

WATER MANAGEMENT PLAN FOR UNCONVENTIONAL GAS WELL DEVELOPMENT

APPLICANT AND PLAN COVERAGE INFORMATION

Applicant	DEP ID No. (If applicable)		Address
Contact Name/Title	Contract Phone		Contact E-mail

Area Covered; This Water Management Plan applies to water sources located in the following Oil and Gas District:

GENERAL WATER SOURCE INFORMATION

Section A. List of Water Sources

	Source Name	Location		Amount			Type of Source (check)			
		Municipality / County	Major River Basin*	30-day Average Daily Quantity of withdrawal (gpd)	Maximum rate of withdrawal	Inst. Max. Withdrawal Rate (gpm)	Surface Water	Groundwater	Wastewater, Mine Water, Cooling Water Discharge	Public Water Supply
1		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		/					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Major River Basins = (1) Delaware; (2) Great Lakes (including Genesee River Basin); (3) Ohio; (4) Potomac; or (5) Susquehanna

Section B. Water Source and Use Monitoring / Act 220 Water Use Registration and Reporting

For sources in Susquehanna River Basin, refer to a water withdrawal and consumptive use metering and monitoring plan meeting SRBC requirements. For sources in Delaware River Basin, refer to a water withdrawal and use monitoring plan meeting DRBC requirements. ***Water withdrawal and use monitoring plans approved meeting SRBC and DRBC requirements may be incorporated by reference and are accepted by the Department of Environmental Protection (DEP).***

For sources in other basins, provide a water source and use monitoring plan.

Will the total water withdrawn from listed sources and other sources operated by the applicant in same watershed exceed an average rate of 10,000 gpd in any 30-day period? If yes, an Act 220 registration must be filed within 30 days of initiating water withdrawal or use.	<input type="checkbox"/> Yes
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Section C. Surface Water Sources <i>The following types of information would be provided for each surface water source.</i>			
C.1 Source Identification and Notification			
Source No. as listed in Section A	Name of Stream or Other Surface Water Body	Location of Proposed Withdrawal Point:	
		County	Municipality
			Latitude (decimal degrees): N ° Longitude (decimal degrees): W °
<i>Attach copy of USGS 7½ Minute Quadrangle map indicating location of proposed source</i>			
C.2 River Basin Commission Approvals			
If the source is located in the Delaware or Susquehanna River Basin, has DRBC or SRBC approval been obtained? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, include a copy of DRBC or SRBC approval with the WMP form.</i>			
Date application submitted: _____		Anticipated approval date: _____	
SRBC or DRBC Approval No.: _____		Date issued: _____	
C.3 Operations Plan			
The operations plan must include an intake design, a flow schematic, site layout and a footprint for each surface water withdrawal, as required by PA Title 25, Ch. 78a.69(c)(6)(i).			
C.4 Stream Impact and Low Flow Analysis			
a. Drainage area at point of withdrawal (in square miles):		Describe or attach basis of calculation:	
b. Q ₇₋₁₀ low flow at point of withdrawal (in gpd):		Describe or attach basis of calculation (e.g., <i>StreamStats printout</i>)	
c. Average daily flow of stream at point of withdrawal (in gpd):		Describe or attach basis of calculation (e.g., <i>StreamStats printout</i>)	
d. Is proposed maximum rate of withdrawal greater than 10% of Q ₇₋₁₀ at point of withdrawal? <input type="checkbox"/> Yes <input type="checkbox"/> No			
C.5 Stream Classification and Uses			
a. Designated use classification per 25 Pa. Code. Ch. 93:			
b. PA DEP existing use determinations: <i>(if different than designated uses in Ch. 93)</i>			
c. Is the proposed source special protection water (High Quality or Exceptional Value)? <input type="checkbox"/> Yes <input type="checkbox"/> No			
d. Is stream classified by the PA Fish & Boat Commission as a Wild Trout Stream? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what classification of wild trout stream? <input type="checkbox"/> Class A <input type="checkbox"/> Not Class A If known: <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Class D			
C.6 PA Natural Diversity Inventory (PNDI)			
Attach results of a PNDI search and, if applicable, supporting documentation of conflict resolution. If a sequential review was conducted, or if a concurrent review is being conducted, attach the PNDI Receipt, completed PNDI Form and a USGS. 7.5 minute quadrangle map showing project boundaries.			
C.7 PA Historic and Museum Commission (PHMC)			
Attach results of proof of consultation with the PHMC regarding the presence of a historical or archaeological site included on the federal or state list of historical places at the location of the withdrawal.			
C.8 County and Municipality Notifications			
Attach proof of notification of the proposed withdrawal to municipalities and counties where the water source will be located.			
C.9 Withdrawal Impacts Analysis			
Develop a narrative withdrawal and diversion impact analysis to address anticipated impacts and describe the methods proposed to avoid or mitigate impacts (such as proposed passby flow conditions). The description should indicate impacts anticipated after considering avoidance or mitigation measures.			
Impact questions:			
a. Attach a plan indicating how the surface water withdrawal intake will be designed and operated to minimize entrainment and impingement of fish and other aquatic life.			
b. Are there any wetlands in the floodplain downstream of the proposed withdrawal where the withdrawal is anticipated to have a			

material impact on the elevation or duration of water levels in the wetland? Yes No

If yes, identify the wetlands, describe their functions and values, and the proposed method for avoiding or mitigating such impact on the values or functions of the affected wetlands.

c. Is the proposed withdrawal anticipated to significantly affect the available habitat of fish species at or below the withdrawal point?
 Yes No (If a passby flow is proposed consistent with SRBC's Guidelines for Determining Passby Flows and Conservation Releases, the impact on fish species is assumed to be acceptable, and further analysis is not required.)

If yes, describe the measures proposed to avoid the impacts.

d. Is the applicant aware of any significant downstream wastewater discharges to the stream, where the proposed withdrawal is anticipated to reduce the assimilative capacity of the stream to accept those discharges without exceeding applicable instream water quality standards? Yes No.

If yes, describe the measures proposed to avoid changes in water quality standards.

e. Is the withdrawal from a stream that is listed as being water quality impaired; and would the withdrawal materially exacerbate the water quality conditions leading to the impaired designation? Yes No.

If yes, describe the measures proposed to avoid the impacts.

f. Is the applicant aware of any significant thermal discharge (such as a power plant) that is downstream of the proposed withdrawal where the proposed withdrawal would diminish the capacity to assimilate that discharge without exceeding instream thermal standards? Yes No.

If yes, describe the measures proposed to avoid changes in the assimilate capacity of the stream.

g. Does the withdrawal impact a special protection (HG or EV) body of water? Yes No

If yes, describe how the withdrawal will be managed to protect existing water quality and uses.

h. Is the applicant aware of any downstream potable water supply source where the proposed withdrawal is anticipated to impair the amount of water available to meet the demands of such potable water supply?. Yes No

If yes, describe the measures proposed to avoid the impacts.

i. Is the applicant aware of any other downstream water supply uses (for example agricultural, industrial, etc) where the proposed withdrawal is anticipated to impair the amount of water available to meet the demands of such water supply? Yes No

If yes, describe the measures proposed to avoid the impacts.

j. Describe any impact avoidance or mitigation plans you are proposing, such as seasonal withdrawals or passby flows.

C.10 Prevention of Rapid Movement of Invasive, Harmful or Nuisance Species

Describe the measures to be taken to prevent the rapid movement of invasive, harmful or nuisance species by vehicles, equipment or other facilities from one site to another.

Section D. Groundwater Sources

The following types of information would be provided for each groundwater source.

D.1 Source Identification and Notification

Source No. as listed in Section A	Name / Address of Site	Location of proposed withdrawal point		
		County	Municipality	GPS Coordinates
				Latitude (decimal degrees): N ° Longitude (decimal degrees): W °

Attach copy of USGS 7½ Minute Quadrangle map indicating location of proposed source

D.2 River Basin Commission Approvals

If the source is located in the Delaware or Susquehanna River Basin, has DRBC or SRBC approval been obtained? Yes No

If yes, include a copy of DRBC or SRBC approval with the WMP form.

Date application submitted: _____	Anticipated approval date: _____
SRBC or DRBC Approval No.: _____	Date issued: _____
D.3 Stream Impact and Low Flow Analysis	
a. Is the proposed groundwater withdrawal anticipated to affect the low flow of any stream in the vicinity? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, identify the name of the affected stream and complete questions b-e below, and item D.4.</i>	
b. Drainage area at point of withdrawal (in square miles):	Describe or attach basis of calculation:
c. Q_{7-10} low flow at point of withdrawal (in gpd):	Describe or attach basis of calculation (e.g., <i>StreamStats printout</i>)
d. Average daily flow of stream at point of withdrawal (in gpd):	Describe or attach basis of calculation (e.g., <i>StreamStats printout</i>)
e. To the extent that the groundwater withdrawal affects stream flow, is the proposed maximum rate of stream flow impact greater than 10% of Q_{7-10} at point of withdrawal? <input type="checkbox"/> Yes <input type="checkbox"/> No	
D.4 Stream Classification and Uses	
a. Designated use classification per 25 Pa. Code. Ch. 93:	
b. PA DEP existing use determinations: <i>(if different than designated uses in Ch. 93)</i>	
c. Is the proposed source a special protection water (High Quality or Exceptional Value)? <input type="checkbox"/> Yes <input type="checkbox"/> No	
d. Is stream classified by the PA Fish & Boat Commission as a Wild Trout Stream? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what classification of wild trout stream: <input type="checkbox"/> Class A <input type="checkbox"/> Not Class A If known: <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Class D	
D.5 PA Natural Diversity Inventory (PNDI)	
Attach results of PNDI search and, if applicable, supporting documentation of conflict resolution. If a sequential review was conducted, or if a concurrent review is being conducted, attach the PNDI Receipt, completed PNDI Form and a USGS 7.5 minute quadrangle map showing project boundaries.	
D.6 PA Historic and Museum Commission (PHMC)	
Attach results of proof of consultation with the PHMC regarding the presence of a historical or archaeological site included on the federal or state list of historical places at the location of the withdrawal.	
D.7 County and Municipality Notifications	
Attach proof of notification of the proposed withdrawal to municipalities and counties where the water source will be located.	
D.8 Withdrawal Impacts Analysis	
Develop a narrative withdrawal impact analysis to address anticipated impacts and describe the methods proposed to avoid or mitigate impacts (such as proposed passby flow conditions). The description should indicate impacts anticipated after considering avoidance or mitigation measures.	
Impact questions:	
a. Are there any wetlands within the zone of drawdown/influence (> 2' drawdown) of the proposed groundwater withdrawal well? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, identify the wetlands, describe their hydrology (supporting source of water) and whether the groundwater withdrawal will affect that hydrology. To the extent that the hydrology of wetlands are affected, identify the wetland's functions and values, and the proposed method for avoiding or mitigating such impact on the values or functions of the affected wetlands.</i>	
b. Describe the extent to which the proposed groundwater withdrawal is anticipated to impact the low flow of streams or other surface bodies of water in the vicinity? (If a passby flow is proposed consistent with SRBC's Low Flow Protection Policy Related to Withdrawal Approvals, the impact on fish species is assumed to be acceptable, and further analysis is not required.)	
c. Is the proposed groundwater withdrawal anticipated to significantly affect stream flow and the available habitat of fish species at or below the withdrawal point? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid the impacts.</i>	
d. To the extent that the groundwater withdrawal affects streamflow, is the applicant aware of any significant downstream wastewater discharges (including thermal discharges) to the stream, where the proposed withdrawal is anticipated to reduce the assimilative	

capacity of the stream to accept those discharges without exceeding instream water quality standards. Yes No
If yes, describe the measures proposed to avoid changes in assimilative capacity of the stream.

e. Is the withdrawal from a watershed that is listed as being water quality impaired; and would the withdrawal materially exacerbate the water quality conditions leading to the impaired designation? Yes No

If yes, describe the measures proposed to avoid any changes in water quality conditions of the stream.

f. Does the proposed groundwater withdrawal involve the diversion of groundwater recharge or spring water from a cold water stream? Yes No

If yes, how would the withdrawal affect thermal conditions in the stream?

g. To the extent that the groundwater withdrawal affects streamflow, does the withdrawal impact a special protection (HG or EV) body of water? Yes No

If yes, describe how the withdrawal will be managed to protect existing water quality and uses.

h. Is the applicant aware of any potable water supply source in the vicinity where the proposed groundwater withdrawal is anticipated to impair the amount of water available to meet the demands of such potable water supply? Yes No

If yes, describe the measures proposed to avoid the impacts.

i. Is the applicant aware of any other water supply source in the vicinity where the proposed groundwater withdrawal is anticipated to impair the amount of water available to meet the demands of such water supply? Yes No

If yes, describe the measures proposed to avoid the impacts.

j. Describe any impact avoidance or mitigation plans you are proposing, such as seasonal withdrawals or passby flows.

D.9 Well Report

a. Attach a Well Report detailing the information required by 25 Pa. Code § 78a.69 (7)(i – v)

Section E. Wastewater, Cooling Water, and Mine Water Diversion Sources

The following types of information would be provided for each source.

E.1 Source Identification and Notification

Source No. as listed in Section A	Wastewater Discharge Source Name	Location of proposed withdrawal point		
		County	Municipality	GPS Coordinates
				Latitude (decimal degrees): N ° Longitude (decimal degrees): W °

NPDES Permit No. for Existing Discharge: _____ Attach copy of USGS 7½ Minute Quadrangle map indicating location of proposed source

Receiving stream for existing discharge: _____

E.2 River Basin Commission Approvals

If the source is located in the Delaware or Susquehanna River Basin, has DRBC or SRBC approval been obtained? Yes No

If yes, include a copy of DRBC or SRBC approval with the WMP form.

Date application submitted: _____

Anticipated approval date: _____

SRBC or DRBC Approval No.: _____

Date issued: _____

E.3 Operations Plan

The operations plan must include an intake design, a flow schematic, site layout and a footprint for each surface water withdrawal, as required by PA Title 25, Ch. 78a.69(c)(6)(i).

E.4 PA Natural Diversity Inventory (PNDI)

Attach results of PNDI search and, if applicable, supporting documentation of conflict resolution. If a sequential review was conducted, or if a concurrent review is being conducted, attach the PNDI Receipt, completed PNDI Form and a U.S.G.S. 7.5 minute quadrangle map showing project boundaries.

E.5 PA Historic and Museum Commission (PHMC)
Attach results of proof of consultation with the PHMC regarding the presence of a historical or archaeological site included on the federal or state list of historical places at the location of the withdrawal.
E.6 County and Municipality Notifications
Attach proof of notification of the proposed withdrawal to municipalities and counties where the water source will be located.
E.7 Wastewater, Cooling Water, or Mine Water Diversion Impact Analysis
A narrative impact analysis that addresses the following issues and describes the methods proposed to avoid or mitigate impacts. Impact questions: a. Does the existing discharge represent a significant portion of the low flow of the receiving stream below the permitted point of discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If not significant, reference the general presumption that impacts will be minimal in the impact analysis. If significant, describe the degree to which the diversion of wastewater would affect the low flow of the receiving stream, and include a discussion addressing the following issues as relevant:</i> b. Are there any wetlands in the floodplain downstream of the existing discharge point where the diversion of wastewater, cooling water or mine water is anticipated to have a material impact on the elevation or duration of water levels in the wetland? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, identify the wetlands; describe their functions and values, and the proposed method for avoiding or mitigating such impact on the values or functions of the affected wetlands.</i> c. Is the proposed diversion of wastewater anticipated to significantly affect the available habitat of fish species at or below the withdrawal point? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid the impacts.</i> d. Is the applicant aware of any significant downstream wastewater discharges to the stream, where the proposed diversion of wastewater, cooling water, or mine water from the proposed source is anticipated to reduce the assimilative capacity of the stream to accept those discharges without exceeding applicable instream water quality standards? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid changes in assimilative capacity of the stream.</i> e. Is the source on a stream that is listed as having water quality impaired; and would the proposed diversion of wastewater, cooling water or mine water materially exacerbate the water quality conditions leading to the impaired designation? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid changes in water quality conditions.</i> f. Is the proposed diversion upstream of a known significant thermal discharge (such as a power plant), or would the proposed wastewater, cooling water or mine water diversion upstream of a known significant thermal discharge diminish the capacity to assimilate that discharge without exceeding instream thermal standards? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid changes in assimilative capacity of the stream.</i> g. Is the applicant aware of any downstream potable water supply source where the proposed withdrawal is anticipated to impair the amount of water available to meet the demands of such potable water supply? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid the impacts.</i> h. Is the applicant aware of any other downstream water supply uses (such as agricultural, industrial, etc.) where the proposed withdrawal is anticipated to impair the amount of water available to meet the demands of such water supply? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, describe the measures proposed to avoid the impacts.</i> i. Describe any impact avoidance or mitigation plans you are proposing, such as seasonal withdrawals or passby flows.
E.8 Prevention of Rapid Movement of Invasive, Harmful or Nuisance Species
<i>Describe the measures to be taken to prevent the rapid movement of invasive, harmful or nuisance species by vehicles, equipment or other facilities from one site to another.</i>
Section F. Public Water Supply Sources
<i>The following types of information would be provided for each source.</i>

F.1 Source Identification														
Source No. as listed in Section A	Public Water Supplier Name and System Name	Location of proposed withdrawal point:												
		County	Municipality	GPS Coordinates										
				Latitude (decimal degrees): N ° Longitude (decimal degrees): W °										
PADWIS Identification No. :		<i>Attach copy of USGS 7½ Minute Quadrangle map indicating location of proposed source</i>												
Description of proposed withdrawal point:														
F.2 River Basin Commission Approvals														
If the source is located in the Susquehanna River Basin, has SRBC approval been obtained? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, include a copy of SRBC approval with the WMP form.</i> Date application submitted: _____ Anticipated approval date: _____														
F.3 Source Narrative														
Source No. as listed in Section A	Public Water Supplier Name and System Name	Description of how the proposed withdrawal will not adversely affect the quantity or quality of water available to other users of the same water sources												
F.4 PA Natural Diversity Inventory (PNDI)														
Attach results of PNDI search and, if applicable, supporting documentation of conflict resolution. If a sequential review was conducted, or if a concurrent review is being conducted, attach the PNDI Receipt, completed PNDI Form and a U.S.G.S. 7.5 minute quadrangle map showing project boundaries.														
F.5 PA Historic and Museum Commission (PHMC)														
Attach results of proof of consultation with the PHMC regarding the presence of a historical or archaeological site included on the federal or state list of historical places at the location of the withdrawal.														
F.6 County and Municipality Notifications														
Attach proof of notification of the proposed withdrawal to municipalities and counties where the water source will be located.														
Section G. Reuse Plan														
Submit a reuse plan for fluids that will be used to hydraulically fracture wells. If applicable, include proof of a wastewater source reduction strategy in compliance with 25 Pa. Code § 95.10(b).														
Section H. SIGNATURE														
I certify under penalty of law that I have the authority to submit this Water Management Plan on behalf of the Applicant, and that the information set forth in this plan and all attachments is true and accurate to the best of my knowledge.														
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; padding-bottom: 5px;"></td> <td style="width: 50%; border-bottom: 1px solid black; padding-bottom: 5px;"></td> </tr> <tr> <td style="padding-top: 5px;">Name (type or print legibly)</td> <td style="padding-top: 5px;">Title</td> </tr> <tr> <td style="border-bottom: 1px solid black; padding-bottom: 5px;"></td> <td style="border-bottom: 1px solid black; padding-bottom: 5px;"></td> </tr> <tr> <td style="padding-top: 5px;">Signature</td> <td style="padding-top: 5px;">Date</td> </tr> <tr> <td colspan="2" style="border-bottom: 1px solid black; padding-bottom: 5px;">Applicant's Telephone No. : _____</td> </tr> </table>							Name (type or print legibly)	Title			Signature	Date	Applicant's Telephone No. : _____	
Name (type or print legibly)	Title													
Signature	Date													
Applicant's Telephone No. : _____														



WATER MANAGEMENT PLAN INSTRUCTIONS FOR UNCONVENTIONAL GAS WELL DEVELOPMENT

GENERAL INFORMATION

Regardless of which basin the water source is located in, a Water Management Plan (WMP) form must be completed that covers the water sources to be withdrawn or utilized for drilling or hydraulic fracture stimulation of each unconventional natural gas well project in the Commonwealth. In accordance with the 2012 Oil and Gas Act and regulations, no person may withdraw or use water from water sources for drilling or hydraulic fracture stimulation of an unconventional well except in accordance with a WMP approved by DEP. 58 Pa. C. S. § 3211(m); 25 Pa. Code § 78a.69. Applicants are encouraged to contact their DEP District Oil and Gas Management Office regarding any questions concerning the completion of any part of a WMP.

DEP District Oil and Gas Operations' Offices

Northwest District Office
 230 Chestnut Street
 Meadville, PA 16335-3481
 Telephone No.: 814-332-6860

Southwest District Office
 400 Waterfront Drive
 Pittsburgh, PA 15522-3481
 Telephone No. 412-442-4000

Eastern District Office
 207 West Third Street
 Williamsport, PA 17701-6448
 Telephone No. 570-327-3636

Notification must be provided to municipalities and counties where the water source is located prior to submittal of the water management plan. Please attach proof of notification to the WMP form. If the source is located in the Susquehanna or Delaware basin, Susquehanna River Basin Commission (SRBC) and Delaware River Basin Commission (DRBC) notification requirements will be accepted. Please attach SRBC and DRBC proof of notification documentation to the WMP form, if applicable.

Send four (4) copies of the completed WMP package to the appropriate DEP Oil and Gas Management District Office listed above.

APPLICANT AND PLAN COVERAGE INFORMATION

Describe which Oil and Gas District that water source which is being withdrawn or used is located as described in this plan. Sources may be located in more than one DEP District. Only applicants which are unconventional gas operators need to supply its DEP ID number.

WATER MANAGEMENT PLAN

SECTION A. GENERAL WATER SOURCE INFORMATION

Provide a listing of the water sources proposed for withdrawal or utilization for drilling or hydraulic fracture stimulation of unconventional gas wells within the covered area.

With respect to each source, identify the major river basin where the source is located. Abbreviations are acceptable (e.g., DEL = Delaware River Basin; GL = Great Lakes River Basin (including the Genesee River Basin); OHIO = Ohio River Basin (including the Monongahela and Allegheny Rivers); POT = Potomac River Basin; and SUS = Susquehanna River Basin. With regard to each source, list anticipated maximum 30-day average daily quantity of withdrawal in gallons per day (gpd), the maximum rate of withdrawal (gpm) and the instantaneous maximum withdrawal rates. Indicate the type of source (the form uses a check box) Note: wastewater discharges include Publicly Owned Treatment Plants (POTWs) or Acid Mine Drainage (AMD) Treatment Plants, and also include other mine waters and cooling water sources.

The WMP Form requires specific information with respect to each source, which varies depending on the type of source.

Note: To reduce duplication, if a water source and amount are subject to approval by SRBC or DRBC, attach approvals (dockets and Approvals by Rule (ABRs)) or forward those approvals when issued.

Surface water sources: provide the information required in Section C.

Groundwater sources: provide the information required in Section D.

Wastewater, cooling water, or mine water discharge sources: provide the information required in Section E.

Public water supply sources: provide the information required in Section F.

For the Reuse Plan requirement: provide the information required in Section G.

SECTION B. WATER SOURCE AND USE MONITORING/ACT 220 WATER USE REGISTRATION AND REPORTING

For sources in Susquehanna River Basin, refer to a water withdrawal and consumptive use metering and monitoring plan meeting SRBC requirements. For sources in Delaware River Basin, refer to a water withdrawal and use monitoring plan meeting DRBC requirements. ***Water withdrawal and use monitoring plans approved meeting SRBC and DRBC requirements may be incorporated by reference and are accepted by DEP.***

For sources in other basins, provide a water source and use monitoring plan.

Will the total water withdrawn from listed sources and other sources operated by the applicant in same watershed exceed an average rate of 10,000 gpd in any 30-day period?

If yes, note that an Act 220 registration must be filed within 30 days of initiating a water withdrawal or use.

The Water Resources Planning Act (Act 220) requires each person whose total withdrawal from one or more points of withdrawal within a watershed operated as a system either concurrently or sequentially that exceeds an average rate of 10,000 gpd in any 30-day period to register with DEP the source, location and amount of withdrawal. In accordance with 25 Pa. Code Ch. 110, each person who obtains water through interconnection in an amount that exceeds an average rate of 100,000 gpd in any 30-day period must also register that use. Registrations shall be submitted no later than 30 days following the initiation of any such withdrawal or use.

The Act 220 registration webpage is available at:

<http://www.pawaterplan.dep.state.pa.us/StateWaterPlan/WaterUse/WaterUse.aspx>

Water source and use monitoring plan

Monitoring, Reporting and Recordkeeping: Copies of the water monitoring and reporting plans submitted to SRBC and DRBC also need to be forwarded to DEP to ensure accurate recordkeeping is occurring by each agency, also, those with approved WMPs must file their annual Act 220 water use reports with DEP.

For sources that are not subject to DRBC and SRBC approval, the water source and use monitoring plan should:

- (i) Identify the methods to be utilized for accurately monitoring the amount of water withdrawn from each source on a daily basis, and how such data will be recorded and maintained. Monitoring may utilize methods that can accurately measure or estimate the amount of withdrawal in accordance with Act 220 and 25 Pa. Code Ch. 110, which may include (but are not limited to) use of meters or logging of truckloads,
- (ii) Provide for the recording, compilation and maintenance of records regarding the daily amount of water withdrawn from each source and daily instream flow measurements, where applicable, and the monthly average amount of water withdrawn from each source. Water withdrawal data and instream flow measurements must be retained for a period of at least five years, and be available for review by DEP upon request,
- (iii) Indicate that applicants will submit Act 220 water withdrawal data to DEP on at least a **quarterly basis** utilizing the DEP GreenPort system, providing the monthly total amount of withdrawals from each source and the number of days on which withdrawals were made from each source. Information on daily withdrawal volumes for each source need not be submitted as part of such quarterly reports, but must be retained and available for review upon DEP request, and
- (iv) Include a description of maintenance of the proposed measuring and recording devices to ensure accurate measurement of the water source.

Maximum Rate Compliance: Describe the methods proposed by the applicant for ensuring compliance with any maximum rate limitations on the withdrawal. Acceptable methods may include, without limitation:

- (i) physical constraints on equipment;
- (ii) automatic limiters which cutoff or reduce pumping rates if maximum flow rates are exceeded; or

- (iii) flow monitoring and recording methods.

Passby Flow Monitoring: Describe the method to be utilized to monitor compliance with any applicable passby flow conditions. Acceptable methods are:

- (i) utilization of an existing upstream or downstream gaging station;
- (ii) utilization of a surrogate USGS or other established gaging station on another watershed in the geohydrologic area that would signal low flow conditions in the area;
- (iii) installation and utilization of staff gages or utilization of existing fixed water level markers (e.g., on bridges) which are correlated to flow values; or
- (iv) other methods approved by DEP.

Coordination of Information Regarding Source Initiation: In order to assist in responding to public inquiries, DEP requires those with approved WMPs to provide the DEP district office with notice prior to the first use of an approved source. This would be a one-time notification. The water source and use monitoring plan should include the procedure and a statement of intent by the applicant to provide oral or e-mail notice to the DEP district office prior to first use of each newly approved source, with the objective of providing such notice at least 48-hours prior to the first withdrawal. This is intended as an information coordination process, not a WMP condition.

SECTION C. SURFACE WATER SOURCES

C.1. Source Identification and Notification

Describe location of proposed source relative to nearby roads or landmarks. Include GPS coordinates for the location of proposed source. Attach copy of USGS 7½ Minute Quadrangle map indicating location of proposed source.

C.2. River Basin Commission Approvals

When issued, a copy of the SRBC or DRBC approval must be supplied to the applicable DEP district office. If the source is subject to DRBC or SRBC approval, only complete the sections of the WMP Application which aren't subject to review, and have been approved by DRBC or SRBC. The Department may rely upon the information gathered, data analyses performed and expertise of the SRBC and DRBC regarding the proposed water source.

C. 3 Stream Impact and Low Flow Analysis

Provide the method of computation for the low flow analysis of the source of water or submit copies of flow data (attach explanation on separate sheet if necessary). For all run-of-stream sources, groundwater withdrawals that impact a stream and sources with limited storage, compute 7-day, 10-year low flow (Q_{7-10}) using low flow statistical data and appropriate hydrologic engineering techniques. Whenever an intake is located on an ungaged stream, the applicant must use an acceptable method for computing the Q_{7-10} , such as:

- (i) Selecting a reference USGS gaging station and proportioning the yield based on drainage area, or utilization of information provided by StreamStats <http://water.usgs.gov/osw/streamstats/pennsylvania.html>
- (ii) Any data provided should state the method used to measure the flow (current meter, weir, etc.), the dates of observation and the flow observed.

Notes:

(1) If using a reference gaging station and proportionate drainage area calculation, the selected gaging station must be on a watershed having similar geologic and climatic characteristics to those of the ungaged watershed. Other factors to consider are relative size of drainage areas and whether the reference gaging station is influenced by upstream reservoirs or other flow regulation activities. Up-to-date low-flow data for specific gaged watersheds may be obtained from the USGS district offices. Actual flow data collected at the project intake may be used to supplement the use of a reference gaging station.

(2) DEP views StreamStats as one source of information for estimation of Q_{7-10} and average daily flow values, but in some cases it may not necessarily be the best source for determining such information. Attach Stream Stats printout if used for Q_{7-10} determination.

(3) DEP encourages applicants to employ or engage professionals who are experienced with hydrologic issues to assist in evaluation of such flow issues.

C.4. Stream Classification and Uses

Identify the current designated water uses and recognized existing water uses of the stream or other surface water body at the location from which the withdrawal is proposed.

Current designated water uses are listed at 25 Pa Code Chapter 93.9. A current copy of this chapter of the Pennsylvania Code can be obtained from the DEP district office or it can be viewed on the Legislative Reference Bureau website at: <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>.

A current list of existing water uses is maintained on the DEP website (Keyword - Existing Use) or at:

<http://www.dep.pa.gov/Business/Water/PointNonPointMgmt/WaterQuality/Pages/ExistingUse.aspx#.VtRqwJ0o59A>

A current list of stream sections supporting natural reproduction of trout is located at: http://www.fish.state.pa.us/trout_repro.htm

C.5. PA Natural Diversity Inventory (PNDI)

A PNDI search must be conducted prior to submitting a WMP. The PNDI database includes plant and animal species classified as threatened or endangered, special concern species and rare and significant ecological features. The online PNDI Environmental Review and Project Planning Tool is available at www.naturalheritage.state.pa.us. If applicable, the applicant must provide documentation of resolution of any conflicts involving threatened or endangered species identified prior to submitting a WMP, if a sequential review was conducted. If a concurrent review is being conducted, the applicant must submit the PNDI Receipt, completed PNDI Form and a USGS 7.5 minute quadrangle map with the project boundaries delineated on the map. If a source has a threatened or endangered species conflict, it should not be included in the WMP until resolution has been reached. If conflicts or concerns are identified for species other than threatened or endangered species, the Department will address these during their review of the WMP.

C.6 PA Historic and Museum Commission (PHMC)

The applicant must submit with the WMP proof of consultation with the PHMC regarding the presence of historical or archeological site included on the Federal or State List of Historical Places at the location of withdrawal.

C.7 County and Municipality Notifications

Proof of Receipt of County and Municipality Notification- The applicant must submit with the WMP: 1. A copy of correspondence notifying the municipality and county government of applicant's intention to submit a WMP and 2. Evidence that the municipality and county government has received the notification. Acceptable forms of this evidence include certified mail receipt, proof of deliver from a commercial carrier or written acknowledgement of the notification from the municipality.

Submit a copy of the WMP to each municipal and county government with the notification. Failure to provide a copy of the notification correspondence and evidence of municipal receipt of your notification with the-WMP will delay processing the WMP.

Sources subject to SRBC and DRBC approval require notification to the county and municipality per the SRBC and DRBC procedures. Sources not subject to SRBC and DRBC approval require a one-time notice letter provided to the county and municipality where the source is located prior to submission of the WMP or supplement to the plan first listing that source. The applicant needs to attach a copy of this notification letter along with WMP application. Sources previously approved by DEP which are being included in a plan require no additional county and municipal notification.

C.8. Withdrawal Impacts Analysis

Include a narrative impact analysis that addresses anticipated impacts (see specific impact questions in WMP Application Form), and describes the methods proposed to avoid or mitigate impacts (such as proposed passby flow conditions or seasonal withdrawal scenarios). The description of anticipated impacts would include impacts after giving effect to the proposed avoidance or mitigation measures.

Certain agencies, including SRBC, have indicated Class A trout streams may be subject to the most limited impact on fish habitat applying a PIFM-analysis, while other classes of streams may be subject to more liberal habitat impact criteria.

Note: If the proposed withdrawal is $\leq 10\%$ of the Q_{7-10} flow at the point of withdrawal, there is a general presumption that impacts will be minimal and not significant, absent special circumstances. If there are no special circumstances, the applicant may reference the general presumption in the impact analysis, and avoid detailed responses to the following items. If special circumstances are not known, describe those circumstances, and address the questions listed in the Form as applicable. Because applicants do not have access to detailed information on other withdrawals, DEP understands that applicants can only answer this question as to the relationship of their own withdrawal to the Q_{7-10} flow of the source. Situations involving cumulative withdrawal impacts may qualify as "special circumstances," and if DEP becomes aware of such a situation they may request further analysis of potential impacts if deemed necessary.

Notes regarding specific questions:

- b. Wetlands.** The area of evaluation (e.g., distance downstream of the proposed withdrawal point) may vary depending upon the quantity and duration of the proposed withdrawal in relation to stream flow, and will be subject to an exercise of professional judgment.
- d.-e.** Indicate whether the applicant is aware of the particular items identified. It is recognized that DEP may have additional information on those items (for example, regarding the location of downstream discharges) that will be considered during DEP's review of the plan.

C.9. Prevention of Rapid Movement of Invasive, Harmful or Nuisance Species

Describe the measures to be taken to prevent the rapid movement of invasive, harmful or nuisance species by vehicles, equipment or other facilities from one site to another.

SECTION D. GROUNDWATER SOURCES

D.1. Source Identification and Notification

Describe location of proposed source relative to nearby roads or landmarks. Include GPS coordinates for the location of proposed source.

D.2. River Basin Commission Approvals

When issued, a copy of the SRBC or DRBC approval must be supplied to the applicable DEP district office. If the source is subject to DRBC or SRBC approval, only complete the sections of the WMP Application which aren't subject to review, and have been approved by DRBC or SRBC. The Department may rely upon the information gathered, data analyses performed and expertise of the SRBC and DRBC regarding the proposed water source.

D.3. Stream Impact and Low Flow Analysis

Prior to submitting a proposed groundwater withdrawal contained in a WMP, the applicant should conduct an aquifer test. Provide the method of computation for the low flow analysis of the source of water or submit copies of flow data (attach explanation on separate sheet if necessary). For all run-of-stream sources, groundwater withdrawals that impact a stream and sources with limited storage, compute 7-day, 10-year low flow (Q_{7-10}) using low flow statistical data and appropriate hydrologic engineering techniques. Whenever an intake is located on an ungaged stream, the applicant must use an acceptable method for computing the Q_{7-10} , such as:

- (i) selecting a reference USGS gaging station and proportioning the yield based on drainage area, or
- (ii) utilization of information provided by StreamStats <http://water.usgs.gov/osw/streamstats/pennsylvania.html>

Any data provided should state the method used to measure the flow (current meter, weir, etc.), the dates of observation and the flow observed.

Notes:

- (1) If using a reference gaging station and proportionate drainage area calculation, the selected gaging station must be on a watershed having similar geologic and climatic characteristics to those of the ungaged watershed. Other factors to consider are relative size of drainage areas and whether the reference gaging station is influenced by upstream reservoirs or other flow regulation activities. Up-to-date low-flow data for specific gaged watersheds

may be obtained from the USGS district offices. Actual flow data collected at the project intake may be used to supplement the use of a reference gaging station.

(2) DEP views StreamStats as one source of information for estimation of Q_{7-10} and average daily flow values, but in some cases it may not necessarily be the best source for determining such information. Attach Stream Stats printout if used for Q_{7-10} determination.

(3) DEP encourages applicants to employ or engage professionals who are experienced with hydrologic issues to assist in evaluation of such flow issues.

D.4. Stream Classification and Uses

Identify the current designated water uses and recognized existing water uses of the stream or other surface water body at the location from which the withdrawal is proposed.

Current designated water uses are listed at 25 Pa Code Chapter 93.9. A current copy of this chapter of the Pennsylvania Code can be obtained from the DEP regional or district office or it can be viewed on the Legislative Reference Bureau website at: <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>.

A current list of existing water uses is maintained on the DEP website (Keyword- Existing Use) or at:

<http://www.dep.pa.gov/Business/Water/PointNonPointMgmt/WaterQuality/Pages/ExistingUse.aspx#.VtRqwJ0o59A>

A current list of stream sections supporting natural reproduction of trout is located at: http://www.fish.state.pa.us/trout_repro.htm

D.5. PA Natural Diversity Inventory (PNDI)

A PNDI search must be conducted prior to submitting a WMP. The PNDI database includes plant and animal species classified as threatened or endangered, special concern species, and rare and significant ecological features. The online PNDI Environmental Review and Project Planning Tool is available at www.naturalheritage.state.pa.us. If applicable, the applicant must provide documentation of resolution of any conflicts involving threatened or endangered species identified prior to submitting a WMP, if a sequential review was conducted. If a concurrent review is being conducted, the applicant must submit, with the WMP, the PNDI Receipt, completed PNDI Form and a USGS 7.5 minute quadrangle map with the project boundaries delineated on the map. If a source has a threatened or endangered species conflict, it should not be included in the WMP until resolution has been reached. If conflicts or concerns are identified for species other than threatened or endangered species, the Department will address these during their review of the WMP.

D.6 PA Historic and Museum Commission (PHMC) – Refer to Section C.6 for directions to complete PHMC requirements.

D.7 County and Municipality Notifications – Refer to Section C.7 for directions to complete county and municipality notifications requirements.

D.8. Withdrawal Impacts Analysis

Because applicants do not have access to detailed information on other withdrawals, they can only answer this question as to the relationship of their own withdrawal to the Q_{7-10} flow of the source. Situations involving cumulative withdrawal impacts may qualify as “special circumstances” referred to in C.8 above.

D.9 Well Report

Prepare and attach a Well Report explaining and including the following information as required by 25 Pa. Code, § 78a.69 (7)(i – v) This Well Report must include:

- A description of the methods and materials used to construct the well, and a summary of the hydraulic characteristics of the aquifer. Information consistent with and sequenced in the same order specified in the Hydrogeologic Report requirements of the PUBLIC WATER SUPPLY MANUAL, Commonwealth of Pennsylvania, Department of Environmental Protection, NO. 383-2125-108; and the AQUIFER TESTING GUIDANCE FOR PUBLIC WATER SYSTEMS, Commonwealth of Pennsylvania, Department of Environmental Protection, NO. 394-2125-001 will satisfy this requirement.

- A detailed explanation of the proposed methods of well abandonment, consistent with Chapter 7: Well Abandonment Procedures of the GROUNDWATER MONITORING GUIDANCE MANUAL, Commonwealth of Pennsylvania, Department of Environmental Protection, NO. 383-3000-001.

SECTION E. WASTEWATER, COOLING WATER OR MINE WATER DISCHARGE SOURCES

E.1. Source Identification and Notifications

Describe location of proposed source relative to nearby roads or landmarks. For sources not subject to SRBC or DRBC approval, attach a copy of the notification letters provided to municipality and county where source is located.

For sources subject to SRBC and DRBC approval, notification to the county and municipality per the SRBC and DRBC procedures suffices. For sources not subject to SRBC and DRBC approval, a one-time notice letter must be provided to the county and municipality where the source is located prior to submission of the WMP or supplement to the plan first listing that source. For water sources previously approved by DEP which are being included in a plan, no additional county and municipal notification is required.

E.2. River Basin Commission Approvals

For those obtaining water from a wastewater discharger located in the Susquehanna River Basin, complete and submit to SRBC the SRBC Notice of Intent (NOI) Approval By Rule Application. Attach a copy of the SRBC's approval and insert the approval number and date issued in the appropriate place on the application. When issued, a copy of the SRBC or DRBC approval should be supplied to the applicable DEP district office. If the source is subject to DRBC or SRBC approval, only complete the sections of the WMP Application which aren't subject to review, and have been approved by DRBC or SRBC. The Department will rely upon the information gathered, data analyses performed and expertise of the SRBC and DRBC regarding the proposed water source.

E.3. PA Natural Diversity Inventory (PNDI)

A PNDI search must be conducted prior to submitting a WMP. The PNDI database includes plant and animal species classified as threatened or endangered, special concern species, and rare and significant ecological features. The online PNDI Environmental Review and Project Planning Tool is available at www.naturalheritage.state.pa.us. If applicable, the applicant must provide documentation of resolution of any conflicts involving threatened or endangered species identified prior to submitting a WMP, if a sequential review was conducted. If a concurrent review is being conducted, the applicant must submit, with the WMP, the PNDI Receipt, completed PNDI Form and a USGS 7.5 minute quadrangle map with the project boundaries delineated on the map. If a source has a threatened or endangered species conflict, it should not be included in the WMP until resolution has been reached. If conflicts or concerns are identified for species other than threatened or endangered species, the Department will address these during their review of the WMP.

E.4 PA Historic and Museum Commission (PHMC) – Refer to Section C.6 for directions to complete PHMC requirements.

E.5 County and Municipality Notifications – Refer to Section C.7 for directions to complete county and municipality notifications requirements.

E.6 Wastewater, Cooling Water, or Mine Water Diversion Impact Analysis

If the proposed diversion of wastewater, cooling water or mine water equates to $\leq 10\%$ of the Q_{7-10} flow just below point of the existing wastewater, cooling water, or mine water discharge, there is a general presumption that impacts will be minimal and not significant, absent special circumstances, and you may reference the general presumption in your impact analysis, and avoid detailed responses to the following items. If you are aware of special circumstances, describe those circumstances, and address the following items on the Form as applicable. The diverting of wastewater, cooling water and mine water is not necessarily equivalent to withdrawing freshwater. In their review of such sources, DEP may consider whether if and when a passby flow may be necessary where the diverted wastewater is $> 10\%$ of Q_{7-10} . Such a decision requires balancing of a number of factors, including the benefits derived from diverting the wastewater, cooling water, or minewater and thereby reducing the loadings and impacts of pollutants at the point they would otherwise be discharged, and the need for the wastewater, cooling water, or minewater flow in terms of supporting streamflow used for fish habitat and providing assimilative capacity for significant downstream discharges.

E.7. Prevention of Rapid Movement of Invasive, Harmful or Nuisance Species

Describe the measures to be taken to prevent the rapid movement of invasive, harmful or nuisance species by vehicles, equipment or other facilities from one site to another.

SECTION F. PUBLIC WATER SUPPLY SOURCES

F.1. Source Identification

If obtaining water from a Public Water Supplier (PWS), provide the name of the PWS, the specific system name, the Pennsylvania Safe Drinking Water System (PADWIS) identification number, the location of the proposed withdrawal point, and a description of the withdrawal point. The description of the withdrawal point should include the type of water being withdrawn (raw or finished water), and the type of taking point (i.e., bulk water loading station, meter pit, direct customer connection).

F.2. River Basin Commission Approvals

Applicants seeking a WMP approval under this section in the Susquehanna River basin are to submit concurrently the appropriate authorization application to the SRBC pursuant to 18 CFR §806.22(f)(12)(11).

F.3. Source Narrative

The 2012 Oil and Gas Act (58 Pa. C.S. § 3211(m)(2)(i)) requires that the Department make a determination that a proposed withdrawal will not adversely affect the quantity or quality of water available to other users of the same water sources, in this case a PWS. If obtaining water from a PWS, adverse impacts may include:

- Diminution of the PWS's source(s) of supply;
- A PWS exceeding its Water Allocation or Safe Drinking Water Act (SDWA) permit limits (thus causing adverse impacts to Waters of the Commonwealth, aquatic life, the environment, and other users of the water sources);
- Depletion of water storage;
- Affect on system pressures or induce negative pressures;
- Affect on fire flows;
- Water outages;
- Backflow or infiltration;
- Tampering of a water supply;
- Contamination of the water supply;
- Depletion of disinfectant residuals; and
- Other adverse impacts to water quality.

To aid the Department in making a determination, the applicant shall provide a description, in their application, of how the proposed activity will not adversely affect the quantity or quality of the PWS. The description may include a discussion of the following:

- PWS's source and treatment plant capacity
- PWS's water allocation limits
- Operational controls and constraints
- Devices used at the proposed taking point

Applicants are encouraged to discuss this application requirement with the PWS. To facilitate that discussion with the PWS, the applicant should inquire about the PWS' responsibility to conduct an assessment that a withdrawal from its system related to the location and type of taking point, and volume and rate of withdrawal will not adversely impact water quantity or quality of the water available to other users of the water system, or to other users of the PWS sources. The PWS' assessment should include that it has:

- Obtained all necessary permits for bulk water loading stations;
- Confirmed that meter pits and direct customer connections meet all design standards;
- Provided cross connection control and backflow prevention;
- Provided appropriate security measures to prevent unauthorized access or intentional/unintentional tampering;
- Ensured compliance with all SDWA and Water Allocation permit conditions and operational limitations;

- Verified monitoring and recording of all withdrawals or customer sales; and
- Ensured appropriate controls are in place to limit or suspend water sales due to operational needs or drought contingencies.

To ensure on-going protection of the PWS, applicants should comply with any operational controls and constraints that are specified in bulk water or customer sales agreements. Applicants should also follow water loading instructions provided by the PWS. Bulk water customers should ensure that only permitted and approved bulk water loading stations are used for water withdrawals. The unauthorized taking of water from a PWS, the failure to comply with operational controls, or the taking of actions that cause adverse impacts to water quantity or quality may result in an enforcement action by DEP.

F.4 PA Natural Diversity Inventory (PNDI)

A PNDI search must be conducted prior to submitting a WMP. The PNDI database includes plant and animal species classified as threatened or endangered, special concern species, and rare and significant ecological features. The online PNDI Environmental Review and Project Planning Tool is available at www.naturalheritage.state.pa.us. If applicable, the applicant must provide documentation of resolution of any conflicts involving threatened or endangered species identified prior to submitting a WMP, if a sequential review was conducted. If a concurrent review is being conducted, the applicant must submit, with the WMP, the PNDI Receipt, completed PNDI Form and a USGS 7.5 minute quadrangle map with the project boundaries delineated on the map. If a source has a threatened or endangered species conflict, it should not be included in the WMP until resolution has been reached. If conflicts or concerns are identified for species other than threatened or endangered species, the Department will address these during their review of the WMP.

F.5 PA Historic and Museum Commission (PHMC) – Refer to Section C.6 for directions to complete PHMC requirements.

F.6 County and Municipality Notifications – Refer to Section C.7 for directions to complete county and municipality notifications requirements.

SECTION G. Reuse Plan

Include a reuse plan for fluids that will be used for hydraulic fracturing of unconventional wells. Proof of a wastewater source reduction strategy in compliance with § 95.10(b) (relating to treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS)) will satisfy the Reuse Plan requirement.

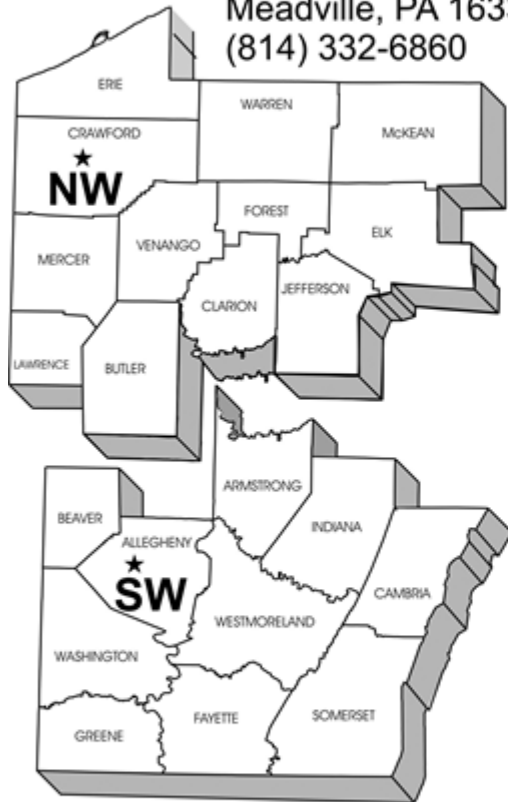
SECTION H. SIGNATURE

Complete and sign the application form.

Oil and Gas Regions

★ Northwest Region

230 Chestnut Street
Meadville, PA 16335-3481
(814) 332-6860



★ Eastern Region

208 West Third Street
Williamsport, PA 17701-6448
(570) 321-6550



★ Southwest Region

400 Waterfront Drive
Pittsburgh, PA 15222-4745
(412) 442-4024

● Central Office

Bureau of Oil and Gas Management
PO Box 8765
Harrisburg, PA 17105-8765
(717) 772-2199

