

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 not included as part of this Joint Application because Washington County is not one of the listed counties for which this is required.

- **TAB 6A – BOG TURTLE HABITAT SCREENING – *NOT APPLICABLE***
- **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
NOT APPLICABLE

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
Washington County, Pennsylvania
DEP File: E63-674
Auth. No.: 1082170
November 2016

Prepared for:
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania, 15222

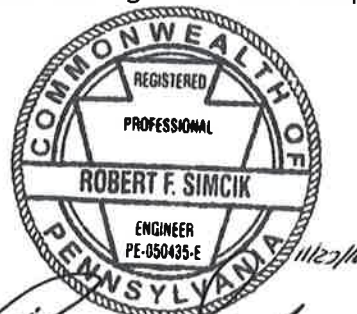
Prepared by:
Tetra Tech OGA, Inc.
301 Ellicott Street
Buffalo, New York
(716) 849-9419


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

TAB 7D

SITE-SPECIFIC DRAWINGS

Note: Standard crossing details apply to all crossings within Washington County; as such there are no site-specific drawings in Washington County.

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 FORM

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**
- **TAB 7D – SITE-SPECIFIC DRAWINGS**

(TAB 7D NOW PROVIDED AS PART OF ATTACHMENT 12 TO FURTHER DEFINE E&S CONTROLS ON A SITE-SPECIFIC LEVEL)

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: SPLP has minimized project impacts to the maximum extent, including siting valves and permanent access roads out of waters and floodways of the Commonwealth. In Washington County all permanent above ground facilities are located outside of wetlands, streams, FEMA floodways, FEMA floodplains, and DEP floodways, except the Houston Injection Station. The Houston Injection Station is sighted within the FEMA 100-year floodplain.

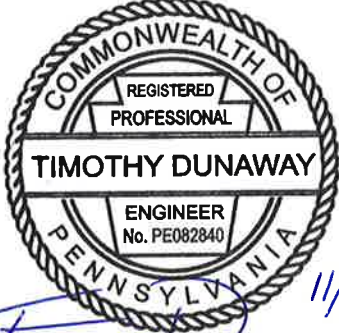
As part of the ESCGP-2 approval process, a detailed floodplain analysis was performed for Westland Run and Chartiers Run. The analysis is summarized within a Floodplain Analysis for Chartiers Run and Westland Run report that included a Hydrologic and Hydraulic (H&H) analysis. The results of the H&H analysis portion of the study indicated the following:

Grading will not cause an increase in the 100-year water surface elevations of more than 1.00 foot relative to the existing conditions within the study reaches for the 100-year peak flow rate of 2,950 cfs. No significant on-site or off-site increases in flood velocities are anticipated to occur. The proposed equipment (i.e., piping) at the site within the Base Flood Elevation (BFE) will be firmly anchored to resist flotation, collapse, and lateral movement. The proposed equipment and structures outside of the BFE but within the FEMA Zone A (approximate) floodplain will be flood proofed. Therefore, the proposed grading will not increase the risk of flooding within the limits of this study for the 100- year storm event along Westland Run and Chartiers Run.

The study reaching this conclusion is included with this application within this Attachment. The study has been submitted to Chartiers Township for review and comments were received from Nichols & Slagle Engineering, Inc. A hard copy of the final report and Township consistency determination from the Township will be provided to the DEP when the consultation process is concluded. Detailed design plans for the Houston Injection Station are provided within Attachment 12 and Chapter 106 impacts accounted for within the Attachment 11 aquatic resource impact tables. The study included in this Attachment includes a signed PE seal.

"I, Timothy Dunaway, 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, Timothy Dunaway, 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."



11/15/16

Timothy Dunaway

Timothy Dunaway, P.E.
Professional Engineer No. PE082840

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.

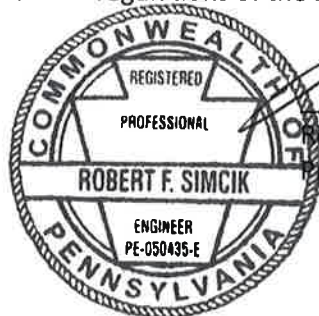
One aboveground structure, the Houston Injection Station, proposed within Chartiers Township in Washington County would be located within a 100-year floodplain. A Hydrology and Hydraulics Study was conducted to determine project impacts on the flood capacity for Chartiers Run and Westland Run. Results of the study indicate that the Project construction would not exceed 100-year peak flow rates or increase flood velocity on-site or off-site. Therefore, the proposed grading will not increase the risk of flooding within the limits of this study for the 100-year storm even along Wetland Run and Chartiers Run. A Post Construction Stormwater Plan has been prepared and is currently being reviewed by Chartiers Township.

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.

"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 11/23/16
Robert F. Simcik, P.E.
Professional Engineer No. PE050435E

"I, Timothy Dunaway, 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, Timothy Dunaway, 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."


Timothy Dunaway 11/15/16
Timothy Dunaway, P.E.
Professional Engineer No. PE082840

ATTACHMENT 15

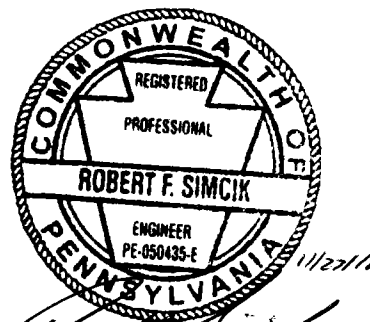
RISK ASSESSMENT

Note: The proposed Project in Washington County 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.