreasonable distance to provide oral/written comments on the project.

Comment #18: The owner or operator of a project with stormwater discharges covered by this permit shall make plans available for review to members of the public upon request.

Response #18: All information required under this permit has been made available to the public under Section 308(b) of the CWA, General WV Water Pollution Control Permit No. WV0116815 or from EPA's Stormwater Construction General Permit.

Comment #19: The extensive nature of the documents for this massive project, which I've already mentioned, necessitate a lengthier period of time for public analysis of the data and information available. And we simply haven't had enough time to read and analyze this information to date.

Response #19: According to 47 CSR Series 10, Section 47-10-12.1. b.1 "Public notice of the preparation of a draft permit shall allow at least thirty (30) days for public comment. Upon request of the permittee, the public comment period will be extended for an additional thirty (30) days. Further extension of the comment period may be granted by the chief for good cause shown but in

no case, may the further extension exceed an additional thirty (30) days.” Columbia has complied with the terms and conditions of the General Water Pollution Control Permit. From November 14th through the 16th, 2017 public notices and public hearing notices were published in the newspapers along the pipelines route. The public comment period closed on December 22, 2017.

Comment #20: The amount of acreage to be disturbed by this project gives me pause. From the final E&S narrative statistics, I calculated that a total of 2,721.5 acres will be disturbed by this pipeline. 128.5 for above ground facilities, 301.9 for access roads, and 496 for staging areas and contractor yards. This is a total of 3,647.9 acres.

Response #20: Acreage Impacts by County and Project Facility have been listed in a table located in the Erosion and Sediment Control Plan and Narrative. A total of 3648 acres is permitted to be disturbed by this pipeline. 2714.5 acres for new pipeline facilities, 7.0 acres for replacement pipeline facilities, 128.6 acres for new above ground facilities, 301.9 acres for access roads, 204.3 acres for staging areas and 291.7 for contractor yards.

Comment #21: First, due to the steep terrain of this project that is proposed to traverse, traditional means of erosion control such as silt fences and socks have largely proven inadequate on multiple other similar projects like the Rover which Vivian mentioned a little while ago.

Response #21: Our reviewers requested, and Columbia agreed to implement enhanced BMPs exceeding minimum requirements to reduce or eliminate potential impacts at all locations in TMDL watersheds, access roads and along the pipeline alignment.

Comment #22: So, with all the failures that are possible with the erosion control methods that are traditionally used, I request that the DEP embark on water testing in all streams that this project is proposed to traverse. I want this implemented prior to initial construction on the project, so that there can be baseline water sampling data obtained and periodic, at least monthly, water tests to be implemented at those sites during the duration of construction and initial startup phases of this project.

Response #22: See Section A. Response E.

Comment #23: I'm aware that there are endangered mussel species in some streams that this project is proposed to traverse. Therefore, I would request that there be a full analysis of species to be impacted in all these streams prior to any consideration of approval of this permit and ongoing monitoring.

Response #23: This project does not discharge into any stream segment currently listed on the US Fish and Wildlife Service's presence or possible presence of endangered/threatened species.

Comment #24: I just had to travel two hours - or over two hours to get to this meeting, so I am requesting we have another meeting in a more populated area that would be affected by this project, either in Cabell, Wayne or Putnam Counties.

Response #24: The WVDEP reviewed the route of the proposed pipeline and decided to hold two public hearings. The two locations chosen were Doddridge County Park (6:00 pm – 8:00 pm on Monday December 11, 2017) and Ripley High School (6:00 pm – 8:00 pm on Tuesday December 12, 2017). These two locations were chosen so that individuals from any point along the route would not have to travel an unreasonable distance to provide oral/written comments on the project.

Comment #25: Section three does not list the name of any information about any contractor who will be contracted to build this pipeline. I see that 60 days before the start date, a site registration application and erosion and sediment control plan and a stormwater pollution and prevention plan needed to be submitted before 2/21/17. That is February 21st, 2017. There's no mention that these - these criteria have been met in the application.

Response #25: Information about contractor who will be contracted to build pipeline projects are not required to receive approval. This Project will disturb more than 100 acres, therefore Columbia was required to submit the application and SWPPP at least 90 days prior to construction to allow for the public notice procedure.

Comment #26: In section four, the preparer of this form is Emma Suberniak of Arcadis, which I assume is a company in Highlands, Colorado. Her contact phone number is a 304 number, which is the area code for West Virginia which is very inconsistent with her Highlands, excuse, me, Highlands Ranch, Colorado. Why is this the area code of this preparer?

Response #26: DEP, via this general stormwater permit, or other authorities, is not empowered to question the preparers contact information.

Comment #27: Section five shows a fee of 1,750. It does not say dollars. I'm assuming it is dollars. This was - this was levied, but there's no mention whether this fee was paid or whether it just goes unpaid.

Response #27: The application fee of \$1,750 was paid. Our procedure is the application fee payment is noted prior to being determined administratively complete.

Comment #28: The applicant has not demonstrated that impacts to water quality has been minimized. Trench, what trench crossing methods are proposed for minor water bodies causing increased sedimentation in streams. Impaired streams crossed by what trench methods will exceed water quality standards and be unable to meet the total maximum daily load pollution prevention requirements. The use of rip rap is proposed for stream restoration instead of West Virginia DEP's preferred method of restoration using natural stream channel design techniques. The engineering calculations for the sizing of culverts are not included in the application. The specific spacing distances for trench line barriers are not included in the application. And no water quality monitoring is proposed.

Response #28:

Section A. Response B.

See Section A. Response D.

See Section A. Response E.

Comment #29: Monitors should be installed at sensitive stream crossings similar to the efforts being conducted along the proposed pipeline routes in Virginia. We have an example that we could follow for that. It's a simple request, but we do at least what Virginia is doing in this case. Because of this and many of the other issues that we have stated today, I do not believe that the MXP's application - I don't believe that it meets the requirements for the West Virginia DEP oil and gas construction stormwater general permit. Thank you.

Response #29: Columbia was required to prepare this registration in accordance with the terms and conditions of the General WV Water Pollution Control Permit No. WV0116815 and from EPA's Stormwater Construction General Permit.

See Section A. Response A.

See Section A. Response E.