



Civil & Environmental Consultants, Inc.

Regulations and Permitting of Pipelines in Pennsylvania



PIPELINE INFRASTRUCTURE TASK FORCE

**Presented By
Lauren R. Parker, P.E.
Civil & Environmental Consultants, Inc.**

September 23, 2015

Overview

- ▶ Federal Regulations
- ▶ Pennsylvania Regulations
- ▶ Pennsylvania Permitting
- ▶ Federal Permitting
- ▶ Reference and Guidance Documents



Federal Regulations



► Laws and Regulations

- The Water Pollution Control Act of 1948
- The Clean Water Act was enacted in 1972
- Section 402 of the Act established the National Pollutant Discharge Elimination System (NPDES).
- Energy Policy Act of 2005, which was published as a final rule by the Environmental Protection Agency (EPA) on June 12, 2006
- Section 106 National Historic Preservation Act
- Endangered Species Act



Pennsylvania Regulations



► Laws and Regulations

- Chapter 102
- Chapter 105
- Clean Streams Law
- Act 167

► Other Obligations

- Submerged Land License Agreement
- T&E species clearances
- PHMC Clearance



Pennsylvania Regulations Act 167

- ▶ Pennsylvania's Storm Water Management Act (Act 167) was enacted in 1978. This Act was in response to the impacts of accelerated stormwater runoff resulting from land development in the state. It requires counties to prepare and adopt watershed based stormwater management plans. It also requires municipalities to adopt and implement ordinances to regulate development consistent with these plans.



Pennsylvania's Storm Water Management Act (Act 167)

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What is accelerated stormwater runoff?

Precipitation that falls on the natural landscape is managed by a system of vegetation, soil, groundwater and surface waters that has formed over time. Natural events shape this system to efficiently handle stormwater through infiltration, evaporation and runoff. When less precipitation is infiltrated into the soil and groundwater or evaporated, either directly to the air or through plants and trees, there is an increase in the volume and rate, or acceleration, of stormwater runoff.

Why is accelerated stormwater runoff a concern?

As changes to the landscape alter the balance of the natural water cycle, accelerated stormwater runoff causes further impacts to the landscape. Higher volumes and rates of stormwater runoff cause increased soil erosion, greater and more frequent flooding, and reshape surface waters through scour and deposition. It also reduces groundwater levels because less precipitation ends up there and this in turn reduces dry weather stream flows that are fed by groundwater. More soil and other water pollutants are picked up and carried further with accelerated stormwater runoff. Depending on the extent of these impacts, serious safety, property and environmental risks can also result.

How does development accelerate stormwater runoff?

Changing the soil cover by placing impervious surfaces (pavement, roofs), removing vegetation (grass, plants, trees) and changing the shape of the land and the way water flows across it can all accelerate stormwater runoff. During construction vegetation is removed, soil is exposed, the landscape is reshaped and impervious surfaces are installed. Following construction, some vegetation is replaced, the impervious surfaces prevent infiltration and may attract new pollution sources and the reshaped landscape alters the flow and destination of stormwater runoff.

How can the impacts of accelerated stormwater runoff be reduced and prevented?

If there is no change from preconstruction to post-construction stormwater runoff volume, rate and quality, accelerated stormwater runoff will be avoided and the impacts prevented. This is accomplished by minimizing changes to the landscape and implementing stormwater management practices that replicate pre-development conditions.

What is a watershed based Stormwater Management Plan?

Watershed based Stormwater Management Plans provide municipalities with a framework, including model

ordinances and management practices, to control stormwater runoff from new development in a watershed. These plans include standards for managing the quantity and quality of stormwater runoff given the characteristics of the watershed including current and future development plans. The goal is to control post-development stormwater runoff rate, volume and quality to replicate pre-development conditions. This is to prevent additional downstream flooding and to protect water resources and their uses. The Department of Environmental Protection (DEP) may require counties to develop joint plans where a watershed includes land in more than one county.

How is the public involved in this process?

During the watershed planning process, counties establish plan advisory committees consisting of county and municipal representatives. Counties may also appoint representatives of interest groups and the public. These committees help to define local concerns and develop stormwater control strategies. The processes for county adoption of the plan includes a public hearing. Municipal adoption of ordinances to implement the plan is also an opportunity for public input.

How are Stormwater Management Plans implemented?

Following adoption of the Stormwater Management Plan by the county and approval by DEP, anyone engaged in construction activities in the watershed is required to implement stormwater management measures consistent with the plan. In addition, each municipality in the watershed covered by the plan must, within six months of DEP's approval, adopt ordinances consistent with the plan. This includes zoning, subdivision and development, building code, erosion and sedimentation and post-construction stormwater management requirements in the municipality. This process is also consistent with municipal obligations under federal National Pollutant Discharge Elimination System (NPDES) permitting requirements for Municipal Separate Storm Sewer Systems (MS4).

What assistance is available to counties and municipalities?

DEP provides technical, administrative and financial assistance to counties in preparing Stormwater Management Plans. DEP pays for 75% of the costs counties incur in preparing plans, and it approves reimbursements to municipalities for 75% of the allowable costs of preparing plans and enacting, administering and implementing stormwater ordinances.

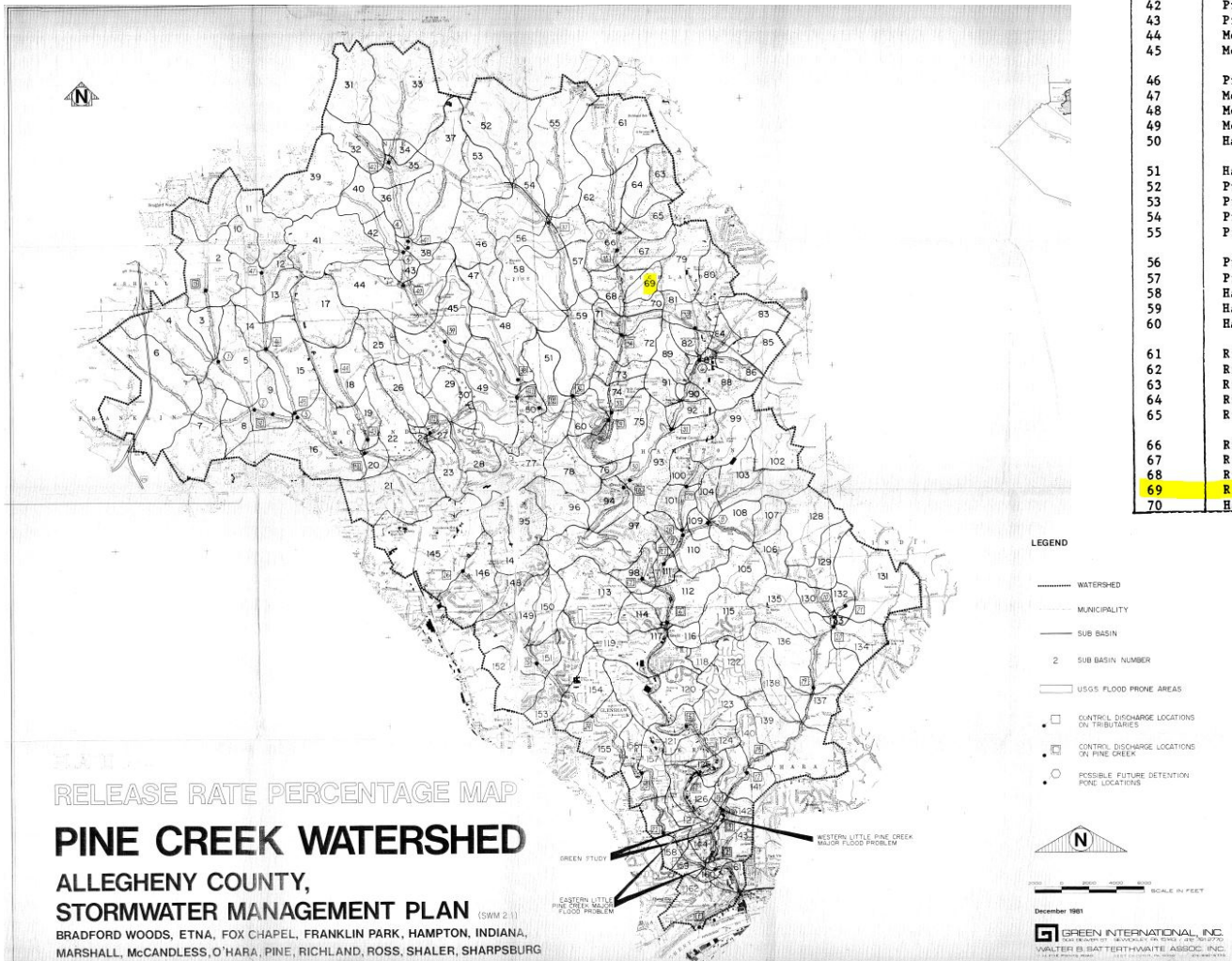


Pennsylvania Regulations Act 167, contd.

APPENDIX A

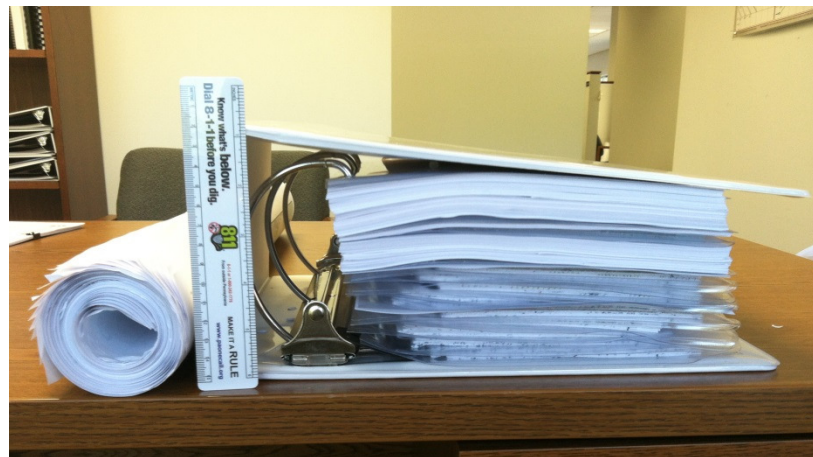
RELEASE RATE PERCENTAGES BY SUBAREA
PINE CREEK WATERSHED
(Continued)

Subarea	Municipality	Release Rate Percentage
36	Pine	70
37	Pine	85
38	Pine	55
39	Pine	100
40	Pine	75
41	Pine	85
42	Pine	85
43	Pine	100
44	McCandless, Pine	80
45	McCandless, Pine	65
46	Pine	100
47	McCandless, Pine	100
48	McCandless, Pine	95
49	McCandless	100
50	Hampton, McCandless	100
51	Hampton, McCandless	100
52	Pine, Richland	100
53	Pine	100
54	Pine, Richland	100
55	Pine, Richland	100
56	Pine, Richland	85
57	Pine, Richland	85
58	Hampton, McCandless, Pine, Richland	90
59	Hampton, McCandless, Richland	100
60	Hampton	100
61	Richland	100
62	Richland	95
63	Richland	100
64	Richland	90
65	Richland	85
66	Richland	80
67	Richland	75
68	Richland	75
69	Richland	65
70	Hampton, Richland	70



Pennsylvania Permitting ESCGP-2

- ▶ ESCGP-1 in 2008
- ▶ 25 Pa Code Chapter 102 revised November 19, 2010
- ▶ ESCGP-2 enacted in January 2013 to incorporate changes in 102
- ▶ ESCGP-2 has become an equivalent to the NPDES program for non oil & gas developments



Pennsylvania Permitting ESCGP-2 package

- ▶ Notice of Intent Checklist and Application
- ▶ Site Location and Soils Map
- ▶ Municipal and county notification and certified mail receipts

U.S. Postal Service
CERTIFIED MAIL - RECEIPT
 (Domestic Mail Only. No Insurance Coverage Provided)
 For delivery information visit our website at www.usps.com

Postage \$ 2.52
 Certified Fee \$ 4.45
 Return Receipt Fee (Insurance Required) 2.80
 Restricted Delivery Fee (Insurance Required) 3.77
 Total Postage & Fees \$ 13.54

TO: MR RANDY S KUNKLE, BOROUGH MANAGER
 ECONOMY BOROUGH
 2856 CONWAY WALLROSE ROAD
 BADIN PA 15005

SENDER, COMPLETE THIS SECTION

Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
 Print your name and address on the reverse so that we can return the card to you.
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 MR RANDY S KUNKLE, BOROUGH MANAGER
 ECONOMY BOROUGH
 2856 CONWAY WALLROSE ROAD
 BADIN PA 15005

COMPLETE THIS SECTION ON DELIVERY

A. Signature: *Randy S. Kunkle*
 B. Received by (Print Name): *Randy S. Kunkle*
 C. Date of Delivery: *06/29/15*

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below: _____

3. Service Type
 Certified Mail® Priority Mail Express®
 Registered Return Receipt for Merchandise
 Insured Mail Collect on Delivery

4. Restricted Delivery? (Extra Fee) Yes No

2. Article Number (Transfer from service label): 7014 0150 0000 0243 2432
 PS Form 3811, July 2013 Domestic Return Receipt



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF WATER MANAGEMENT
 OFFICE OF OIL AND GAS MANAGEMENT

NOTICE OF INTENT (NOI) ADMINISTRATIVE COMPLETENESS CHECKLIST EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP-2) FOR EARTH DISTURBANCE ASSOCIATED WITH OIL AND GAS EXPLORATION, PRODUCTION, PROCESSING, OR TREATMENT OPERATIONS OR TRANSMISSION FACILITIES

Please check the following list to make sure that you have included all the required information. Place a check mark in the column provided for all items completed and/or provided. Failure to provide all of the requested information will delay the processing of the application, may preclude the use of the Expedited Review, and may result in the application being placed ON HOLD with NO ACTION, or being considered withdrawn and the application file closed.

THIS CHECKLIST MUST BE COMPLETED AND ENCLOSED WITH YOUR GENERAL PERMIT NOI

<input checked="" type="checkbox"/> CHECKLIST FOR EROSION AND SEDIMENT CONTROL GENERAL PERMIT NOI <input type="checkbox"/> NEW NOI <input type="checkbox"/> RENEWAL <input type="checkbox"/> SUBSEQUENT PHASE <input type="checkbox"/> MAJOR MODIFICATION If a Renewal, Subsequent Phase or Revision, identify ESCGP-2 Permit Authorization # _____		Minor revisions are not required to be submitted to the regional office for review.	Applicant Check <input checked="" type="checkbox"/> if Included	Official Use Only
APPLICANT _____ PROJECT and PHASE NAME _____ (If applicable)				
1.	Fully completed, properly signed and notarized Notice of Intent form (1 original and 2 copies). (Not required for subsequent phases)		<input type="checkbox"/>	<input type="checkbox"/>
2.	Complete Erosion and Sediment Control (E&S) Plans. (1 original and 2 copies) NOTE: Identify Locations as Drawings (D), Narrative (N). (Identify Not Applicable as "N/A") The E & S Plan must contain, at a minimum, the following:		<input type="checkbox"/>	<input type="checkbox"/>
	a. Topographic Features Existing topographic features of the project site and immediate surrounding area. Include the project area outlined on an 8 1/2" x 11" photocopy of the U.S.G.S. topo map area. The map must include the name of the appropriate 1:24,000 scale U.S.G.S. 7.5 minute series quadrangle map where the project is located.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>
	b. Soil Characteristics Types, depth, slope, locations and limitations of the soils including methods for resolution of all soil limitations.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>
	c. Earth Disturbance Activity The characteristics of the earth disturbance activity, including the past, present and proposed land uses and proposed alteration to the project site.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>
	d. Project Site Runoff The Volume and rate of runoff from the project site and its upstream watershed area.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>
	e. Surface Water Classification The Location of all surface waters of this Commonwealth which may receive runoff within or from the project site including their classification under Chapter 93 and status as siltation-impaired water.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>
	f. BMP Description Narrative A narrative description of the location and type of perimeter and onsite BMPs used before, during, and after the earth disturbance activity.	Location: _____ Page: _____	<input type="checkbox"/>	<input type="checkbox"/>



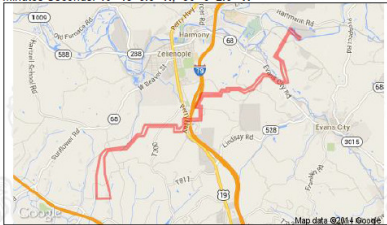
Pennsylvania Permitting ESCGP-2 package

► PNDI and clearances (if required)

PNDI Project Environmental Review Receipt Project Search ID: 20140916467176

1. PROJECT INFORMATION

Project Name: **Cardinal Pike to MWE Pipeline**
 Date of review: 9/16/2014 1:17:23 PM
 Project Category: **Energy Storage, Production, and Transfer, Energy Production (generation), Oil or Gas - new wells, expansion of well field**
 Project Area: 450.6 acres
 County: **Beaver, Butler Township/Municipality: New Sewickley, Jackson**
 Quadrangle Name: **ZELIENOPLE** - ZIP Code: 15074, 16033, 16063, 15074
 Decimal Degrees: 40.801797 N, -80.084049 W
 Degrees Minutes Seconds: 40° 48' 6.5" N, -80° 5' 2.6" W



2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	Potential Impact	MORE INFORMATION REQUIRED, See Agency Response

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
 Pennsylvania Field Office
 110 Radnor Road, Suite 101
 State College, Pennsylvania 16801-4850

November 24, 2014

Ryan Slack
 Civil & Environmental Consultants, Inc.
 530 E. Ohio Street
 Suite G
 Indianapolis, IN 46204

RE: USFWS Project #2014-0561
 Cardinal Pike to B1, B1 to B2, and Pike to MWE Pipelines

Dear Mr. Slack:

This is in response to your email of October 2, 2014, which included an *Indiana Bat Conservation Plan* for the above-referenced project located in Butler and Beaver Counties, Pennsylvania. The proposed project is located within the range of the Indiana bat (*Myotis sodalis*), a species that is federally listed as endangered. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

The proposed project will affect 29.98 acres of forest habitat in the vicinity of the CS&M Mine Indiana bat hibernaculum. To minimize adverse effects on Indiana bats, Cardinal PA Midstream, LLC has agreed to implement the measures outlined in their *Indiana Bat Conservation Plan* for the subject pipeline project. The Conservation Plan details specific measures that will be implemented to reduce the short-term and long-term effects of the project on Indiana bats, including the contribution of \$64,184.60 into the Indiana Bat Conservation Fund.

The Service has reviewed the Conservation Plan and found it to address the recommended avoidance, minimization and compensation measures outlined in our guidance. Therefore, with the implementation of these measures, the effects of the project on the Indiana bat are insignificant or discountable.



Division of Environmental Planning and Habitat Protection
 717-783-5857

COMMONWEALTH OF PENNSYLVANIA Pennsylvania Game Commission

2001 ELMERTON AVENUE
 HARRISBURG, PA 17109-0787

"To manage all wild birds, mammals and their habitats for current and future generations."

ADMINISTRATIVE BUREAUS:

ADMINISTRATION	717-783-6870
ANIMAL RESOURCES	717-783-7894
FISCAL MANAGEMENT	717-783-7314
CONTRACTS AND	717-783-7314
REGULATORY	717-783-6884
OFFICE SERVICES	717-783-7314
WILDLIFE MANAGEMENT	717-783-6822
WILDLIFE EDUCATION	717-783-6822
WILDLIFE HABITAT	717-783-6822
MANAGEMENT TECHNOLOGY	717-783-6822
TRAINING DIVISION	717-783-6822
ADMINISTRATIVE TECHNOLOGY	717-783-6822

www.pgc.state.pa.us

October 31, 2014

PGC ID Number: 201410300201

Lauren Parker
 Civil & Environmental Consultants, Inc.
 333 Baldwin Road
 Pittsburgh, PA 15205
 lparker@ceecinc.com

Re: Cardinal PA Midstream LLC - Pike Compressor Station
 PNDI Number: 20140811462890
 New Sewickley Township, Beaver County, PA

Dear Ms. Mehall,

Thank you for submitting the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number 20140811462890 for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

Potential Impact Anticipated

PNDI records indicate species or resources of concern are located in the vicinity of the project. The PGC has received and thoroughly reviewed the information that you provided to this office, as well as PNDI data, and has determined that potential impacts to the following endangered species may be associated with your project:

Scientific Name	Common Name	PA Status	Federal Status
<i>Myotis sodalis</i>	Indiana Bat	ENDANGERED	ENDANGERED

Next Steps

Indiana bats are a federally listed endangered species under the jurisdiction of the U.S. Fish and Wildlife Service. As a result, our agency defers comments on potential impacts to Indiana bats to the U.S. Fish and Wildlife Service.

This response represents the most up-to-date summary of the PNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.



Pennsylvania Permitting ESCGP-2 package

- ▶ Erosion and Sediment Control Report, which includes:
 - Project description
 - Soils information
 - Receiving water information
 - E&S BMP description
 - Potential thermal impacts analysis
 - Naturally occurring geologic formation discussion
 - Riparian forest buffer discussion
 - Antidegradation analysis (if HQ/EV or siltation impaired watershed)
 - calculations



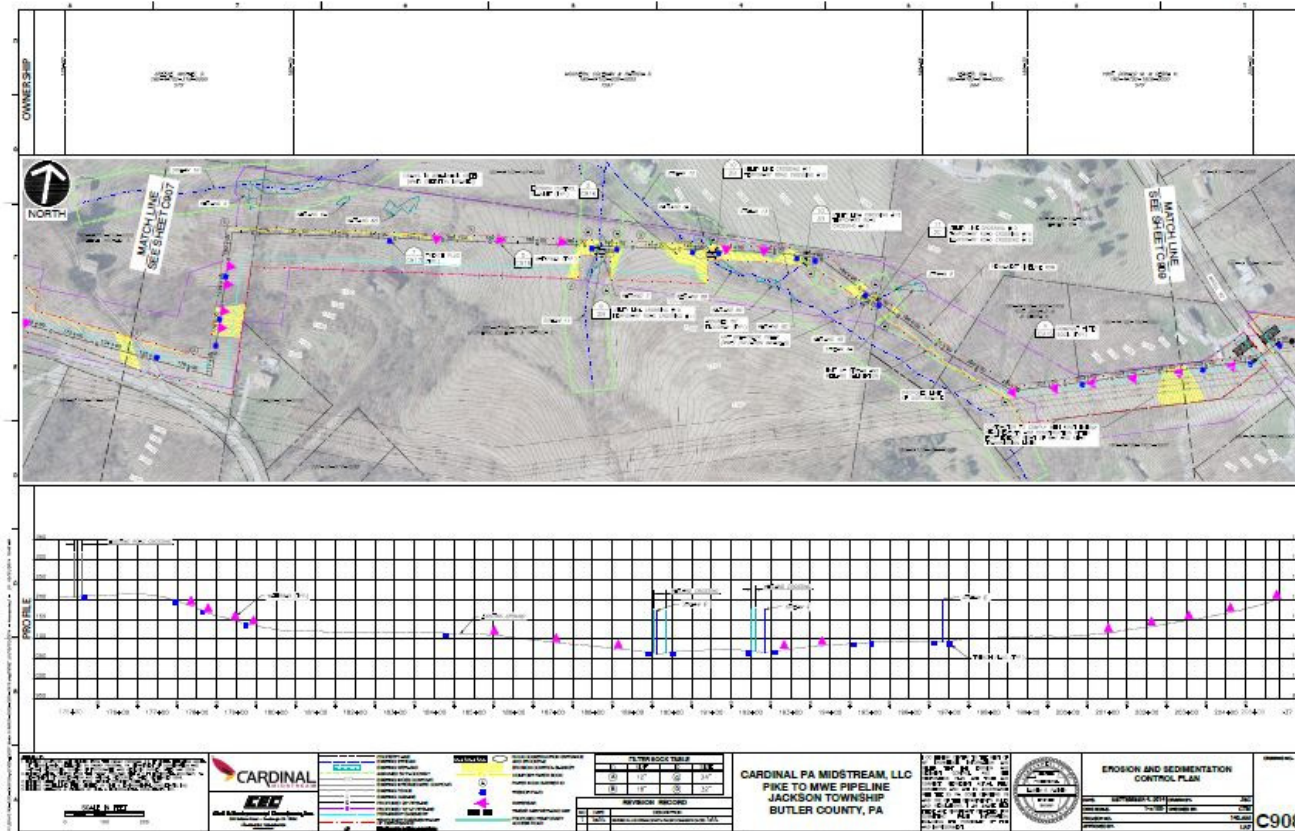
Pennsylvania Permitting ESCGP-2 package

- ▶ Post Construction Stormwater Management/Site Restoration Report, which includes:
 - Project description
 - Hydrologic Methodology and Rainfall
 - Soils information
 - Receiving water information
 - Project site runoff summary
 - PCSM BMP description
 - Potential thermal impacts analysis
 - Naturally occurring geologic formation discussion
 - Riparian forest buffer discussion
 - Antidegradation analysis (if HQ/EV or siltation impaired watershed)
 - Calculations and drainage area maps



Pennsylvania Permitting ESCGP-2 package

- ▶ Infiltration Analysis Narrative
- ▶ Erosion and Sediment Control Plan and Detail Drawings
- ▶ Post-construction Stormwater Management & Site Restoration Plan and Detail Drawings



Pennsylvania Permitting Chapter 105

General Permits

- ▶ GP-3 Bank Rehabilitation, Bank Protection and Gravel
- ▶ GP-5 Utility Line Stream Crossing
- ▶ GP-7 Minor Road Crossing
- ▶ GP-8 Temporary Road Crossing
- ▶ GP-11 Maintenance, Testing, Repair, Rehabilitation, or Replacement of Water Obstructions and Encroachments

3150-PM-BWEW0500 Rev. 2/2014 Form

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

**CHAPTER 105
GENERAL PERMIT REGISTRATION**

TYPE OF GENERAL PERMIT: New Permit
PLEASE MARK ("X") ONE: Transfer of Existing Permit (Complete Section A, C & H below and all of form 3150-PM-BWEW0010)

PLEASE MARK ("X") ALL THAT APPLY:

<input type="checkbox"/> GP-1 Fish Habitat Enhancement Structures	<input type="checkbox"/> GP-5 Utility Line Stream Crossing
<input type="checkbox"/> GP-2 Small Docks & Boat Launching Ramps	<input type="checkbox"/> GP-6 Agricultural Crossings & Ramps
Please mark ("X") the specific type of project:	
<input type="checkbox"/> private recreational dock	<input type="checkbox"/> GP-7 Minor Road Crossings
<input type="checkbox"/> public access facility	<input type="checkbox"/> GP-8 Temporary Road Crossings
<input type="checkbox"/> public service facility	<input type="checkbox"/> GP-9 Agricultural Activities
<input type="checkbox"/> other private or commercial facility	<input type="checkbox"/> GP-10 Abandoned Mine Reclamation
<input type="checkbox"/> GP-3 Bank Rehabilitation, Bank Protection and Gravel Bar Removal	<input type="checkbox"/> GP-11 Maintenance, Testing, Repair, Rehabilitation, or Replacement of Water Obstructions and Encroachments (reviewed by DEP Regional Office only)
<input type="checkbox"/> GP-4 Intake and Outfall Structures	<input type="checkbox"/> GP-12 Private Residential Construction in Wetlands

Activity Related to Oil and Gas Exploration, Production or Transmission
 Activity Subject to FERC approval (Docket number _____) FERC Natural Gas Act Facility

SECTION A. APPLICANT INFORMATION

Applicant's Name / Client		DEP Client ID# (if known)	Employer ID# (EIN)
Client Information - Please select Client Type / Code from drop down box under the correct entity shown to the right (or may be written in) →		Government	Non-Government
Mailing Address		City	State ZIP + 4
Contact Person - Last Name	First MI Suffix	Telephone ()	Email Address

SECTION B. CONSULTANT INFORMATION (Complete if different than above) N/A

Contact Person - Last Name	First MI Suffix	Consultant's Title	Consulting Firm
Mailing Address		City	State ZIP + 4
Telephone ()	Fax ()	Email	Employer ID# (EIN)

SECTION C. PROJECT INFORMATION

Project /Site Name:		DEP Site ID# (if known or leave blank)	
Client Relationship - Please select Site-to-Client Relationship / Code from drop down box to the right (or may be written in) →		Double-click on shaded area below to select correct Site-to-Client Relationship / Code ↓	
County	Municipality	<input type="checkbox"/> City	<input type="checkbox"/> Borough
Site Location / Address		City	State ZIP + 4

Collection Method: EMAP HGIS GISDR* ITPMP GPS WAAS LORAN
Check the horizontal reference datum (or projection datum) employed in the collection method.
EMAP and HGIS (PNDI) have known datum and do not require checking here. NAD27 NAD83 WGS84 (GEO84)
Enter the date of collection if coordinates were derived from GPS, WAAS or LORAN. ____ mm ____ dd ____ yyyy



Pennsylvania Permitting Chapter 105

General Permits

- ▶ Typical General Permit Registration Requirements
 - Project Description
 - Act 14 Notifications
 - Location Map
 - Photographs
 - Site Plan/Drawings
 - E&S Control Plan
 - Wetland Delineation Report

- ▶ Example permit conditions
 - GP not applicable if:
 - Water resource is Exceptional Value (per Ch. 93)
 - Wetland is greater than 10 acres
 - Historic, cultural or archeological site present



Pennsylvania Permitting Chapter 105

Individual Permit

- ▶ Water Obstruction and Encroachment Joint Permit
 - Permit has to be authorized by the DEP and USACE
 - Additional application requirements such as:
 - Alternatives Analysis
 - Public notice
 - Risk Assessment
 - Professional Engineer Seal



3150-PM-BWEW0036A Rev. 3/2013
 COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 and
 DEPARTMENT OF ARMY CORPS OF ENGINEERS
 (Baltimore, Philadelphia, and Pittsburgh Districts)
 JOINT APPLICATION FOR
 PENNSYLVANIA WATER OBSTRUCTION AND ENCROACHMENT PERMIT AND
 U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT

Before completing this form, please read the step-by-step instructions and Section F Application Completeness Checklist provided with this Joint Permit package.

AGENCY USE ONLY		
Application ID# (Assigned by DEP) _____	RECEIVED DATE _____	CHECK NO. _____
Program Application No. _____	REQUIRED APP. FEE _____	AMOUNT \$ _____
SECTION A. APPLICATION TYPE: STANDARD <input type="checkbox"/> SMALL PROJECTS <input type="checkbox"/>		
SECTION B. APPLICANT IDENTIFIER		
Applicant Name _____		Employer ID# (EIN) _____
Consulting Firm _____		Employer ID# (EIN) _____
SECTION C. PROJECT LOCATION DATA		
Name of stream and/or body of water and Chapter 93 designation. _____		
Corps District where project will occur. <input type="checkbox"/> Pittsburgh (Ohio River Basin) <input type="checkbox"/> Baltimore (Susquehanna River Basin) <input type="checkbox"/> Philadelphia (Delaware River Basin)		
Name of the U.S.G.S. 7 1/2 Minute Quadrangle Map where project is located: _____		
Indicate location of project: Latitude _____; Longitude _____		
Project type, purpose and need: _____ _____ _____		
SECTION D. PROJECT STATUS		
HAS ANY PORTION OF PROPOSED PROJECT BEEN AUTHORIZED? <input type="checkbox"/> yes <input type="checkbox"/> no _____ date authorized		
If yes, attach description of those portions of the project that have been authorized and identify dates of authorization. Also attach a completed PASPGP-4 Cumulative Impact Project Screening Form.		
SECTION E. COMPLIANCE REVIEW		
Yes	No	Is the applicant (owner and/or operator) currently in violation of any permits issued by the Department? If yes, please provide:
<input type="checkbox"/>	<input type="checkbox"/>	1. Permit Number: _____
		2. Nature of the violation (if any): _____
		3. Status of violation (i.e., schedule for compliance, etc.): _____



Federal Permitting Pennsylvania State Programmatic General Permit (PASPGP-4)

- ▶ Nationwide Permit 12 suspended in PA
- ▶ PASPGP is the replacement federal permit designed to coordinate with PADEP
 - Level of review determined by Category of Impact (Cat I or III)
 - Category I – PADEP authorized to include Army Corps Authorization
 - Category III – PADEP and Army Corps must review project independently
- ▶ Requires 30 day and 1 year (or after the first full growing season) post construction monitoring report submission



U.S. Army Corps of Engineers

PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT-4 (PASPGP-4) July 1, 2011

TO WHOM IT MAY CONCERN:

Part I – Authorities:

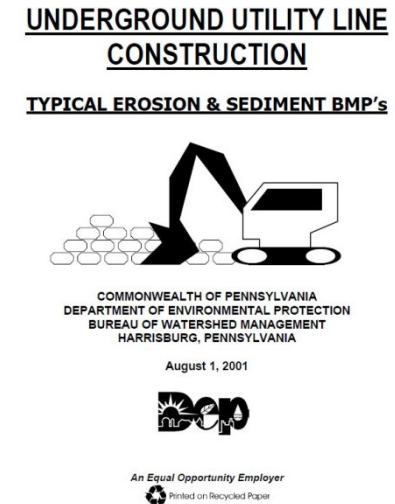
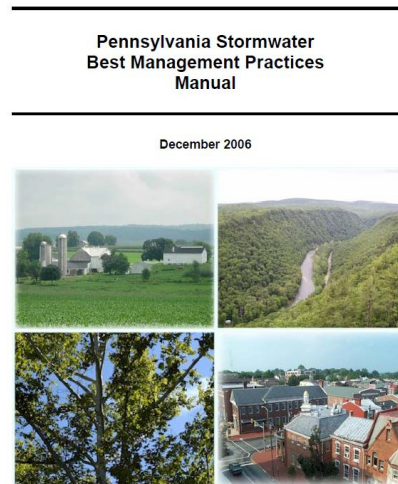
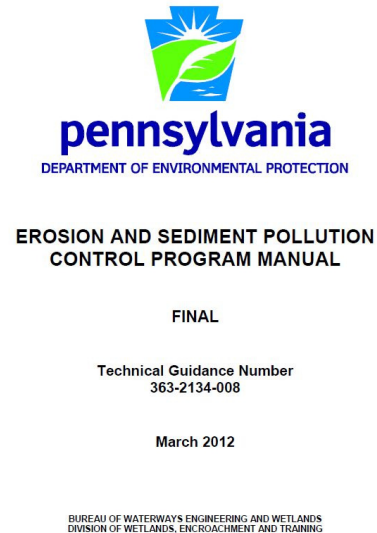
A. Federal Authorities:

1. Section 404(e) of the Clean Water Act (CWA) (33 United States Code [U.S.C.] Section [§] 1344) allows for the issuance of general permits on a statewide basis, which operate in conjunction with a State regulatory program that protects the aquatic environment in a manner equivalent to the Department of the Army regulatory program, provided that the activities permitted under each category of such general permits are similar in nature and result in no more than minimal individual or cumulative adverse effects on the aquatic environment. This Pennsylvania State Programmatic General Permit # 4 (PASPGP-4) is issued pursuant to Section 404(e) and is based on and consistent with the requirements of the CWA 404(b)(1) Guidelines.
2. Upon the recommendation of the Chief of Engineers, and under the provisions of Section 404 of the CWA, as amended, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), the Secretary of the Army hereby authorizes the discharge of dredged or fill materials and/or the placement of structures, for a single and complete project, including all attendant features, both temporary and/or permanent, which individually or cumulatively results in impacts to 1.0 acre or less of waters of the United States including jurisdictional wetlands. These discharges and placement of structures must comply with all the terms, conditions, and processing procedures identified in this PASPGP-4. Refer to the definitions and sketches in the Definitions Section for calculating the 1.0-acre eligibility threshold for linear projects.
3. Section 404(q) of the CWA states that agreements are to be entered into in order to minimize, to the maximum extent practicable, duplication, needless paperwork, and delays in the issuance of permits. Memorandums of Agreements (MOAs) have been developed between U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and Environmental Protection Agency (EPA) to outline the means for establishing these goals. The coordination, communication process, professional partnerships, and cooperative working relationships established by these MOAs will be maintained, where applicable, in this PASPGP-4.
4. Section 404(c) of the CWA authorizes the Administrator of EPA to prohibit the specification of any defined area as a disposal site, and to deny or restrict the use of any defined area for



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Pennsylvania References & Guidance Documents



- ▶ **Erosion and Sediment Pollution Control Program Manual**
 - Dated March 2012
- ▶ **Pennsylvania Stormwater Best Management Practices Manual**
 - Dated December 2006
- ▶ **Underground Utility Line Construction****
 - Dated August 2001
- ▶ **Northeast Regional Supplement to the 1987 USACE Wetland Delineation Manual**

Pennsylvania References & Guidance Documents

E&S Manual, Stabilize Immediately



- ▶ **Install erosion control blankets, sprayed hydroseeding/mulch, and seed and mulch immediately.**
- ▶ **This helps to prevent soil from being eroded through wind, rain drops, stormwater runoff**
- ▶ **Right of way restoration is key to eliminating erosion and subsequent sedimentation**



Pennsylvania References & Guidance Documents E&S Manual, Rock Construction Entrance



- ▶ **Used at all entry and exit points**
- ▶ **Knocks dirt off of vehicles before they enter the public roadway**



Pennsylvania References & Guidance Documents E&S Manual, Compost Filter Sock & Silt Fence

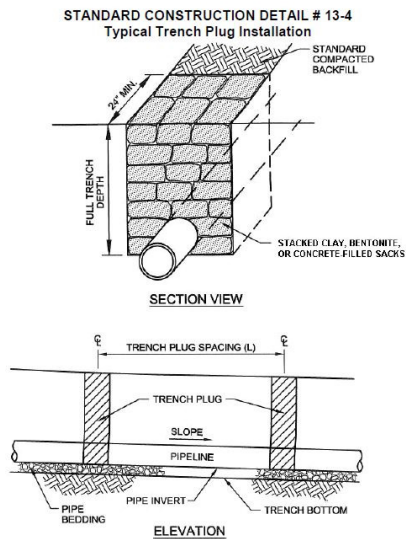


- ▶ **Install compost filter sock or silt fence parallel to contours to intercept sediment laden runoff prior to leaving the project area**



Pennsylvania References & Guidance Documents

E&S Manual, Trench Plugs



Pennsylvania Department of
Environmental Protection, Erosion
and Sediment Pollution Control
Program Manual (March 2012)



- ▶ Breaks the trench into smaller segments to limit the stormwater inside the open trench which can cause scour.
- ▶ Additionally, trench plugs are used to prevent water within the open trench from flowing in a stream or wetland and to prevent the stream or wetland from draining into the trench



Pennsylvania References & Guidance Documents

E&S Manual, Waterbars



- ▶ **When the right of way is running perpendicular to contour, waterbars act to split up the slope into smaller drainage areas. This diverts the runoff off of the right of way prior to it becoming concentrated which can cause erosion**
- ▶ **Water bars should outlet to a compost filter sock, straw bales, or other E&S control BMP to filter sediment out of the runoff**



Pennsylvania References & Guidance Documents

PA Stormwater BMP Manual

Purpose

- ▶ The purpose of the manual is to provide guidance, options and tools that can be used to protect water quality, enhance water availability and reduce flooding potential through effective stormwater management.



Pennsylvania References & Guidance Documents

PA Stormwater BMP Manual

Contents

- ▶ Principals and recommendations
- ▶ Ideas for integrating site design and stormwater management
- ▶ Non-structural BMPs (ex.)
- ▶ Structural BMPs (ex. Infiltration basin)
- ▶ How to handle Special Management Areas (ex. Brownfields)
- ▶ Calculations and Methodology
- ▶ Water Quality Calculation worksheets
- ▶ Protocols for infiltration testing



Pennsylvania References & Guidance Documents

PA Stormwater BMP Manual

Structural BMPs

Chapter 6 Structural BMPs

6.1 Introduction	1
6.2 Groupings of Structural BMPs	1
6.3 Manufactured Products	2
6.4 Volume/Peak Rate Reduction by Infiltration BMPs	5
BMP 6.4.1 Pervious Pavement with Infiltration Bed	7
BMP 6.4.2 Infiltration Basin	27
BMP 6.4.3 Subsurface Infiltration Bed	33
BMP 6.4.4 Infiltration Trench	41
BMP 6.4.5 Rain Garden/Bioretention	49
BMP 6.4.6 Dry Well / Seepage Pit	67
BMP 6.4.7 Constructed Filter	71
BMP 6.4.8 Vegetated Swale	83
BMP 6.4.9 Vegetated Filter Strip	99
BMP 6.4.10 Infiltration Berm & Retentive Grading	113
6.5 Volume/Peak Rate Reduction BMPs	123
BMP 6.5.1 Vegetated Roof	125
BMP 6.5.2 Runoff Capture & Reuse	139
6.6 Runoff Quality/Peak Rate BMPs	149
BMP 6.6.1 Constructed Wetland	151
BMP 6.6.2 Wet Pond/Retention Basin	163
BMP 6.6.3 Dry Extended Detention Basin	173
BMP 6.6.4 Water Quality Filters & Hydrodynamic Devices	183
6.7 Restoration BMPs	189
BMP 6.7.1 Riparian Buffer Restoration	191
BMP 6.7.2 Landscape Restoration	211
BMP 6.7.3 Soil Amendment & Restoration	221
BMP 6.7.4 Floodplain Restoration	231
6.8 Other BMPs and Related Structural Measures	241
BMP 6.8.1 Level Spreader	243
BMP 6.8.2 Special Detention Areas - Parking Lot, Rooftop	253



Pennsylvania References & Guidance Documents

PA Stormwater BMP Manual

Infiltration testing

- ▶ Protocols are outlined in the manual related to test pits, depth to bedrock and seasonal high groundwater table, and the number and duration of infiltration tests that are required.



Summary

- ▶ Pennsylvania has a robust regulatory and permitting scheme that requires experienced biologist and professional engineers to assist in designing and permitting pipeline projects.

- ▶ QUESTIONS?
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