

FORM 3150-PM-BWEW0036A

Joint Application for Pennsylvania

**Water Obstruction and Encroachment Permit
and**

U.S. Army Corps of Engineers Section 404 Permit

ATTACHMENT 1

GENERAL INFORMATION FORM (GIF) AND SUPPLEMENTAL INFORMATION

Note: It is up to the construction contractor to finalize contracts with the Public Water Supplies and they are not finalized at this time. Letters of Approval from Suppliers to be provided when contracts are executed.

ATTACHMENT 2
APPLICATION FEE & WORKSHEET

ATTACHMENT 3

ACT 14 NOTIFICATION AND CORRESPONDENCE

ATTACHMENT 4
CULTURAL RESOURCE NOTICE

ATTACHMENT 5

PASPGP-4 CUMULATIVE SCREENING FORM

Note: Per PADEP direction, completion of the new PASPGP-5 would not be necessary as long as concurrence was received from the USACE. Attached is the received concurrence from each of the three USACE Districts, Pittsburgh, Baltimore, and Philadelphia. Also attached is the Original PASPGP-4 Cumulative Impacts Project Screening Form.

ATTACHMENT 6

PNDI & AGENCY COORDINATION

PA DCNR, PAFBC, PGC, AND USFWS

Note: A Bog Turtle Habitat Screening Form is included as part of this Joint Application because Delaware County is a listed county within the range of the bog turtle.

- **TAB 6A – BOG TURTLE HABITAT SCREENING**
- **TAB 6B – THREATENED/ENDANGERED SPECIES COORDINATION**

Note: As agreed to with PADEP, initial correspondences and interim correspondences are provided on the application CD and pertinent documentation will be provided upon completion of the consultations.

- **TAB 6C – ADDITIONAL AGENCY CORRESPONDENCE**

UNDER SEPARATE COVER

ATTACHMENT 6A

BOG TURTLE HABITAT SCREENING

ATTACHMENT 6B

PNDI COORDINATION

PART 1

THREATENED/ENDANGERED SPECIES CORRESPONDENCE

ATTACHMENT 6B

**PNDI COORDINATION
PART 2**

CLEARANCES AND CONSERVATION PLANS

ATTACHMENT 6C
ADDITIONAL AGENCY CORRESPONDENCE

ATTACHMENT 7

SITE PLANS

- **TAB 7A – AERIAL SITE PLANS**
- **TAB 7B – HORIZONTAL DIRECTIONAL DRILL DRAWINGS AND ATONS**
- **TAB 7C – AUGER BORE DRAWINGS**
- **TAB 7D – SITE-SPECIFIC DRAWINGS
(INCLUDED UNDER ATTACHMENT 12 IN THE
E&S PLAN SHEET SET)**
- **TAB 7E – CHANGE SUMMARY AND MAP SET**
- **TAB 7F – 8 INCH OVERLAP MAP SET**
- **TAB 7G – SITE-SPECIFIC CROSS SECTIONS**

Pennsylvania Pipeline Project
Chapter 105 Joint Permit Application
Delaware County, Pennsylvania
Application No: E15-862
APS No.: 879047
AUTH: 1087479
November 2016

Prepared for:
Pennsylvania Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania, 19401-4915

Prepared by:
Tetra Tech OGA, Inc.
301 Ellicott Street
Buffalo, New York
(716) 849-9419

Prepared by:

Pat Green
Tetra Tech OGA, Inc.

Approved by:

Brad Schaeffer, P.M.P.
Tetra Tech OGA, Inc.

"I, Robert F. Simcik, do hereby certify to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted professional practice, is true and correct, and is in conformance with Chapter 106 of the rules and regulations of the Department of Environmental Protection."

"I, Robert F. Simcik, do hereby certify pursuant to the penalties of 18 Pa. C.S.A Sec. 4904 to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection."

Robert F. Simcik, P.E.
Professional Engineer No. PE050435E

TAB 7A

AERIAL SITE PLANS

TAB 7B

**HORIZONTAL DIRECTIONAL DRILL DRAWINGS
AND AIDS TO NAVIGATION (ATON) PLANS**

TAB 7C

AUGER BORE DRAWINGS

Note: No auger bores impacting aquatic resources in Delaware County.

TAB 7D

SITE-SPECIFIC DRAWINGS

TAB 7E

CHANGE SUMMARY AND MAP SET

TAB 7F

8 INCH OVERLAP MAP SET

TAB 7G

SITE-SPECIFIC CROSS SECTION

ATTACHMENT 8

LOCATION MAP

ATTACHMENT 9
PROJECT DESCRIPTION

ATTACHMENT 10
COLOR PHOTOGRAPHS

Note: Color photographs are provided in Enclosure A (Aquatic Resource Report) of Attachment 11 (Environmental Assessment).

ATTACHMENT 11
ENVIRONMENTAL ASSESSMENT FORM
AND
RESOURCE TABLES / ENCLOSURES

ENVIRONMENTAL ASSESSMENT
ATTACHMENT 11
ENVIRONMENTAL ASSESSMENT PLAN

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

**RESOURCE TABLES:
WETLAND AND STREAM IMPACTS AND ATTRIBUTES**

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE A**

AQUATIC RESOURCE REPORT AND SUPPLEMENTAL

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE B**

LAND USE MAPS

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE C**

**DESCRIPTION OF AQUATIC RESOURCES AND FUNCTIONS AND VALUES
ASSESSMENT**

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE D**

PROJECT IMPACTS

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE E**

COMPREHENSIVE ENVIRONMENTAL EVALUATION

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 1

SECTION 105.18A COMPREHENSIVE EVALUATION OF COMPLIANCE

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 2

RESOURCE IDENTIFICATION AND PROJECT IMPACTS

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 3

ALTERNATIVES ANALYSIS

(INCLUDES TRENCHLESS CONSTRUCTION FEASIBILITY ANALYSIS)

UNDER SEPARATE COVER

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 4

IMPACT AVOIDANCE, MINIMIZATION, AND MITIGATION PROCEDURES

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 5

ANTIDEGRADATION ANALYSIS

ENVIRONMENTAL ASSESSMENT

ATTACHMENT 11

ENCLOSURE E

PART 6

CUMULATIVE IMPACTS ASSESSMENT

ENVIRONMENTAL ASSESSMENT

**ATTACHMENT 11
ENCLOSURE F**

PERMITTEE-RESPONSIBLE COMPENSATORY WETLAND MITIGATION PLAN

ATTACHMENT 12

EROSION & SEDIMENT CONTROL PLAN

- **TAB 12A – PREPAREDNESS, PREVENTION AND CONTINGENCY**
- **TAB 12B – WATER SUPPLY ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN**
- **TAB 12C – INADVERTENT RETURN ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN (WITH HDD RISK ASSESSMENT ATTACHED)**
- **TAB 12D – VOID MITIGATION PLAN FOR KARST TERRAIN AND UNDERGROUND MINING**

Note: The ESCGP-2 Application is being submitted and reviewed concurrently with this Joint Application. A copy of the Draft E&S Plan sheet set is included with this application under separate cover. In addition, the Preparedness, Prevention, and Contingency Plan is also included with this application under separate cover.

UNDER SEPARATE COVER

ATTACHMENT 12

EROSION & SEDIMENT CONTROL PLAN

- **TAB 12A – PREPAREDNESS, PREVENTION AND CONTINGENCY**

ATTACHMENT 12

EROSION & SEDIMENT CONTROL PLAN

- **TAB 12B – WATER SUPPLY ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN**

ATTACHMENT 12

EROSION & SEDIMENT CONTROL PLAN

- **TAB 12C – INADVERTENT RETURN ASSESSMENT, PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN (WITH HDD RISK ASSESSMENT ATTACHED)**

ATTACHMENT 12

EROSION & SEDIMENT CONTROL PLAN

- **TAB 12D – VOID MITIGATION PLAN FOR KARST TERRAIN AND UNDERGROUND MINING**

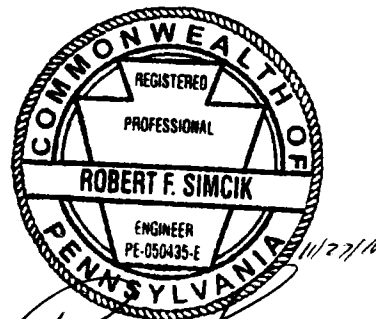
ATTACHMENT 13

HYDROLOGIC AND HYDRAULIC ANALYSIS

NOTE: The proposed Project does not alter the flow volumes, direction, or geomorphology of any of the streams traversed: all streams and wetlands temporarily disturbed will be restored to their pre-existing topographic contours. Furthermore, the Project does not involve the creation of impermeable surfaces that would result in a change in the existing 100-year frequency flood discharges. Similarly, the Project will not alter the flood storage capacity of any floodways traversed as there will be no permanent structures built in FEMA floodways and no additional/new fill will be placed in FEMA floodways. Accordingly, further coordination regarding this requirement is not applicable.

"I, Robert F. Simcik, do hereby certify to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted professional practice, is true and correct, and is in conformance with Chapter 106 of the rules and regulations of the Department of Environmental Protection."

"I, Robert F. Simcik, do hereby certify pursuant to the penalties of 18 Pa. C.S.A Sec. 4904 to the best of my knowledge, information and belief, that the information above, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection."



Robert F. Simcik, P.E.
Professional Engineer No. PE050435E

ATTACHMENT 14

STORMWATER MANAGEMENT ANALYSIS

The proposed Project has been designed to satisfy Pennsylvania's stormwater management requirements and has incorporated best management practices identified in the Pennsylvania Stormwater Best Management Practices Manual. Stormwater will be managed during construction activities in accordance with the Project's Erosion and Sediment Control Plan. The Project does involve the construction of above ground stations and valve settings that will require grading, permanent access roads, and other impermeable surfaces, however these are all located outside of wetlands, streams, and the FEMA floodway. All of these sites are designed to manage stormwater runoff in accordance with the Pennsylvania Stormwater Best Practices Manual and are discussed and presented within the Project's Erosion and Sediment Control Plan.

Coordination with the local municipalities was initiated with letters and project maps sent between the dates of November 10 and December 22, 2015. As part of that process, the municipalities were requested to respond with any concerns regarding the proposed Project and its consistency with their comprehensive plans and/or ordinances.

FLOODPLAIN MANAGEMENT ANALYSIS

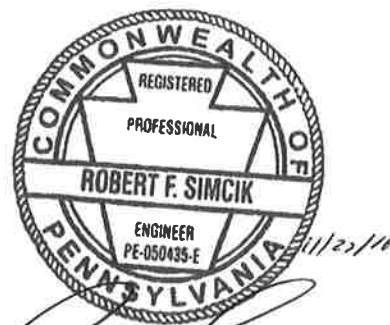
As presented in the Environmental Assessment (Attachment 11), the proposed Project does cross floodways delineated on FEMA maps. However, the Project will not involve the construction of any aboveground structures within these mapped floodways nor will the Project result in any change in the storage capacity of the floodways. All floodways temporarily impacted by the Project will be restored to their pre-existing contours and no additional/new fill will be placed in the floodways. There are no permanent impacts to FEMA floodways as a result of the proposed Project.

Coordination with the local municipalities was initiated with letters and project maps sent between the dates of November 10 and December 22, 2015. As part of that process, the municipalities were requested to respond with any concerns regarding the proposed Project and its consistency with their comprehensive plans and/or ordinances. A summary of the initial stormwater and floodplain management correspondence is included in this attachment as Table 14-1. Following Table 14-1 are copies of the consistency letter requests, delivery confirmations, and responses received to date.

A portion of the proposed Twin Oak Station modification in Delaware County would be located within a PADEP 50-foot floodway. However, this particular floodway is considered waived from a PADEP Chapter 105 permit requirements as it drains less than 100 acres and represents a stormwater drain. The impacts to the 50-foot floodway are quantified within the aquatic resource impact tables located in Attachment 11. Furthermore, the Project will implement a Post-Construction Stormwater Plan to ensure that increases in runoff or changes in stormwater flows do not occur. As such, Project impacts to the PADEP 50-foot floodway as a result of the Project would not result in adverse effects and would be negligible. A copy of the E&S Plan and PCSP for the Twin Oaks Station expansion is provided Attachment 12.

"I, Robert F. Simcik, do hereby certify to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted professional practice, is true and correct, and is in conformance with Chapter 106 of the rules and regulations of the Department of Environmental Protection."

"I, Robert F. Simcik, do hereby certify pursuant to the penalties of 18 Pa. C.S.A Sec. 4904 to the best of my knowledge, information and belief, that the information above, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection."



Robert F. Simcik, P.E.
Professional Engineer No. PE050435E

ATTACHMENT 15

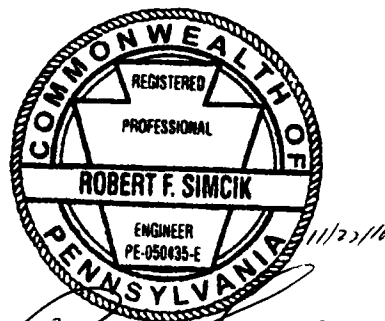
RISK ASSESSMENT

NOTE: The proposed Project will not result in an increase in peak runoff rates or flood elevations; therefore, no public property or land uses will be adversely affected. Therefore, further analysis regarding the degree of increased risk to life property and the environment is not warranted.

Accordingly, further coordination regarding this requirement is not applicable.

"I, Robert F. Simcik, do hereby certify to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted professional practice, is true and correct, and is in conformance with Chapter 106 of the rules and regulations of the Department of Environmental Protection."

"I, Robert F. Simcik, do hereby certify pursuant to the penalties of 18 Pa. C.S.A Sec. 4904 to the best of my knowledge, information and belief, that the information above, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection."



Robert F. Simcik, P.E.
Professional Engineer No. PE050435E

ATTACHMENT 16

PROFESSIONAL ENGINEER'S SEAL/CERTIFICATION

Note: The plans and specifications for the proposed Project are included in Attachment 7 and Attachment 12 of this Joint Application Package. In accordance with Title 25 of the Pennsylvania Code §105.13(i), these plans are affixed with the seal and certification of a registered professional engineer within the respective Attachments.