



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

June 1, 2018

Stephen Van Stone, Attorney-in-Fact
Shell Pipeline Company LP
150 North Dairy Ashford
Houston, TX 77079

Re: DEP FILE E04-369
Technical Deficiency Letter
Falcon Ethane Pipeline System
Greene, Independence, Potter & Raccoon Townships
Beaver County

Dear Mr. Van Stone:

The Department of Environmental Protection (DEP) has reviewed the above referenced application package and has identified significant technical deficiencies. The attached list specifies the deficiency items. The deficiencies are based on applicable laws and regulations, and the guidance set forth as DEP's preferred means of satisfying the applicable regulatory requirements.

Pursuant to 25 Pa. Code §105.13a of DEP's Chapter 105 Rules and Regulations you must submit a response fully addressing each of the significant technical deficiencies set forth on the attached list. Please note that this information must be received within sixty (60) calendar days from the date of this letter or DEP may consider the application to be withdrawn by the applicant.

You may request a time extension, in writing before the due date to respond to deficiencies beyond the sixty (60) calendar days. Requests for time extensions will be reviewed and considered by DEP. You will be notified of the decision in writing to either grant or deny, including a specific due date to respond if the extension is granted. Time extensions shall be in accordance with 25 Pa. Code §105.13a(b).

DEP has developed a standardized review process and processing times for all permits or other authorizations that it issues or grants. Pursuant to its Permit Review Process and Permit Decision Guarantee Policy (021-2100-001), DEP guarantees providing permit decisions within the published time frames, provided applicants submit complete, technically adequate applications that address all applicable regulatory and statutory requirements, in the first submission. Since you did not submit a complete and/or technically adequate application, DEP's Permit Decision Guarantee is no longer applicable to your application.

If you believe that any of the stated deficiencies is not significant, instead of submitting a response to that deficiency, you have the option of asking DEP to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be withdrawn or denied.

Should you have any questions pertaining to the identified deficiencies, please contact Howard Kellick at 412.442.4074 or hkellick@pa.gov, or Joseph Snyder at 412.442.4308 or jossnyder@pa.gov. Please refer to Application No. E04-369 or Authorization No. 1199263 to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the sixty (60) day period allotted for your reply, unless otherwise extended by DEP. You may also follow your application review process via *eFACTS on the Web* at: <http://www.ahs2.dep.state.pa.us/eFactsWeb/default.aspx>.

Sincerely,



Gregory W. Holesh, P.E.
Environmental Group Manager
Permitting & Technical Services
Waterways & Wetlands Program

Enclosure(s)

cc: Consultant
Beaver County Conservation District
US Army Corps of Engineers (2015-1191)
PA Fish & Boat Commission
Greene, Independence, Potter & Raccoon Townships
Robert Wooten, Shell Pipeline Company, LP
Natalie Shearer, AECOM Technical Services, Inc.

PLEASE ENCLOSE A COPY OF THIS LETTER WHEN SUBMITTING
THE REQUESTED INFORMATION
ALL REQUESTED INFORMATION BELOW MUST BE SUPPLIED IN TRIPLICATE
Items Needed for TECHNICAL ADEQUACY

1. The answer to Question #4 on your General Information Form (GIF), in the Land Use Information section, indicates that the project does not meet the provision of the zoning ordinance or does not have zoning approval. Provide evidence that your project is consistent with local land use planning, pursuant to Sections 105.13(a) and 105.14(b)(8), of the Department's Chapter 105 rules and regulations.
2. The answer to Question No. 5.3, on your GIF, in the Coordination Information section, indicates that this project involves a discharge of stormwater or wastewater from an industrial activity. Identify and describe this industrial discharge, pursuant to Sections 105.14(b)(6) and 105.24(a), of the Department's Chapter 105 rules and regulations. Please be aware that additional permits may be required from the Department, pending your response to this item.
3. The answer to Question No. 6.0, on your GIF, in the Coordination Information section, indicates that this project involves a floodplain project by the Commonwealth, a political subdivision of the commonwealth or a public utility. Identify and describe the floodplain project and the entity that is conducting this activity, pursuant to Sections 106.3 and 106.11(a), of the Department's Chapter 106 rules and regulations. Additional information may be required, pending your response to this item.
4. To facilitate the determination of whether any additional permits may be required for your proposed project, and to the extent possible, describe the structures and activities that will be constructed within the junction sites (refer to Plan View Map Sheets 18 and 29 of 54), pursuant to Sections 105.13(e)(1)(iii), 105.14(b)(6) and 105.24(a).
5. Regarding your wetland investigation, revise your delineation report to include the results of your investigation to determine the presence of wetlands within your project area that are identified by the US Fish & Wildlife Service's National Wetlands Inventory (NWI) data system (Wetlands Mapper), and provide supporting data sheets, pursuant to Section 105.13(e)(1)(x), of the Department's Chapter 105 rules and regulations.
6. Regarding your wetland investigation, provide a means to match the off-line wetland data sheets with the sampling point locations that are shown on the study area maps in your environmental assessment, pursuant to Section 105.13(e)(1)(x), of the Department's Chapter 105 rules and regulations.
7. Pursuant to Sections 105.13(a) and 105.13(e)(1)(x) of the Department's Chapter 105 rules and regulations, revise Module S2, Section D.1.iv, to discuss the riverine resource type(s) and condition(s) as they relate to the inherent functions including, but not limited to, those associated with hydrological, biogeochemical and habitat attributes. Include any recreational uses when applicable. Currently, this section provides a general discussion on project effects (which is also discussed in a Section in Module S3), rather than a discussion of the inherent functions of the identified riverine resources that is requested in this section of Module S2.

8. Pursuant to Sections 105.13(a) and 105.13(e)(1)(x) of the Department's Chapter 105 rules and regulations, revise Module S2, Section D.2.vi, to discuss the wetland HGM type(s) and condition(s) as they relate to the inherent functions including, but not limited to, those associated with hydrological, biogeochemical and habitat attributes. Include any recreational uses when applicable. Currently, this section provides a general discussion on project effects (which is also discussed in a Section in Module S3), rather than a discussion of the inherent functions of the identified wetland resources that is requested in this section of Module S2.
9. Provide an evaluation of the impact that open cut installation methods could have on wetlands that rely on perched water tables, confining layer, and/or fragipans to maintain hydrology. This evaluation should include a discussion of how your proposed activities, and, if applicable, proposed mitigation will maintain wetland hydrology in these types of areas. 25 Pa. Code §105.13(e)(1)(x)
10. Evaluate and discuss your project's potential to impact any public water systems and their sources that are located within 1-mile of your proposed pipeline system, pursuant to Sections 105.13(e)(1)(ii) and 105.14(b)(5), of the Department's Chapter 105 rules and regulations.
11. Related to the preceding item, and as needed, discuss efforts to avoid and minimize impacts to these public water systems, and measures that will be implemented to mitigate for any unavoidable impacts, pursuant to Sections 105.13(e)(1)(viii & ix) and 105.14(b)(5), of the Department's Chapter 105 rules and regulations. These efforts might include, but are not limited to, considering alternative locations, routings or design for the proposed pipeline; providing provisions for shut-off in the event of break or rupture; etc.
12. Related to the preceding item, the Department has received multiple public comments, with concerns about your project's potential to affect the Ambridge Reservoir and the associated raw water service pipeline. Accordingly, evaluate and discuss your project's potential to affect the Ambridge Reservoir and to interrupt public water supply service, pursuant to Section 105.14(b)(5), of the Department's Chapter 105 rules and regulations. Based upon this evaluation, discuss efforts to avoid and minimize impacts to this reservoir and/or public water system, and measures that will be implemented to mitigate for any unavoidable impacts, pursuant to Sections 105.13(e)(1)(viii & ix) and 105.14(b)(5), of the Department's Chapter 105 rules and regulations. You should to contact the Ambridge Water Authority to facilitate your response to this item.
13. Due to the presence of public water systems in or near your project area, re-evaluate and discuss whether your project will impact Exceptional Value (EV) wetlands, which were not previously identified as EV wetlands, pursuant to Sections 105.13(e)(1)(x)(B), of the Department's Chapter 105 rules and regulations. If your project will impact EV wetlands, identify these wetlands, and demonstrate compliance with Sections 105.18a(a)(1-7), of the Department's Chapter 105 rules and regulations, regarding the permitting of structures and activities in EV wetlands.
14. Module S3 of your EA indicates that the proposed pipeline centerline is located within previously mined areas (see pages 31-32). Provide a map overlay drawing of your project with these mining areas, and GIS shape files with this information, pursuant to Section 105.14(b)(6) and 105.24(a) 105.301(10), of the Department's Chapter 105 rules and regulations.

15. Related to the preceding item, revise your profile drawings to show the limits of the previously mined areas. In addition, provide the depth of cover over the mine workings that will be crossed by the proposed pipeline, and the distance between the mine workings and the proposed pipeline. Use this information to evaluate and discuss the potential for a subsidence event compromising the utility line, and the potential to create a mine water discharge, pursuant to Section 105.301(10), of the Department's Chapter 105 rules and regulations.
16. To facilitate coordination between DEP's Waterways and Wetlands Program and DEP's Mining Program, identify all areas where the proposed pipeline will cross active mining permit boundaries, pursuant to Sections 105.14(b)(6) and 105.24(a), of the Department's Chapter 105 rules and regulations.
17. The current alternatives analysis provides general information about the route development process; however, revise this narrative to provide a detailed analysis of the alternative locations and routes that were considered to avoid or minimize adverse environmental impacts, pursuant to Section 105.13(e)(1)(viii), of the Department's Chapter 105 rules and regulations.
18. Related to the preceding item, Module S3 indicates that approximately 18.5 of the 45 miles (41%) of the proposed pipeline (in Beaver County 11 of 23 miles) are parallel to or adjacent to existing right-of-ways (ROWs) (see page 27). Evaluate and discuss whether there might be additional opportunities to co-locate the proposed pipeline within existing ROWs, to potentially reduce the proposed adverse environmental impacts, pursuant to Sections 105.13(e)(1)(viii), 105.16(a) and 105.18a, of the Department's Chapter 105 rules and regulations.
19. The Beaver County Natural Heritage Inventory, available from the PA Natural Heritage Program website, identifies the following Natural Heritage Areas (NHA) in or near your project area: Ambridge Reservoir Valleys NHA, Lower Raccoon Creek NHA and Raccoon Creek Valley and Wildflower Reserve NHA. Evaluate and discuss the potential for your project to affect these natural heritage areas, pursuant to Sections 105.14(b)(4 and 12), of the Department's Chapter 105 rules and regulations.
20. The proposed project is located within the Raccoon Creek Valley & State Park Important Bird Area (IBA). Evaluate and discuss the potential for your project to affect this IBA (see the National Audubon Society website for more information about this IBA), pursuant to Sections 105.14(b)(4 and 12), of the Department's Chapter 105 rules and regulations.
21. Since Harbinger-of-spring (PA-threatened plant) and Purple Rocket (PA-endangered plant) were located within the Raccoon Creek floodplain, re-evaluate whether any of the identified wetlands within the project area are Exceptional Value (EV), pursuant to Sections 105.13(e)(1)(x)(B) and 105.17(1)(i and ii), of the Departments Chapter 105 rules and regulations. If any EV wetlands are identified within your project area, identify and quantify any impacts to these EV wetlands, and demonstrate compliance with the requirements in Section 105.18a(a)(1-7), of the Department's rules and regulations, regarding the permitting of structures and activities in EV wetlands.
22. The Comprehensive Environmental Assessment (CEA) in Module S1 of your Environmental Assessment makes references to various, other sections of your environmental assessment. Revise your CEA to pull all of this information together, into a comprehensive assessment that analyzes alternatives, impacts, mitigation and antidegradation for all structures and activities

associated with the project, in accordance with 25 Pa. Code Chapters 93, 95, 102 and 105, since the proposed project involves water obstructions or encroachments that are located in multiple counties.

23. Related to the preceding item, for projects proposing to impact wetlands, the applicant must assess the cumulative impact of the project and other existing and potential projects, including direct and secondary impacts that are permanent in nature, as required by 25 Pa. Code §§ 105.13(e)(1)(x), 105.18a(a)(6) and 105.18a(b)(6). To address the Chapter 105 cumulative impacts requirements, consider identifying and evaluating other existing and potential projects permanently impacting each wetland resource as follows:
 - a. Other Existing Permanent Project Impacts - Existing permanent wetland impacts in, along, across or projecting into the wetland resource.
 - b. Other Potential Projects Proposing Permanent Impacts— Future anticipated permanent wetland impacts in, and along, across or projecting into the wetland resource including:
 - (i) Proposed but not yet built permanent wetland impacts proposed by the applicant; or
 - (ii) Other permanent wetland impacts from projects proposed by other entities authorized by valid DEP Chapter 105 Water Obstruction and Encroachment Permits (issued in the last five years, i.e. not expired), but not constructed.
24. While your project summary indicates that disturbed areas will be seeded and mulched upon placement of the proposed pipeline, revise your mitigation plan to describe, in detail, how you will restore wetlands and streams that are disturbed during construction, pursuant to Section 105.13(e)(1)(ix), of the Department's rules and regulations. This narrative should include details about seed mixes, shrubs and trees that will be used to restore wetland areas, stream banks and riparian corridors. The selected vegetation should be native species, or provide a justification as to why a non-native species is selected.
25. Provide a copy of the Mitigation Bank Credit Availability letter from First Pennsylvania Resource, LLC (FPR), which has been signed by a person who has been designated to sign documents, on behalf of FPR, pursuant to Sections 105.18a(b)(7) and 105.20a, of the Department's Chapter 105 rules and regulations.
26. To facilitate the Department's review of your mitigation plan, provide a table that lists, describes and quantifies all permanent impacts to wetlands and watercourses, other than those that are associated with utility line stream crossings, pursuant to Section 105.13(e)(1)(ix), of the Department's Chapter 105 rules and regulations. Regarding the proposed utility line stream crossings, include in this table all permanent impacts to wetlands that will result in a permanent conversion of the wetland type.
27. Pursuant to Section 105.13(e)(1)(ix), of the Department's Chapter 105 rules and regulations, provide the following information, regarding the proposed Permittee-Responsible Mitigation Plan for the Falcon Ethane Pipeline Project Neshannock Creek Restoration Site:
 - a. Since the Neshannock Creek Restoration Site includes other existing Permittee-Responsible Mitigation (PRM) sites, modify Figure 2 in Appendix A of your mitigation plan, or provide a table or some other means, to identify these other existing PRM sites and any associated Water Obstruction and Encroachment Permits from DEP.

- b. Related to the preceding item, provide a master restoration plan for the entire Neshannock Creek Restoration Site and describe how your currently proposed PRM site fits into this master plan.
 - c. Demonstrate how your proposed PRM site will replace the functions and values of the wetlands that will be affected by the proposed pipeline project.
28. To facilitate the Department's review of the "Shell Pipeline HDD Procedure" document, dated September 2017, provide the location and resource crossing number for the "List of HDDs," in PA, that are listed on page 1 of this document, or provide some way to cross reference this list with the aquatic resource impacts tables, pursuant to Section 105.14(b)(6) and 105.301(10) of the Department's Chapter 105 rules and regulations.
29. Related to the preceding item, revise your "Shell Pipeline HDD Procedure" document to include such items as an HDD site feasibility analysis, inadvertent return risk assessment, water supply protection, agency contact information, etc., pursuant to Sections 105.14(b)(6) and 105.301(10) of the Department's Chapter 105 rules and regulations. The preceding list is not all inclusive, but lists some of the items that should be addressed in your document. The Department is available to meet with you, to discuss the content of your document.
30. Related to the preceding item, a stand-alone attachment should be created to address the pre-boring geologic evaluation of the existence and potential to impact local drinking water supplies or aquifers around the boring location, pursuant to Sections 105.13(e)(1)(x), 105.14(b)(5) and 105.301(10) of the Department's Chapter 105 rules and regulations. The plan needs to include what measures will be employed to verify that no supplies or aquifer are impacted (i.e. pre- and post-water quality quantity analysis). The plan should specify what notifications and remediation measures will be employed if there are impacts.
31. Evaluate and discuss the potential for your proposed project to encounter areas underlain by a) carbonate bedrock (i.e. areas susceptible to sinkhole formation) and b) landslide prone areas, during construction. Evaluate and discuss precautions and construction methods that will be utilized during construction, where these areas will be encountered, pursuant to Section 105.14(b)(11) of the Department's Chapter 105 rules and regulations.
32. Pursuant to Sections 105.13(e) and 105.13(e)(1)(i, iii, viii & x), of the Department's rules and regulations, provide the requested information or evaluate and discuss the feasibility of:
 - a. Avoiding impacts to W-PA-160517-MRK-002 at RC-10.
 - b. Relocating SCIO-TAR-35 to avoid impacts at RC-18.
 - c. Moving valve site outside of wetland boundaries at RC-20. If able to demonstrate that this is not feasible, revise site plan drawing to show cross section. Demonstrate that sufficient hydrology will remain to sustain the restored wetland area(s).
 - d. Revise Plan View Map, Sheet 13 of 54 to include W-PA-161220-MRK-007 at/near RC-22.
 - e. Provide cross section for RC-27; if pond, evaluate and discuss potential impacts to this resource.
 - f. Adjusting route away from confluence of streams at RC-35.
 - g. Eliminating HOU-TAR-50 and impacts at RC-38 to -42, due to proximity of SCO-PAR-09.
 - h. Eliminating HOU-TAR-51 and associated impacts at RC-43 and -44.

- i. Adjusting route to avoid or minimize impacts at RC-48 to -50.
 - j. Eliminating HOU-TAR-53 & impacts at RC-51 to -55, due to proximity of HOU-TAR-52 & -54.
 - k. Reducing impacts to S-PA-160504-CBA-001 at RC-64.
 - l. Provide cross section & evaluate and discuss potential impacts to this pond at RC-67.
 - m. Moving HDD entry out of W-PA-15013-MRK-003 at RC-74.
 - n. Moving valve site from S-PA-151013-MRK-004 at RC-75.
 - o. Increasing amount of timber mat over W-PA-151013-MRK-005 at RC-76.
 - p. Identify or provide additional info regarding the discharge to be relocated by others at RC-76.
 - q. Adjusting route away from confluence of streams at RC-88.
 - r. Adjusting route to avoid impacts at RC-91 and -92.
 - s. If unable to adjust route at RC-91 & -92, adding trench plugs at one stream crossing location.
 - t. Adjusting route away from confluence of streams at RC-96.
 - u. Adjusting route away from confluence of streams at RC-101.
 - v. Adjusting route to avoid/minimize timber mat crossings at confluence of streams at RC-102.
 - w. Revise LOD Line on Photo Location Map, Sheet 29 of 54 and Plan View Map, Sheet 29 of 54?
33. As you are proposing to withdraw water from streams for hydrostatic testing, and then propose to discharge the water after use, please provide a detail or typical drawing of both the intake and the outfall measures, so DEP can determine whether these are temporary or require inclusion as impacts, pursuant to Sections 105.14(b)(6) and 105.24(a), of the Department's Chapter 105 rules and regulations. Also provide an approximate location of with withdraw and discharge locations. It should be noted that you will be required to obtain authorization from DEP's Clean Water Program for these discharges. Provide documentation that you have initiated this process. You may contact Mike Fifth, Environmental Engineering Manager, Clean Water Program at 412-442-4000 or mfifth@pa.gov.
34. In addition to your "Shell Pipeline HDD Procedure" document, provide a copy of your Preparedness, Prevention and Contingency (PPC) Plan for your pipeline project, pursuant to Section 105.14(b)(6) of the Department's Chapter 105 rules and regulations.
35. Changes or modifications to this application and supporting documentation will need to also be reflected in the narrative and drawings for the Chapter 103 permit application (DEP File No. ESG00007170003), pursuant to Section 105.14(b)(6) of the Department's Chapter 105 rules and regulations.

Please note that the responses should be in the form of revisions to the original application. Any pages revised should bear the revision date. We need three (3) copies of any responses and revisions. Please do NOT send copies of the entire application; only those pages or drawings that change should be submitted.