



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

6/12/15

Ate S. Visser
Shell Chemical Appalachia LLC
910 Louisiana Street (OSP 10000C) AND
Houston, TX 77002

Timothy Basilone
Horsehead Corporation
300 Frankfort Road
Monaca, PA 15061

Re: DEP File No. **E04-250-A1**
Petrochemicals Complex
Potter Twp. and Center Twp – Beaver County
Crosss Creek Twp. – Washington County

Dear Messrs. Visser and Basilone:

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

Please be advised that you do not have Federal authorization 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.

Prior to the commencement of construction, the enclosed Acknowledgment of Appraisal of Permit Conditions must be completed and signed by you and an individual responsible for the supervision or conduct of the construction work acknowledging and accepting the general and special conditions contained in the permit. Unless the signed Acknowledgment of Appraisal of Permit Conditions is submitted to this office, the permit is void.

A copy of both the Permit and the Acknowledgment of Appraisal of Permit Conditions must be 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.

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

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S., Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph

does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.


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.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO 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 (717-787-3483) FOR MORE INFORMATION.

If you have questions about your application, please contact Gregory Holesh of this office at 412.442.4271 or gholesh@pa.gov or Joseph Snyder at 412.442.4308 or jossnyder@pa.gov.

Sincerely,



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

Enclosure

cc: PA Fish and Boat Commission
U. S. Army Corps of Engineers
Beaver County Conservation District
Washington County Conservation District
David Lingle, URS Corporation

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ACKNOWLEDGMENT OF APPRISAL OF PERMIT CONDITIONS

Permit No. E04-250-A1
Project Location: County Beaver and Washington
Municipality Potter, Center, and Cross Creek Twps.

Gentlemen:

Acknowledgment is made that We, (Permittee Name) Shell Chemical Appalachia LLC and Horsehead Corporation

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. E04-250-A1 issued to

(Permittee): _____

giving its consent to:

1. remove several, existing culverts and pipes from Poorhouse Run (WWF) and Rag Run (WWF);
2. remove two (2) existing barge unloading structures (existing foundations will remain in place), five (5) dolphins and one (1) ice breaker from in or along the Ohio River (WWF, N);
3. to operate and maintain six (6) existing mooring dolphins, a raw water intake structure and building, and six (6) existing outfall structures within the Ohio River and/or its floodway;
4. to construct and maintain a stream enclosure that will enclose approximately 3,386 lf of Poorhouse Run into an approximately 2,844 lf 10'x8' concrete box stream enclosure;
5. to construct and maintain a stream enclosure that will enclose approximately 1,787 lf of Rag Run into an approximately 1,283 lf 8'x7' concrete box culvert stream enclosure;
6. to construct and maintain a replacement of an existing stream enclosure, on another section of Rag Run, which will replace approximately 720 lf of existing, corrugated metal pipe stream enclosure with approximately 778 lf of 96" diameter, reinforced concrete pipe stream enclosure;
7. to reconstruct and maintain approximately 1,074 lf of Rag Run between the aforementioned stream enclosures;
8. to construct and maintain an approximately 71,000 ft² dock (aka East RORO dock) in and along the Ohio River; approximately 47,550 ft² of the Ohio River will be dredged to construct this dock;
9. to construct and maintain an approximately 22,700 ft² dock (aka West LOLO dock) in and along the Ohio River; approximately 5,700 ft² of the Ohio River will be dredged to construct this dock
10. to construct and maintain twenty-four (24) mooring dolphins in the Ohio River, and six (6) tie-back dolphins;
11. to construct and maintain geo-grid structures and to plant vegetation, to stabilize shoreline areas, at select areas, along the Ohio River;

- 12. to place and maintain fill in, or encroach upon, multiple watercourses, and to place and maintain fill in, or encroach upon, forty (40) wetland areas (0.08 acre - PFO; 0.56 acre - PSS and 2.99 acres - PEM); and
- 13. to construct and maintain pipe and culvert connections to the aforementioned stream enclosures and associated stormwater management facilities;

for the purpose of constructing an ethane cracker and associated derivative plants, and to relocate a portion of SR 18, in an approximately 665 acre project area, of which approximately 543 acres will be disturbed. The project will cumulatively impact approximately 16,838 lf of forty-one (41) watercourses and 3.63 acres of forty (40) wetlands. The project will also impact approximately 1.29 acre of the Ohio River from maintenance dredging, near the East RORO dock, West LOLO dock and the existing intake structure. In addition, the project will temporarily impact approximately 381 lf of regulated waters of the Commonwealth and 0.70 acre of wetland. The project is located at 300 Frankfort Road, Monaca, PA 15061 (USGS Quadrangle: Beaver, PA; Latitude: 40° 40' 20"; Longitude: -80° 20' 20"), in Potter and Center Townships, Beaver County. To mitigate for these impacts, approximately 17,674 lf of watercourses within the watersheds of three (3) unnamed tributaries to the South Fork of Cross Creek (HQ-WWF) will be restored or enhanced, and approximately 6.42 acres of wetland will be re-established or restored, at off-site locations, which are located near 905 Avella Road, Avella PA 15312 (USGS Quadrangle: Avella, PA Latitude: 40° 16' 19.47"and Longitude: -80° 25' 40.04"; Latitude: 40° 16' 25.63"and Longitude: -80° 25' 21.81"; Latitude: 40° 16' 29.73"and Longitude: -80° 24' 58.19"), in Cross Creek Township, Washington County. This permit replaces Permit No. E04-250.

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

 (Permittee signature)

 Date

 (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.	<u>E04-250-A1</u>
<u>Project Location:</u> County	<u>Beaver and Washington</u>
Municipality	<u>Potter, Center, and Cross Creek Twps.</u>

Gentlemen:

I (We) hereby certify that the

1. Removal of several, existing culverts and pipes from Poorhouse Run (WWF) and Rag Run (WWF);
2. Removal of two (2) existing barge unloading structures (existing foundations will remain in place), five (5) dolphins and one (1) ice breaker from in or along the Ohio River (WWF, N);
3. Construction of a stream enclosure that will enclose approximately 3,386 lf of Poorhouse Run into an approximately 2,844 lf 10'x8' concrete box stream enclosure;
4. Construction of a stream enclosure that will enclose approximately 1,787 lf of Rag Run into an approximately 1,283 lf 8'x7' concrete box culvert stream enclosure;
5. Construction of a replacement of an existing stream enclosure, on another section of Rag Run, which will replace approximately 720 lf of existing, corrugated metal pipe stream enclosure with approximately 778 lf of 96" diameter, reinforced concrete pipe stream enclosure;
6. Reconstruction of approximately 1,074 lf of Rag Run between the aforementioned stream enclosures;
7. Construction of an approximately 71,000 ft² dock (aka East RORO dock) in and along the Ohio River; approximately 47,550 ft² of the Ohio River will be dredged to construct this dock;
8. Construction of an approximately 22,700 ft² dock (aka West LOLO dock) in and along the Ohio River; approximately 5,700 ft² of the Ohio River will be dredged to construct this dock
9. Construction of twenty-four (24) mooring dolphins in the Ohio River, and six (6) tie-back dolphins;
10. Construction of geo-grid structures and to plant vegetation, to stabilize shoreline areas, at select areas, along the Ohio River;
11. Placement of fill in, or encroach upon, multiple watercourses, and to place and maintain fill in, or encroach upon, forty (40) wetland areas (0.08 acre - PFO; 0.56 acre - PSS and 2.99 acres - PEM);
12. Construction of pipe and culvert connections to the aforementioned stream enclosures and associated stormwater management facilities; and
13. Construction of stream and wetland mitigation areas.

for the purpose of constructing an ethane cracker and associated derivative plants, and to relocate a portion of SR 18, in an approximately 665 acre project area, of which approximately 543 acres will be disturbed. The project will cumulatively impact approximately 16,838 lf of forty-one (41) watercourses and 3.63 acres of forty (40) wetlands. The project will also impact approximately 1.29 acre of the Ohio River from maintenance dredging, near the East RORO dock, West LOLO dock and the existing intake structure. In addition, the project will temporarily impact approximately 381 lf of regulated waters of the Commonwealth and 0.70 acre of wetland. The project is located at 300 Frankfort Road, Monaca, PA 15061 (USGS Quadrangle: Beaver, PA; Latitude: 40° 40' 20"; Longitude: -80° 20' 20"), in Potter and Center Townships, Beaver County. To mitigate for these impacts, approximately 17,674 lf of watercourses within the watersheds of three (3) unnamed tributaries to the South Fork of Cross Creek (HQ-WWF) will be restored or enhanced, and approximately 6.42 acres of wetland will be re-established or restored, at off-site locations, which are located near 905 Avella Road, Avella PA 15312 (USGS Quadrangle: Avella, PA Latitude: 40° 16' 19.47" and Longitude: -80° 25' 40.04"; Latitude: 40° 16' 25.63" and Longitude: -80° 25' 21.81"; Latitude: 40° 16' 29.73" and Longitude: -80° 24' 58.19"), in Cross Creek Township, Washington County. This permit replaces Permit No. E04-250.

was 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

PERMIT NO. E04-250-A1
This permit expires if construction is
not completed by December 31, 2020
See Condition No. 9.

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 Chemical Appalachia LLC
910 Louisiana Street (OSP 10000C)
Houston, TX 77002

AND

Horsehead Corporation
300 Frankfort Road
Monaca, PA 15061

giving its consent to

1. remove several, existing culverts and pipes from Poorhouse Run (WWF) and Rag Run (WWF);
2. remove two (2) existing barge unloading structures (existing foundations will remain in place), five (5) dolphins and one (1) ice breaker from in or along the Ohio River (WWF, N);
3. to operate and maintain six (6) existing mooring dolphins, a raw water intake structure and building, and six (6) existing outfall structures within the Ohio River and/or its floodway;
4. to construct and maintain a stream enclosure that will enclose approximately 3,386 lf of Poorhouse Run into an approximately 2,844 lf 10'x8' concrete box stream enclosure;
5. to construct and maintain a stream enclosure that will enclose approximately 1,787 lf of Rag Run into an approximately 1,283 lf 8'x7' concrete box culvert stream enclosure;
6. to construct and maintain a replacement of an existing stream enclosure, on another section of Rag Run, which will replace approximately 720 lf of existing, corrugated metal pipe stream enclosure with approximately 778 lf of 96" diameter, reinforced concrete pipe stream enclosure;
7. to reconstruct and maintain approximately 1,074 lf of Rag Run between the aforementioned stream enclosures;
8. to construct and maintain an approximately 71,000 ft² dock (aka East RORO dock) in and along the Ohio River; approximately 47,550 ft² of the Ohio River will be dredged to construct this dock;
9. to construct and maintain an approximately 22,700 ft² dock (aka West LOLO dock) in and along the Ohio River; approximately 5,700 ft² of the Ohio River will be dredged to construct this dock
10. to construct and maintain twenty-four (24) mooring dolphins in the Ohio River, and six (6) tie-back dolphins;
11. to construct and maintain geo-grid structures and to plant vegetation, to stabilize shoreline areas, at select areas, along the Ohio River;
12. to place and maintain fill in, or encroach upon, multiple watercourses, and to place and maintain fill in, or encroach upon, forty (40) wetland areas (0.08 acre - PFO; 0.56 acre - PSS and 2.99 acres - PEM); and

13. to construct and maintain pipe and culvert connections to the aforementioned stream enclosures and associated stormwater management facilities;

for the purpose of constructing an ethane cracker and associated derivative plants, and to relocate a portion of SR 18, in an approximately 665 acre project area, of which approximately 543 acres will be disturbed. The project will cumulatively impact approximately 16,838 lf of forty-one (41) watercourses and 3.63 acres of forty (40) wetlands. The project will also impact approximately 1.29 acre of the Ohio River from maintenance dredging, near the East RORO dock, West LOLO dock and the existing intake structure. In addition, the project will temporarily impact approximately 381 lf of regulated waters of the Commonwealth and 0.70 acre of wetland. The project is located at 300 Frankfort Road, Monaca, PA 15061 (USGS Quadrangle: Beaver, PA; Latitude: 40° 40' 20"; Longitude: -80° 20' 20"), in Potter and Center Townships, Beaver County. To mitigate for these impacts, approximately 17,674 lf of watercourses within the watersheds of three (3) unnamed tributaries to the South Fork of Cross Creek (HQ-WWF) will be restored or enhanced, and approximately 6.42 acres of wetland will be re-established or restored, at off-site locations, which are located near 905 Avella Road, Avella PA 15312 (USGS Quadrangle: Avella, PA Latitude: 40° 16' 19.47" and Longitude: -80° 25' 40.04"; Latitude: 40° 16' 25.63" and Longitude: -80° 25' 21.81"; Latitude: 40° 16' 29.73" and Longitude: -80° 24' 58.19"), in Cross Creek Township, Washington County. This permit replaces Permit No. E04-250.

Except as otherwise noted below, the Department of Environmental Protection, pursuant to Section 401(a) of the Federal Clean Water Act, as amended, 33 U.S.C.A. Section 1341(a), certifies that the construction and operation herein described will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of that Act, and that the construction will not violate applicable Federal and State water quality standards.

This permit is issued in response to an application filed with the Department of Environmental Protection on February 21, 2014, 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 May 13, 2014, August 12, 2014, October 21, 2014, March 6, 2015, March 30, 2015, April 27, 2015, May 26, 2015, June 11, 2015 and 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 & Regulations promulgated thereunder and the following conditions and restrictions.

1. 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.
2. 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.
3. 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 subserved thereby.
4. 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 terms 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.

5. 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.
6. There shall be no unreasonable interference with the free discharge of the river or stream or navigation during construction.
7. 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.
8. 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.
9. If this work is not completed on or before December 31, 2020, this permit, if not previously revoked or specifically extended by the Department in writing, shall become void without further notification. This expiration applies only to approval to construct facilities under this permit. Approval to operate and maintain those facilities does not expire once those facilities are built.
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 an 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 Beaver County Conservation District, 156 Cowpath Road, Aliquippa, PA 15001; 724-378-1701 for activities in Beaver County OR the Washington County Conservation District, Suite 105, 2800 North Main Street, Washington, PA 15301; 724-705-7098 for activities in Washington County.

19. **SPECIAL CONDITIONS** – see next page

SPECIAL CONDITIONS

- A. This permit replaces Permit No. E04-250.
- B. Prior to the beginning of work, all public water supplies or other water-related activities located downstream that may be affected by turbidity increases or other water quality changes caused by said work shall be sufficiently notified in advance to allow for preparation of any water quality changes.
- C. Fill placed in watercourses, floodways, bodies of water, including wetlands, and over culvert(s) and stream enclosures shall consist of clean aggregate, except for in the Brick Landfill area. Within the limits of the Brick Landfill, the stream enclosure will be enclosed in geosynthetic layers, and will be covered/backfilled with a 3' minimum layer of clean fill, prior to any further fill placement.
- D. Perpetual maintenance dredging in order to maintain the East RORO docking facility, West LOLO docking facility and the existing water intake structure, in accordance with the permitted configurations, is authorized with the following limitations:
 1. Deposition of dredged or excavated materials on shore and all earthwork operations on shore shall be carried out in such a way as to minimize erosion of the material and preclude its re-entry into the waterway.
 2. The permittee shall contact the County Conservation District Office in the county where the dredged material will be deposited. The disposal site shall be identified and approved in writing by the County Conservation District.
 3. Prior to disposal of the dredged material, the permittee must determine if the material is a residual or hazardous waste as defined in 25 Pa. Code §§287.1 and 260.1. Analysis of the material is to be performed in accordance with 25 Pa. Code §287.54 for residual waste and §262.11 for hazardous waste. In order to satisfy the above requirements, sampling and analysis may be performed as follows:
 - a. If less than 1500 cubic yards of dredged material is removed in any one year period, no testing is required as long as the dredged material is disposed of at an Army Corps approved site. If more than 1500 cubic yards of dredged material is involved, the following requirements apply.
 - b. Sampling may be conducted by utilizing a clamshell bucket to obtain grab samples. A minimum of three (3) grab samples should be taken for every 1000 cubic yards of dredge material. The grab samples shall be combined to form one representative, dewatered, composite sample that is absent of free liquids, for each 1000 cubic yards of dredged material. Initial analysis shall consist of TPH, Lead, Chlordane, PCBs and TOX.
 - c. If the testing reveals that the dredged material meets the requirements for unrestricted use as clean fill, the permittee can dispose of the material as clean fill. The permittee shall retain the records for the dredged material testing for five (5) years after disposal.
 - d. If the testing reveals that the dredged material exceeds the requirements for unrestricted use as clean fill but does not exceed the requirements for placement at an approved Army Corps site, then the test results and a map showing the location of the sample must be submitted to the Bureau of Waste Management, 400 Waterfront Drive, Pittsburgh, PA 15222.
 - i. Within fifteen (15) days of receipt of the analytical data, the Department will review this information to determine if additional sampling is warranted and will notify the permittee if further sampling is necessary. After this fifteen (15) day period is over, disposal of the

material at an approved Army Corps site may be conducted, unless the permittee has been notified by the Department that additional testing is necessary. If so notified, the permittee shall perform and submit to the Department such additional sampling as required by the Department, and await review of same by the Department, prior to disposal.

PARAMETER LEVELS (mg/kg) NOT TO EXCEED:

	Unrestricted Use as Clean Fill	Placed at an Approved Army Corps Site
TPH	100	500
Lead	45	450 (1.25 mg/l TCLP/SPLP)
Chlordane	0.02	1.1
PCB	1	1
TOX	25	50

- e. If the parameter levels exceed the foregoing values, or if additional testing is performed which in the Department's view demonstrates that the dredged material is a waste, then it must be managed in accordance with Act 97, the Pennsylvania Solid Waste Management Act, Act of July 7, 1980, P.L. 380, as amended, 35 P.S. §§6018.101-6018.1003 ("SWMA").

The permittee may petition for a waiver from analysis from the Bureau of Waste Management, 400 Waterfront Drive, Pittsburgh, PA 15222, if the permittee has sufficient knowledge that the dredged material is uncontaminated.

- 4. A mussel survey may be required. Contact the Department's Permitting and Technical Services Section for this determination at least 3 months prior to the proposed dredging.
- 5. Advanced notice must be given to the Department, PA Fish & Boat Commission and Beaver County Conservation District at least ten (10) days prior to the start of any dredging activities.
- E. This permit is not to be considered an approval of the structural analysis, the engineering specifications or the construction methods utilized during construction of these water obstructions and encroachments.
- F. The permittees, in accepting this permit, agree to maintain the structures herein authorized, including the Poorhouse Run stream enclosure the Rag Run stream enclosure, and the Poor Farm stream enclosure, free of flood debris and deposits.
- G. 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 permittees certifies that they hold 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.
- H. This permit does not relieve the permittees of the responsibility to comply with all applicable local codes and ordinances, including floodplain and storm water management.
- I. The Submerged Lands License Agreement entered into between the Department and Permittees covering this operation is incorporated herein by reference, and the permittees shall comply with all of its terms and conditions.

- J. By accepting this permit, the permittees agree to implement the mitigation plan as reviewed, revised and/or approved by the Department, including creation of 6.42 acres of wetlands.
- K. The construction of replacement wetlands shall be started at the commencement of or prior to placement of fill authorized by this permit. Within 30 days of completing construction of replacement wetlands, the permittees shall submit "as-built" plans of the replacement wetlands to the Department at: Department of Environmental Protection, Permitting and Technical Services Section, Waterways and Wetlands Program, 500 Waterfront Drive, Pittsburgh, PA 15222-4745.
- L. Permittees shall monitor the wetland replacement site for at least five years. Reports shall be submitted to the Department every six months for the first two years after construction and annually for three years thereafter. 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 the replacement sites with plans showing the location and orientation of each of the photographs, and a written plan and schedule to correct any deficiencies identified during the monitoring phase. Permittees shall implement such plans and schedule. . Monitoring shall continue until the all of the replacement wetlands have been established. All reports should be sent to the Department at: Department of Environmental Protection, Water Quality Specialist Supervisor, Waterways and Wetlands Program, 500 Waterfront Drive, Pittsburgh, PA 15222-4745.
- M. If wetlands constructed on the approved sites have not achieved design objectives within the monitoring period remedial work will be required to assure establishment of 3.63 acres of functional wetlands. Replacement wetlands shall be considered successful when they meet the design objectives as stated in the approved wetland replacement plan.
- N. By accepting this permit, the permittees agree to implement the stream mitigation plan as reviewed, revised and/or approved by the Department, including the restoration of 11,028 linear feet (lf) of watercourse and enhancement work along 6,645 lf of watercourse (total = 17673 lf of stream mitigation).
- O. Within 30 days of completing construction of the stream restoration activities, the permittees shall submit "as-built" plans of the stream restoration areas and structures to the Department at: Department of Environmental Protection, Waterway and Wetlands Program, Permitting and Technical Services Section, 500 Waterfront Drive, Pittsburgh, PA 15222-4745.
- P. Permittees shall effectively monitor the stream mitigation areas for at least five years. Reports shall be submitted to the Department every six months for the first two years after construction and annually for three years thereafter. The monitoring reports shall contain information describing the success of the site at the time of inspection, an inventory of the stream structures installed and other measures as identified in the approved mitigation plan, photographs of the structures with plans showing the location and orientation of each photograph, and a written plan and schedule to correct any deficiencies identified during the monitoring phase. Permittees shall implement such plans and schedule. All reports should be sent to the Department at: Department of Environmental Protection, Waterways and Wetlands Program, Water Quality Supervisor, 500 Waterfront Drive, Pittsburgh, PA 15222-4745.
- Q. Permittees shall also monitor the success of the efforts to restore 381 lf of temporary impacts to watercourses and 0.70 acre of temporary impacts to wetland, in association with the monitoring of the wetland replacement sites and stream mitigation areas.
- R. Be advised that a copy of the recorded deed restriction or conservation easement submitted as part of your application for a Department of the Army Permit must be forwarded to the appropriate United States Army Corps of Engineers District office, prior to initiation of any permitted work. A copy of your Department of the Army Permit authorization should be attached to, and recorded with, the restrictive covenant for conservation. Courtesy copies of the recorded deed restriction or conservation easement, along with a copy of your Department of the

Army Permit, should be submitted to the Pennsylvania Department of Environmental Protection Central Office as well as the appropriate Regional Office and County Conservation District office at the following addresses:

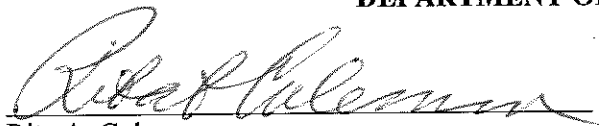
Central Office: Pennsylvania Department of Environmental Protection, Waterways and Wetlands, P.O. Box 8775, Harrisburg, PA 17105-8775

Regional Office: Pennsylvania Department of Environmental Protection, Waterways and Wetlands Program, 500 Waterfront Drive, Pittsburgh, PA 15222-4745

Conservation District: Washington Conservation District, Suite 105, 2800 North Main Street, Washington, PA 15301

- S. To mitigate for potential direct and indirect impacts to PA threatened and/or endangered fish that may be located within the project area, the permittees will install riprap within the Ohio River, at several locations between mooring dolphins, to provide habitat, per the approved plans.
- T. Although a third party may be contracted to construct and to monitor the wetland replacement sites and the stream mitigation areas, the permittees are not relieved of its legal duties or responsibilities, to replace the affected wetlands and to mitigate for impacts to the affected watercourses.
- U. In the event that the U.S. Coast Guard reclassifies the project area as a marine exclusion zone, or otherwise reclassifies the Ohio River within the project area, in a manner that will affect public accessibility to the river, the permittees will work with the Department and the PA Fish and Boat Commission, to develop a plan to mitigate for any adverse effect to this accessibility.
- V. The Department is aware that the U. S. Coast Guard (USCG) is still evaluating the river classification and markings that may be required in the Ohio River, around the petrochemical complex. After the USCG has made its determination, provide a copy of the plan, regarding Aids-to-Navigation signage, or its equivalent, that is developed to provide safe navigation, in the Ohio River, near your project area. Submit this plan to the Department at Pennsylvania Department of Environmental Protection, Waterways and Wetlands Program, 500 Waterfront Drive, Pittsburgh, PA 15222-4745, and to the Pennsylvania Fish and Boat Commission, 450 Robinson Lane, Bellefonte, PA 16823

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Rita A. Coleman
Program Manager
Waterways and Wetlands Program

6/12/15
Date

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATERWAYS AND WETLANDS**

STANDARDS FOR CHANNEL CLEANING AT BRIDGES AND CULVERTS

1. A work schedule which includes a written description of each structure, a description of the proposed work and a map showing each project location shall be submitted concurrently to the Department of Environmental Protection, the Pennsylvania Fish and Boat Commission, and the Conservation District of the county in which the project is located not less than 30 days in advance of initiating work. The work schedules shall be submitted to the appropriate Department of Environmental Protection Regional Office listed on Exhibit B and to the appropriate Pennsylvania Fish and Boat Commission Regional Headquarters listed on Exhibit A.

Addresses for County Conservation Districts may be obtained from the Department of Environmental Protection or may be found in local telephone directories.

2. The owner shall notify the appropriate Pennsylvania Fish and Boat Commission's Regional Headquarters (Exhibit A) and the appropriate County Conservation District 10 days in advance of starting work each time at any location identified in the proposed work schedule. Notification by postcard is suggested.
3. The work schedule shall be in the possession of the person in charge on the site whenever work is being performed. The project description and limits must be clearly indicated on the work schedule.
4. No work may be done in stocked trout streams between March 1 and June 15 except for emergencies. Emergency work must be approved by the Department of Environmental Protection in consultation with the Pennsylvania Fish and Boat Commission.
5. Work in the stream channel shall be limited to 50 feet upstream and 50 feet downstream from the bridge or culvert. In addition, work should be accomplished by working from the stream banks. In those cases where this is not possible, the operation of equipment in the water is to be minimized.
6. Channels may be excavated to a width no greater than the width of the normal low flow channel immediately upstream and downstream of the bridge or culvert. The remainder of the channel width shall be maintained as an elevated flood plain and may be excavated only to six inches above water level at the time of work.
7. Material removed shall be disposed of at a location which precludes re-entry into the stream and in a manner which does not obstruct flood flows in the floodway. If material removed from the stream is needed for backfill or bank restoration, it should be faced to the ordinary high water level with riprap suitably sized according to the anticipated stream velocity. All disturbed areas above the level of the riprap must be stabilized or seeded. Excess excavated material shall not be deposited in any wetland, river, lake, water course, floodway, or other regulated waters of the Commonwealth without first applying for and receiving the written permit of the Department of Environmental Protection.
8. Tree and shrub growth on stream banks shall not be disturbed unless absolutely necessary.
9. If an access road is constructed, stormwater diversion shall be provided to assure that water will not flow along the access road directly into the stream or the work area.

STANDARDS FOR CHANNEL CLEANING AT BRIDGES AND CULVERTS - continued

10. Erosion and sediment pollution control measures must be properly implemented and closely monitored to minimize erosion and prevent sediment from entering the stream channel.
11. Where it is necessary for construction equipment to cross the stream, a temporary stream crossing shall be provided by the permittee for this purpose unless the stream flow is shallow and the stream bed consists of solid or nonerodible material. The temporary crossing must be authorized by and comply with the conditions of General Permit BDWM-GP-8, Temporary Road Crossings. Any fill material provided for temporary crossings shall be clean granular material and entire fill shall be kept to an absolute minimum elevation to avoid obstructing flood flows and creating backwater flooding condition upstream. The owner is responsible for any damages resulting from the obstruction of flood flows by this temporary stream crossing. Upon completion of the project, the temporary crossing shall be removed in its entirety and the disturbed areas restored to their original condition. Copies of, and authorization to use, BDWM-GP-8 are available from the Department offices listed on Exhibit B.
12. The Department shall have the discretion to require a separate individual permit application to be submitted for any project or portion thereof, which the Department determines to have a potential significant effect on safety or protection of life, health, property, or the environment.
13. Any repairs or maintenance involving modification of the structure from its original specifications and any repairs or reconstruction or replacement involving a substantial portion of the structure shall require the prior written permit of the Department.

EXHIBIT A

FISH AND BOAT COMMISSION'S OFFICES

Headquarters Address

County Responsibility

NORTHWEST REGION

Regional Manager
11528 Highway 98
Meadville, PA 16335-7320
814-337-0444

Butler, Clarion, Crawford, Erie,
Forest, Lawrence, Mercer, Venango
and Warren

SOUTHWEST REGION

Regional Manager
236 Lake Road
Somerset, PA 15501-1644
814-445-8974

Allegheny, Armstrong, Beaver,
Cambria, Fayette, Greene, Indiana,
Somerset, Washington and
Westmoreland

NORTHCENTRAL REGION

Regional Manager
P.O. Box 5306
Pleasant Gap, PA 16823
814-359-5250

Cameron, Centre, Clearfield,
Clinton, Elk, Jefferson, Lycoming,
McKean, Montour, Northumberland,
Potter, Snyder, Tioga and Union

SOUTHCENTRAL REGION

Regional Manager
1704 Pine Road
Newville, PA 17241
717-486-7087

Adams, Bedford, Blair, Cumberland,
Dauphin, Franklin, Fulton,
Huntingdon, Juniata, Lebanon,
Mifflin, Northumberland (Mahatango
Creek in Jordan and Lower Mahanoy
Townships only) Perry and York

SOUTHEAST REGION

Regional Manager
Box 8
Elm, PA 17521
717-626-0228

Berks, Bucks, Chester, Delaware,
Lancaster, Lehigh, Montgomery,
Northampton, Philadelphia and
Schuylkill

NORTHEAST REGION

Regional Manager
P.O. Box 88
Sweet Valley, PA 18656
570-477-5717

Bradford, Carbon, Columbia,
Lackawanna, Luzerne, Monroe,
Pike, Sullivan, Susquehanna, Wayne
and Wyoming

DIVISION OF ENVIRONMENTAL SERVICES

450 Robinson Lane, Bellefonte, PA 16823-9620
814-359-5147

EXHIBIT B

DEPARTMENT OF ENVIRONMENTAL PROTECTION
REGIONAL OFFICES
WATERWAYS AND WETLANDS SECTION

<u>Regional Office</u>	<u>County Responsibility</u>
Southcentral Regional Office 909 Elmerton Avenue, Second Floor Harrisburg, PA 17110 (717) 705-4707	Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York
Southeast Regional Office 2 East Main Street Norristown, PA 19401 (484) 250-5970	Bucks, Chester, Delaware, Montgomery and Philadelphia
Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412) 442-4000	Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland
Northwest Regional Office 230 Chestnut Street Meadville, PA 16335 (814) 332-6942	Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren
Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711-0790 (570) 826-2511	Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming
Northcentral Regional Office 208 W. Third Street, Suite 101 Williamsport, PA 17701 (570) 327-3574	Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union

WATERWAYS AND WETLANDS
P.O. Box 8775
Harrisburg, PA 17105-8775
717-787-6827