



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

DEC 20 2018

Stephen Van Stone
Shell Pipeline Company LP
150 North Dairy Ashford
Houston, TX 77079

Re: DEP File No. **E02-1773**
Falcon Ethan Pipeline System
North Fayette and Findlay Townships
Allegheny County

Dear Mr. Van Stone:

Enclosed is your copy of your State Water Obstruction and Encroachment Permit (WOEP). Please review this permit so that you are aware of the extent of authorization and the conditions that apply to that authorization.

Please be advised that you do not have Federal authorizations for this project and such authorization is required prior to starting your project. In accordance with procedures established with the U.S. Army Corps of Engineers, you will be contacted directly by the Corps regarding Federal Authorization.

This WOEP is not effective until a copy of the Acknowledgment of Appraisal of Permit Conditions, signed by you, is received by the Department. Any work conducted prior to the Department's receipt of the signed Acknowledgment of Appraisal of Permit Conditions is a violation of the Dam Safety and Encroachments Act and the Clean Streams Law, and you may be subject to fines and penalties pursuant to those Acts.

A copy of the Permit, Acknowledgment of Appraisal of Permit Conditions, the Erosion and Sediment Control plan, this Issuance Letter, and any other applicable State and Federal authorizations, must be maintained on site during construction and available at the work site for inspection upon request by any officer or agent of the Department or any other Federal, State, County and Municipal agency.

A Completion Report must be submitted to this office within 30 days of completion of the approved project. The Completion Report form must be signed by you and the supervising engineer indicating that the work has been completed as approved.

This authorization does not relieve the applicant from applying for and obtaining any additional permits or approvals from local, state or federal agencies required for this project. Please be advised that if any other permits are required for this project, they must be issued prior to undertaking the activities described in the permit application. Issuance of the enclosed permit(s) does not indicate an affirmative action on any other pending or future permit applications. If you are uncertain as to whether or not other permits are needed for this project, please use the Department's "Pre-Application Consultation Tool" (PACT) which can be found at <http://www.ahs.dep.pa.gov/PACT/>. The online tool is designed to quickly and easily assist potential applicants in determining which types of environmental permits, authorizations or

notifications would be needed for specific projects. Based on the user's responses to a series of simple questions, PACT automatically provides an email response with information on permits and other information an applicant should consider.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.


A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please contact Howard Kellick, P.E. at hkellick@pa.gov or 412.442.4074.

Sincerely,



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

Enclosure(s)

cc: PA Fish and Boat Commission
U. S. Army Corps of Engineers

Findlay and North Fayette Townships
Natalie Shearer, AECOM
Allegheny County Conservation District

PERMIT NO. E02-1773
This permit expires if construction is
not completed by December 31, 2024

Commonwealth of Pennsylvania
Department of Environmental Protection
Southwest Regional Office
Waterways and Wetlands Program - Permitting and Technical Services Section

WATER OBSTRUCTION AND ENCROACHMENT PERMIT

The Department of Environmental Protection (“Department”), established by the Act of December 3, 1970, P.L. 834 (71 P.S. §§510.1 *et seq.*) and empowered to exercise certain powers and perform certain duties under and by virtue of the Act of November 26, 1978, P.L. 1375, as amended by the Act of October 23, 1979, P.L. 204 (32 P.S. §§693.1 *et seq.*) known as the “Dam Safety and Encroachments Act”; Act of October 4, 1978, P.L. 851 (32 P.S. §§679.101 *et seq.*) known as the “Flood Plain Management Act”; Act of June 22, 1937, P.L. 1987, (35 P.S. §§691.1 *et seq.*), known as “The Clean Streams Law”; and the Administrative Code, Act of April 9, 1929, P.L. 177, as amended, which empowers the Department to exercise certain powers and perform certain duties by law vested in and imposed upon the Water Supply Commission of Pennsylvania and the Water and Power Resources Board, hereby issues this permit to:

Shell Pipeline Company LP
150 North Dairy Ashford
Houston, TX 77079

giving its consent to

1. Construct and maintain ethane pipeline crossings under unnamed tributaries (UNT) to Little Racoon Run (WWF),
2. Construct and maintain a 52-foot long ethane pipeline crossing under Potato Garden Run (WWF) and an additional crossing under UNT to Potato Garden Run (WWF),
3. Construct and maintain ethane pipeline crossings under UNT to Raredon Run (WWF),
4. In addition, to construct and maintain associated support features; access roads, etc.

For the purpose of constructing an ethane supply pipeline from fractionation facilities in Ohio and Pennsylvania, to a chemical plant in Monaca, Pennsylvania. Approximately 98-miles of pipeline will be constructed in parts of Ohio, West Virginia and Pennsylvania. The Pennsylvania portion of this project, which will consist of approximately 45.5 miles of pipeline, will be located in Allegheny (DEP File Number E02-1773), Beaver (DEP File Number E04-369) and Washington (DEP File Number E63-710) Counties. This authorization (DEP File Number E02-1773) is for the portion of this multi-state and multi-county pipeline project that is located in Allegheny County. In Allegheny County, this project will cumulatively result in 1,943 LF of permanent impacts to various watercourses, 978 LF of temporary impacts to various watercourses, 0.66 acre of permanent impact to PEM wetlands, 0.01 acre of permanent impact to PSS wetlands, less than 0.01 acre of permanent impact to PFO wetlands, 0.31 acre of temporary impact to PEM wetlands and 0.11 acre of temporary impact to PSS wetlands. Mitigation will include restoring the disturbed area back to its original condition and grade, and stabilizing the disturbed area. In addition, existing wetlands will be enhanced at the Neshannock Creek Restoration Site, in Mercer County, to provide approximately 1.33 acres of PFO wetland, to compensate for conversion impacts to wetlands for the entire project, including permanent conversion impacts to 0.01 acre of PSS wetland in Allegheny County. This project enters Allegheny County at approximately 3,150 feet south-southeast of the intersection

of Old Steubenville Pike and State Route 980 (Quadrangle: Clinton, PA; Latitude 40° 25' 7.42"; Longitude: -80° 17' 16.45"), and exits Allegheny County at approximately 3,400 feet south-southwest of the intersection of Hookstown Grade Road and Campmeeting Road (Quadrangle: Aliquippa, PA; Latitude 40° 30' 44.29"; Longitude: -80° 18' 39.20"). This project is located in Findlay and North Fayette Townships, Allegheny County.

The issuance of this permit also constitutes approval of a Water Quality Certification under Section 401 of the Federal Water Pollution Control Act [33 U.S.C.A. 1341(a)].

This permit is issued in response to an application filed with the Department of Environmental Protection on September 18, 2017, and with the understanding that the work shall be performed in accordance with the maps, plans, profiles and specifications filed with and made a part of the application on December 6, 2017, January 9, 2018, August 1, 2018, November 19, 2018, November 21, 2018, November 30, 2018, December 5, 2018, December 11, 2018, December 12, 2018, December 13, 2018, December 14, 2018, December 17, 2018, December 18, 2018 and December 19, 2018, subject, however, to the provisions of the Dam Safety and Encroachments Act, the Flood Plain Management Act, the Clean Streams Law, the Administrative Code, the rules and regulations promulgated thereunder and the following conditions and restrictions: **If the work authorized by this permit is not completed on or before December 31, 2024, this permit, if not previously revoked or specifically extended by the Department in writing, shall become void without further notification.**

1. The permittee shall sign the Acknowledgement of Appraisal of Permit Conditions thereby expressly certifying the permittee's acceptance of, and agreement to comply with, the terms and conditions of this permit. The permittee shall return a signed copy of the Acknowledgement of Appraisal of Permit Conditions to the Department. Unless the Acknowledgement of Appraisal of Permit Conditions form is completed and filed with the Department, this permit is void;
2. The Department, in issuing this permit, has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the Department may, in addition, institute appropriate legal proceedings;
3. This permit does not give any property rights, either in real estate or material, nor any exclusive privileges, nor shall it be construed to grant or confer any right, title, easement, or interest in, to, or over any land belonging to the Commonwealth of Pennsylvania; neither does it authorize any injury to private property or invasion of private rights, nor any infringement of Federal, State, or Local laws or regulations; nor does it obviate the necessity of obtaining Federal assent when necessary;
4. The work shall at all times be subject to supervision and inspection by representatives of the Department, and no changes in the maps, plans, profiles, and specifications as approved shall be made except with the written consent of the Department. The Department, however, reserves the right to require such changes or modifications in the maps, plans, profiles, and specifications as may be considered necessary. The Department further reserves the right to suspend or revoke this permit if in its opinion the best interest of the Commonwealth will be sub served thereby;
5. This permit authorizes the construction, operation, maintenance and normal repair of the permitted structures conducted within the original specifications for the water obstruction or encroachment,

and in accordance with the regulations of the Department and term and conditions of this permit. Any repairs or maintenance involving modifications of the water obstruction or encroachment from its original specifications, and any repairs or reconstruction involving a substantial portion of the structure as defined by regulations of the Department shall require the prior written approval and permit of the Department;

6. All construction debris, excavated material, brush, rocks, and refuse incidental to this work shall be removed entirely from the stream channel and placed either on shore above the influence of flood waters, or at such dumping ground as may be approved by the Department;
7. There shall be no unreasonable interference with the free discharge of the river or stream or navigation during construction;
8. If future operations by the Commonwealth of Pennsylvania require modification of the structure or work, or if, in the opinion of the Department of Environmental Protection, the structure or work shall cause unreasonable obstruction to the free passage of floodwaters or navigation, the permittee shall, upon due notice, remove or alter the structures, work or obstructions caused thereby, without expense to the Commonwealth of Pennsylvania, so as to increase the flood carrying capacity of the channel or render navigation reasonably free, easy, and unobstructed, in such manner as the Department may require. No claim shall be made against the Commonwealth of Pennsylvania on account of any such removal or alteration;
9. The permittee shall notify the Department, in writing, of the proposed time for commencement of work at least 15 days prior to the commencement of construction;
10. If construction work has not been completed within the time specified in this permit and the time limit specified in this permit has not been extended in writing by the Department or if this permit has been revoked for any reason, the permittee shall, at his own expense and in a manner that the Department may prescribe, remove all or any portion of the work as the Department requires and restore the watercourse and floodplain to their former condition;
11. The permittee shall fully inform the engineer or contractor, responsible for the supervision and conduct of the work, of the terms, conditions, restrictions and covenants of this permit. Prior to the commencement of construction, the permittee shall file with the Department in writing, on a form provided by the Department, a statement signed by the permittee and an individual responsible for the supervision or conduct of the work acknowledging and accepting the general and special conditions contained in this permit. Unless the acknowledgment and acceptance have been filed, this permit is void. A copy of this permit and the acknowledgment shall be available at the work site for inspection upon request by an officer or agent of the Department or another Federal, State, County, or municipal agency;
12. The permittee shall operate and maintain the structure or work authorized herein in a safe condition in accordance with the permit terms and conditions and the approved maps, plans, profiles, and specifications;

13. This permit may not be transferred without prior written approval from the Department, such approval being considered upon receipt of the properly executed "Application of Transfer of Permit" form;
14. If and when the permittee desires to discontinue use or abandon the activity authorized herein, he must remove all or part of the structure or work authorized and take other actions as are necessary to protect safety and the environment in accordance with a permit issued by the Department;
15. If the use of explosives in any waterways is required, the permittee shall secure the prior written permit from the Pennsylvania Fish and Boat Commission, pursuant to the Pennsylvania Fish and Boat Code, Act 1980-175 Title 30 Pennsylvania Consolidated Statutes, Section 2906. Requests should be directed to the Pennsylvania Fish and Boat Commission, Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620, telephone 814-359-5140;
16. Permittee shall implement and monitor Erosion and Sedimentation Control Plan prepared in accordance with Chapter 102 so as to minimize erosion and prevent excessive sedimentation into the receiving watercourse or body of water;
17. The project site shall at all times be available for inspection by authorized officers and employees of the Pennsylvania Fish and Boat Commission. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Pennsylvania Fish and Boat Commission's Southwest Regional Office, RD #2, Box 39, Somerset, PA 15501, telephone 814-445-8974;
18. The project site shall at all times be available for inspection by authorized officers and employees of the County Conservation District. Prior to commencement and upon completion of the work authorized by this permit, the permittee shall notify the Allegheny County Conservation District, 33 Terminal Way, Suite 325B, Pittsburgh, PA 15219; 412-241-7645.
19. **Work may not commence until a signed copy of the Acknowledgement of Appraisal of Permit Conditions is received by the Department.** Any work authorized by this permit conducted prior to the Department's receipt of a signed copy of the Acknowledgement of Appraisal of Permit Conditions is a violation of the Dam Safety and Encroachments Act and the Clean Streams Law, and you may be subject to fines and penalties pursuant to those Acts.
20. SPECIAL CONDITIONS: Permittee shall be responsible for compliance with each of the following special conditions. The Pennsylvania Department of Environmental Protection shall be referred to hereinafter as either "DEP" or the "Department."

SPECIAL CONDITIONS

Water Supplies:

- A. At least 72 hours in advance of beginning any construction activities, the permittee shall directly notify all public and private water supply owners identified in the permittee's Water Supply Monitoring Plan (Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan).
- B. If the project results in a pollution event or other adverse impact to any public or private water supplies, the permittee shall immediately notify the Department and the potentially affected public or private water supplies of the pollution event, and implement the measures specified in the Shell's Water Supply Monitoring Plan.
- C. In the event the permittee's work causes adverse impacts to a public or private water supply source, the permittee shall restore or replace the impacted water supply and mitigate and/or remediate any pollution resulting from the project in accordance with applicable legal requirements.
- D. At least 72 hours before beginning construction activities, the permittee shall notify all owners of surface water intakes within one mile downstream from each stream crossing.
- E. The permittee shall immediately notify a landowner with a water supply within 450 feet of an HDD of any discharge of pollution associated with the project.
- F. If a public or private drinking water source not previously identified by the permittee is discovered by the permittee during construction, the permittee shall immediately notify the Department of the identified water source and shall notify the source owner of the permittee's construction activities.

Historic, Cultural or Archaeological Resources:

- G. The permittee and its agents shall visually inspect for historic, cultural, and archaeological resources that may be encountered during construction of the project and shall immediately cease earth disturbance activities in the vicinity of the archaeological artifacts upon encountering such potential artifacts.
- H. If potential historic, cultural, and archaeological resources are discovered, the permittee shall immediately notify the DEP Regional Office in the DEP region where the artifacts are found and shall concurrently notify the Pennsylvania Historical and Museum Commission (PHMC) at P.O. Box 1026, Harrisburg, PA 17120-1026, telephone 717.783.8947.
- I. The permittee shall not adversely impact any historic, cultural, and archaeological resources that are identified by the latest published version of the Pennsylvania Inventory of Historical Places and the National Register of Historical Places.

Temporary Road Crossings:

- J. All temporary road crossings of streams and wetlands must meet all of the following conditions:
 - 1. The permittee shall restore and stabilize all temporary crossing sites immediately after termination of its permitted use.

2. Permittee shall at all times ensure that all culverts have a waterway opening sufficient to adequately convey the normal flow of the watercourse or stream, and that culverts are of sufficient length to extend beyond the toe of the clean rock fill.
3. Permittee shall ensure that culverts are installed in such manner that overtopping of the roadway will occur within the stream channel. This can be accomplished by providing a depressed roadway embankment within the stream channel.
4. Permittee shall minimize excessive fill and excavation of stream banks by utilizing culverts with as large a diameter as possible. The minimum diameter size of a culvert to be used is no less than 12 inches.
5. Road and causeway embankments shall be constructed of clean rock material in order to minimize stream channel sedimentation during placement, removal, and periods of overtopping.
6. All temporary bridges shall be of single span construction from top of bank to top of bank and must be structurally stable.
7. Approach roads to temporary road crossings shall utilize original grades. However, permittee can use clean rock material or gravel to a depth of six inches above original grade for approaches, as necessary.
8. Causeways shall not extend streamward a distance greater than one-half the width of the stream channel.
9. Temporary road crossings shall be kept open and functioning at all times by maintaining the crossings free of debris and other obstructions.
10. The permittee shall promptly repair any damage resulting from increased backwater caused by a temporary road crossing. The permittee shall remove temporary road crossings in the event of high waters to prevent increased backwater.
11. If permittee cannot avoid a wetland crossing, all wetland crossings shall be located at the narrowest practicable point of the wetlands.
12. All wetland crossings shall be installed in accordance with plan specifications.
13. Temporary embankments for roads across wetlands shall be installed to maintain the hydrology of the wetland.
14. The discharge of pollution to any water of the Commonwealth is prohibited.
15. Access roads should not approach the stream channel directly downslope, but should cross the slope obliquely to prevent high velocity road drainage flows from directly entering the stream channel. Road drainage shall include proper erosion and sediment control Best Management Practices.
16. The permittee shall remove all or any portion of a temporary road crossing upon written notification from the Department in the event the project is causing an adverse impact on public health, safety or the environment or in any other manner violates any of the requirements of the Pennsylvania Clean Streams Law, Dam Safety and Encroachments Act and the regulations promulgated thereunder.

17. The permittee shall be responsible for determining and documenting which method of crossing is appropriate for each resource. This documentation shall be provided to the Department with the pre- and post-construction photographs. The permittee shall submit this documentation to the DEP Southwest Regional Office within ninety (90) days after completion of the work under the respective permit.
18. Permittee shall implement and maintain proper erosion and sedimentation control BMPs on all existing access roads and obtain permit modifications where necessary.

Site Field Verification, Restoration and Monitoring:

- K. Prior to the installation of all pipeline crossings, the permittee shall take new pre-construction photographs at each of the crossing areas depicting the existing conditions. The permittee shall prepare and maintain a record of pre- and post- conditions of each stream and wetland crossing. The permittee shall submit this documentation to the DEP Southwest Regional Office within ninety (90) days after completion of the work under the respective permit.
- L. All wetlands within the project area shall be accurately field-delineated prior to the start of construction activities and until the earth disturbance activities are completed and the site has been stabilized. An acceptable means of field-identification of wetlands includes, but is not limited to, the use of an orange construction safety fence and/or flags.
- M. For a period of 5 years following construction, the permittee shall monitor for secondary impacts to hydrology, i.e., the loss of hydrology, to all watercourses with a drainage area of less than 100 acres, including those watercourses that originate within the project right-of-way (ROW). Reports shall be submitted to DEP in the spring and fall for the first two (2) calendar years following construction and annually for three (3) years thereafter.
 1. The monitoring reports shall contain information describing the presence or absence of hydrology at the time of inspection, a narrative comparison to hydrology present in the watercourse during pre-permitting field investigation(s), and photographs of the watercourse.
 2. If the monitoring identifies a diminution or complete loss of hydrology, the permittee shall evaluate whether the activities authorized by this Permit caused the loss of hydrology and submit this evaluation to the Department for review.
 3. If the Department determines that the activities authorized by this Permit are contributing to the loss of hydrology, the permittee shall prepare a written plan to correct the loss of hydrology to the watercourse (Plan). The permittee shall submit the Plan to DEP for review and approval. If DEP identifies any deficiencies with permittee's Plan, then the permittee shall provide DEP a written response to address the stated deficiencies within 15 days of receiving written notice of DEP's deficiencies, unless DEP extends that timeframe in writing.
 4. The permittee shall implement the DEP-approved Plan to address the loss of hydrology to a water course within ninety (90) days of receiving written approval from DEP, unless DEP extends that timeframe in writing.

5. In the event that loss of hydrology from activities conducted under this Permit cannot be restored, the permittee shall submit a mitigation plan to DEP that sets forth the manner in which full loss of hydrology and associated water will be compensated for (Mitigation Plan). If DEP identifies any deficiencies with the permittee's Mitigation Plan, then the permittee shall provide DEP a written response to address the stated deficiencies within 15 days of receiving written notice of DEP's deficiencies, unless DEP extends that timeframe in writing. The permittee shall implement the DEP-approved Mitigation Plan within 90 days of receiving written approval from DEP, unless DEP extends that timeframe in writing.
 6. Monitoring may be terminated or extended in writing by DEP based upon monitoring reports submitted.
- N. For wetland excavations, the permittee shall segregate the soil horizons and replace the soil horizons to match pre-construction conditions. For areas where bore pits are proposed in or adjacent to wetlands, or if a restrictive layer, including but not limited to clay or fragipans, is encountered during the trench excavation, the permittee shall have a knowledgeable wetlands scientist on site that shall oversee backfilling of the trench and installation of trench plugs, in order to maintain wetland hydrology.
- O. Topsoil shall be segregated from subsoil in all wetland areas.
- P. All disturbed areas are to be restored, stabilized and shall be replanted with native and non-invasive plant species. Excess fill from disturbed areas and construction activities shall be located outside of the floodway, floodplain and wetlands. The permittee is responsible for stabilizing any excess materials spoiled onsite or offsite, whether the permittee owns the site or others own the site.
- Q. Rock riprap shall be used in the stream bed only where a shear stress analysis has determined that scour protection is necessary to ensure stability of the resource.
- R. A trench in which the pipeline will be laid shall be backfilled in a manner that does not create the formation of a permanent ridge in a streambed or wetland.
- S. Each stream channel shall be restored by using a minimum of six (6) inches of native stream bed material. For streams where riprap is necessary to prevent scour, the riprap shall be depressed sufficiently to allow six (6) inches of native stream bed material over the riprap.
- T. Permittee shall restore and properly stabilize each stream channel upon completion of the associated stream crossing. Where riprap is proposed, the riprap shall be depressed and covered with a minimum of 6-inches of streambed material. The restored streambed elevation shall not exceed the pre-existing streambed elevation.
- U. The permittee shall avoid wetland impacts, to the extent practicable, and minimize any such impacts. The permittee shall immediately restore all disturbed wetland areas to original contours, and replant with indigenous wetland vegetation in accordance with the restoration plan as presented in the permit application. Permittee shall minimize and stabilize wetland disturbances with indigenous vegetation within ten (10) calendar days of final earthmoving to prevent erosion and provide cover, shading, and food source for aquatic life. Permittee shall construct any temporary wetland crossings using low ground pressure machinery and wetland mats or similar devices. Permittee shall not deposit excess fill in any wetland, watercourse, floodway, floodplain, or other body of water.

- V. For a period of five (5) years, the permittee shall monitor the stream and wetland plantings in the permanent ROWs. Monitoring reports shall be submitted to the DEP Southwest Regional Office in the spring (May 15) and fall (November 15) for the first two (2) calendar years following construction and annually (November 15) for three (3) years thereafter.
1. The monitoring reports shall describe the status of the site at the time of each inspection including, but not limited to, an inventory of the surviving plant species and percent areal coverage, photographs of the replacement site with plans showing the location and orientation of each of the photographs, and a written plan to correct any deficiencies identified during the monitoring phase.
 2. Monitoring may be terminated or extended in writing by DEP based upon monitoring reports submitted.
- W. Permittee shall ensure at least an eighty-five percent (85%) survival rate of wetland plantings during the five (5) year monitoring period. Permittee may be required to provide additional wetland plantings and/or reports beyond the initial five (5) years if an eighty-five percent (85%) survivability of planted species is not achieved.
- X. Permittee shall minimize and stabilize streambank disturbance with indigenous vegetation within twenty-four (24) hours upon completion of final earthmoving to prevent erosion and to provide cover, shading, and food source for aquatic life.

Wetland Compensatory Mitigation and Monitoring:

- Y. The permittee shall mitigate for PFO wetlands and PSS wetlands conversion impacts in accordance with their "Permittee-Responsible Compensatory Wetland Mitigation Plan", including the enhancement of existing wetlands to provide 1.33 acres of PFO wetland, at the Neshannock Creek Restoration Site in Mercer County.
- Z. For at least five (5) years after the restoration activities are completed, the permittee shall monitor the Permittee Responsible Mitigation Site. Within sixty (60) days of completing construction, the permittee shall submit two (2) "as-built" drawings for the mitigation site to the DEP. Two (2) copies of the monitoring reports shall be submitted to the DEP Southwest Regional Office at a frequency of every six (6) months for the first two (2) years after mitigation site construction and annually for at least three (3) years thereafter.
1. The monitoring reports shall contain information describing the success of the site at the time of inspection, an inventory of the surviving plant species and percent aerial coverage, photographs of each site with plans showing the location and orientation of each of the photographs, and a written plan to correct any deficiencies identified during the monitoring phase.
 2. If the Permittee Responsible Mitigation Site has not achieved design objectives within the monitoring period, the permittee will undertake remedial work to assure establishment of functional wetland habitats.
- AA. Permittee Responsible Mitigation Site shall be considered successful when the design objectives are met.

- BB. Construction of the Permittee Responsible Mitigation Site shall commence prior to or concurrently with wetland impacts requiring compensation as authorized by this permit.
- CC. Permittee Responsible Mitigation Site shall be completed within one (1) growing season from the commencement of the activities authorized by this permit. Within thirty (30) days of completion, the permittee shall submit as-built drawings to the DEP Southwest Regional Office as-built conditions vary from the original approved plans. If the DEP determines there is a significant difference from the approved plans, revised plans shall be submitted, and a permit amendment may be required.
- DD. The permittee shall provide copies of the recorded deed restrictions or conservation easements for the compensatory wetland mitigation site within sixty (60) days after permit issuance. Time-stamped copies of the recorded instruments shall be sent to the DEP Southwest Regional Office.

Horizontal Directional Drilling:

- EE. Fifteen days before Horizontal Directional Drilling (HDD) operations start at an HDD location, the permittee will notify all landowners within 450 feet of HDD alignments, (by US Postal Service Certified Mail and First Class Mail) and offer such landowners the opportunity to have their water supplies within 450 feet of the HDD alignment sampled before, during and after the HDD operation in accordance with the parameters in the Shell Pipeline Company Water Supply Monitoring Plan.
- FF. A copy of the "Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan" shall be located at each HDD crossing during all HDD operations, and shall be made available to federal, state, and local regulatory agency representatives upon request.
- GG. The permittee shall construct and operate the HDD crossings at wetlands, streams and floodways in a manner to prevent a release of drilling fluid to "waters of the Commonwealth," as that term is defined in the Clean Streams Law, 35 P.S. § 691.1. The permittee shall immediately notify the Department at (412)442-4000 in the event of an Inadvertent Return and immediately activate and implement the Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan to prevent any impacts to waters of the Commonwealth and other natural resources.
- HH. The permittee shall take measures to avoid drilling activities in the vicinity of mine voids and utilities.
- II. The permittee shall visually monitor the ground surface and waters of the Commonwealth generally along the path of the HDD while drilling operations are occurring. This monitoring shall include walking, wading and use of a boat, as necessary to effectively observe and monitor for any drilling fluid surface return to Waters of the Commonwealth. If loss of circulation of drilling fluid occurs or drilling fluid pressure is lost, the permittee shall immediately investigate the drilling pathway and general surrounding area for an inadvertent return. If an inadvertent return is discovered, then drilling shall immediately cease and the following must occur;
 - 1. If an inadvertent return occurs, the permittee shall provide notifications in accordance with the Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan.
 - 2. Drilling may only resume in accordance with the Applicant's Drilling Resumption Procedures outlined in the Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan or otherwise provided by the Department.

3. For those HDD sites that do not have an approved contingency crossing method, the permittee shall submit a permit modification to the DEP for review and approval prior to commencing an alternate crossing method.
- JJ. Inadvertent returns that impact or discharge to streams, floodways or wetlands shall be remediated in compliance with the Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan. If clean-up operations differ from the submitted plans, prior approval from the DEP Southwest Regional Office will be necessary for any modifications to the Inadvertent Returns From HDD: Assessment, Preparedness, Prevention and Response Plan.
- KK. HDD additives which are certified for conformance with ANSI/NSF Standard 60 (Drinking Water Treatment Chemicals - Health Effects) are deemed acceptable to DEP, when used in strict compliance with the manner indicated in the certification of the additive. All conditions included as part of the additive's certification must be followed. A current listing of certified drilling fluids is maintained by NSF at: <http://www.nsf.org/Certified/PwsChemicals/Listings.asp?ProductFunction=Drilling+Fluid&>. Use of drilling additives certified for conformance with ANSI/NSF Standard 60 does not relieve operators from the requirement to obtain the necessary permits to conduct HDD operations. Use of certified additives does not relieve the operator of liability should an inadvertent return or other pollution of waters of the Commonwealth occur as a result of drilling operations.

Habitat Conservation Plans and Threatened and Endangered Species Protection:

- LL. Construction activities shall be avoided during the Northern Harrier breeding season, from April 15 through August 31, in the project area between Potato Garden Run Road in Findlay Township, Allegheny County and State Route 980 in Robinson Township, Washington County.
- MM. Prior to conducting any future maintenance activities on the pipeline or ROW which involve earth disturbance, the Permittee shall conduct a then-current Pennsylvania Natural Diversity Inventory search, obtain clearance(s) for any species or resource where a potential impact is identified, provide the avoidance and mitigation plan to the Department prior to initiating such maintenance work and implement and adhere to all avoidance measures outlined in such clearance(s).

Seasonal Restrictions:

- NN. The permittee shall not perform any in-stream work in waters listed by the PFBC as trout stocked streams and their tributaries, including Mill Creek, between March 1 and June 15 without the prior written approval from the PFBC's Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620; telephone 814.359.5147.

Miscellaneous:

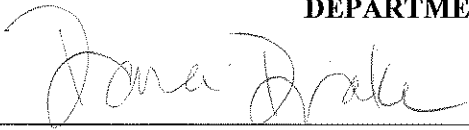
- OO. This Permit does not convey any real property rights or interests or authorization to trespass on privately-owned riparian land. By accepting this Permit, the permittee certifies that he/she holds title, easement, right or other real interest in the riparian land. Any dispute over ownership of this land is solely a matter for private litigation.

- PP. Riprap and stone used throughout the project, including the construction of causeways and coffer dams, shall be free of fines and silts, or other non-erodible material.
- QQ. If during excavation a groundwater seep is encountered, a trench plug shall be placed at ten feet (10') from each side of the seep.
- RR. All french drains associated with the project shall be removed or otherwise rendered inoperable prior to final site restoration.
- SS. Water pumped from any construction area shall be diverted into a sediment trap, basin, or a filter bag discharging into an appropriate vegetated filter area to prevent sediment from being discharged into any waters of the Commonwealth.
- TT. Open Trench Crossings: The permittee shall construct open trench pipeline crossings in dry conditions by working only during periods of no water flow and/or by installing stream flow bypass systems (flumed or pumped) through the affected area.
1. Each crossing shall be conducted in an uninterrupted process as quickly as possible. Impacts to waters of the Commonwealth shall be avoided, to the extent practicable, and if not practicable, then minimized in accordance with the permittee's approved plans.
 2. The permittee may cross dry channels, swales and ephemeral streams without the use of stream flow bypass systems if the channel has no flow and the stream crossing and stabilization can be completed in dry conditions and within twenty-four (24) hours. Standby sandbag dams and pumps shall be located on-site and installed in the event of precipitation resulting in channel flow.
- UU. The permittee shall cross intermittent and perennial streams using trenchless methods (HDD or Direct Boring DB) or through the use of stream flow bypass systems. Bypass systems must stay in use until streambeds and banks are adequately stabilized. Downstream flow must be maintained during the construction.
- VV. Depth of Pipeline in Stream Bed: The permittee shall locate all pipelines under stream beds with a minimum of three feet (3') of cover between the top of the pipe or encasement and the lowest point in the stream bed, unless the pipeline is in rock, where a minimum cover of one foot (1') shall be provided.
- WW. This Permit authorizes specific impacts to waters of the Commonwealth that were specifically described in the permit applications and revisions. Any proposed changes regarding the specific impacts will require a permit modification.
- XX. Any additional impacts to waters of the Commonwealth from water obstruction or encroachment activities including, but not limited to, temporary access roads, lay-down areas, staging areas, or temporary work spaces, that have not been specifically identified in the permit application are not authorized by this Permit.
- YY. No deviation from the construction methodology or project design that is shown on the approved drawings is authorized under this Permit unless approved by the Department in writing.
- ZZ. This Permit does not relieve the permittee of the obligation to comply with any Federal or State laws.

AAA. All synthetic erosion control features (e.g., silt fencing, netting, mats, compost filter socks), which are intended for temporary use during construction, will be completely removed and properly disposed of in a timely manner. Only natural fiber materials which will degrade over time may be used as permanent erosion control measures, or if used temporarily, may be abandoned in place.

BBB. Severability: The provisions of this permit are severable; and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Dana Drake, P.E.
Program Manager
Waterways and Wetlands Program

12/20/2018

Date

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ACKNOWLEDGMENT OF APPRISAL OF PERMIT CONDITIONS

Permit No. E02-1773

Project Location: County Allegheny

Municipality North Fayette and Findlay Townships

Gentlemen:

Acknowledgment is made that I, (Permittee Name) Shell Pipeline Company LP

and _____
(Name/address/telephone of individual responsible for supervision of work)

have been apprised of and are familiar with the terms and conditions of Permit No. _____ issued to

(Permittee): _____

giving its consent to:

1. Construct and maintain ethane pipeline crossings under unnamed tributaries (UNT) to Little Racoon Run (WWF),
2. Construct and maintain a 52-foot long ethane pipeline crossing under Potato Garden Run (WWF) and an additional crossing under UNT to Potato Garden Run (WWF),
3. Construct and maintain ethane pipeline crossings under UNT to Raredon Run (WWF),
4. In addition, to construct and maintain associated support features, access roads, etc.

For the purpose of constructing an ethane supply pipeline from fractionation facilities in Ohio and Pennsylvania, to a chemical plant in Monaca, Pennsylvania. Approximately 98-miles of pipeline will be constructed in parts of Ohio, West Virginia and Pennsylvania. The Pennsylvania portion of this project, which will consist of approximately 45.5 miles of pipeline, will be located in Allegheny (DEP File Number E02-1773), Beaver (DEP File Number E04-369) and Washington (DEP File Number E63-710) Counties. This authorization (DEP File Number E02-1773) is for the portion of this multi-state and multi-county pipeline project that is located in Allegheny County. In Allegheny County, this project will cumulatively result in 1,943 LF of permanent impacts to various watercourses, 978 LF of temporary impacts to various watercourses, 0.66 acre of permanent impact to PEM wetlands, 0.01 acre of permanent impact to PSS wetlands, less than 0.01 acre of permanent impact to PFO wetlands, 0.31 acre of temporary impact to PEM wetlands and 0.11 acre of temporary impact to PSS wetlands. Mitigation will include restoring the disturbed area back to its original condition and grade, and stabilizing the disturbed area. In addition, existing wetlands will be enhanced at the Neshannock Creek Restoration Site, in Mercer County, to provide approximately 1.33 acres of PFO wetland, to compensate for conversion impacts to wetlands for the entire project, including permanent conversion impacts to 0.01 acre of PSS wetland in Allegheny County. This project enters Allegheny County at approximately 3,150 feet south-southeast of the intersection of Old Steubenville Pike and State Route 980 (Quadrangle: Clinton, PA; Latitude 40° 25' 7.42"; Longitude: -80° 17' 16.45"), and exits Allegheny County at approximately 3,400 feet south-southwest of the intersection of Hookstown Grade Road and Campmeeting Road (Quadrangle: Aliquippa, PA; Latitude 40° 30' 44.29"; Longitude: -80° 18' 39.20"). This project is located in Findlay and North Fayette Townships, Allegheny County.

RETURN TO:

Department of Environmental Protection
Permitting & Technical Services Section
Waterways and Wetlands Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

(Permittee signature)

Date

(Signature of individual responsible for supervision work)

Date

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**WATER OBSTRUCTION AND ENCROACHMENT PERMIT
COMPLETION REPORT**

Permit No. E02-1773
Project Location: County Allegheny
Municipality North Fayette and Findlay Townships

Gentlemen:

I (We) hereby certify that the following, authorized construction activities for the project originally described as;

1. Construct and maintain ethane pipeline crossings under unnamed tributaries (UNT) to Little Racoon Run (WWF),
2. Construct and maintain a 52-foot long ethane pipeline crossing under Potato Garden Run (WWF) and an additional crossing under UNT to Potato Garden Run (WWF),
3. Construct and maintain ethane pipeline crossings under UNT to Raredon Run (WWF),
4. In addition, to construct and maintain associated support features, access roads, etc.

For the purpose of constructing an ethane supply pipeline from fractionation facilities in Ohio and Pennsylvania, to a chemical plant in Monaca, Pennsylvania. Approximately 98-miles of pipeline will be constructed in parts of Ohio, West Virginia and Pennsylvania. The Pennsylvania portion of this project, which will consist of approximately 45.5 miles of pipeline, will be located in Allegheny (DEP File Number E02-1773), Beaver (DEP File Number E04-369) and Washington (DEP File Number E63-710) Counties. This authorization (DEP File Number E02-1773) is for the portion of this multi-state and multi-county pipeline project that is located in Allegheny County. In Allegheny County, this project will cumulatively result in 1,943 LF of permanent impacts to various watercourses, 978 LF of temporary impacts to various watercourses, 0.66 acre of permanent impact to PEM wetlands, 0.01 acre of permanent impact to PSS wetlands, less than 0.01 acre of permanent impact to PFO wetlands, 0.31 acre of temporary impact to PEM wetlands and 0.11 acre of temporary impact to PSS wetlands. Mitigation will include restoring the disturbed area back to its original condition and grade, and stabilizing the disturbed area. In addition, existing wetlands will be enhanced at the Neshannock Creek Restoration Site, in Mercer County, to provide approximately 1.33 acres of PFO wetland, to compensate for conversion impacts to wetlands for the entire project, including permanent conversion impacts to 0.01 acre of PSS wetland in Allegheny County. This project enters Allegheny County at approximately 3,150 feet south-southeast of the intersection of Old Steubenville Pike and State Route 980 (Quadrangle: Clinton, PA; Latitude 40° 25' 7.42"; Longitude: -80° 17' 16.45"), and exits Allegheny County at approximately 3,400 feet south-southwest of the intersection of Hookstown Grade Road and Campmeeting Road (Quadrangle: Aliquippa, PA; Latitude 40° 30' 44.29"; Longitude: -80° 18' 39.20"). This project is located in Findlay and North Fayette Townships, Allegheny County.

were completed on _____, 20____, in accordance with the plans approved and that all unauthorized obstructions have been removed.

Name: _____
(typed or printed)

Signature: _____

Title: _____

Firm:

Date:

RETURN TO:

Department of Environmental Protection
Permitting & Technical Services Section
Waterways and Wetlands Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745