

# Southcentral Regional Office CLEAN WATER PROGRAM

Application Type	New	NPDES PERMIT FACT SHEET	Application No.	PA0267635
Facility Type	Industrial	INDIVIDUAL INDUSTRIAL WASTE (IW)	APS ID	1049922
Major / Minor	Minor	AND IW STORMWATER	Authorization ID	1373274

Applicant and Facility Information					
Applicant Name	Texas	s Eastern Trans LP	Facility Name	Texas Eastern Bechtelsville Compressor Station	
Applicant Address	890 W	/inter Street Suite 320	Facility Address	467 Forgedale Road	
	Walth	am, MA 02451-1470		Barto, PA 19504-8806	
Applicant Contact	Ivana	Pejatovic	Facility Contact		
Applicant Phone	(617)	560-1364	Facility Phone		
Client ID	82786	j	Site ID	443394	
SIC Code	4922		Municipality	Washington Township	
SIC Description	Trans. & Utilities - Natural Gas tion Transmission		County	Berks	
Date Application Rec	eived	October 15, 2021	EPA Waived?	Yes	
Date Application Accepted		October 27, 2021	If No, Reason		
Purpose of Application		Individual NDPES Industrial W	astewater permit for discha	rges from hydrostatic testing of pipelines	

## **Summary of Review**

SWCA on behalf of Texas Eastern submitted this permit application for the proposed discharge of hydrostatic test water either through the water treatment system at the northern side of the project or directly to ground surface and vegetated uplands.

The discharges of hydrostatic testing water are from certain natural gas pipeline facilities and tanks to be installed as part of the construction work at the Bechtelsville Compressor Station. The construction work is part of a project designed to ensure continued compliance with PADEP's air emissions regulation.

The facility does not qualify for a PAG-10 NPDES General Permit for discharges from hydrostatic testing of tanks and pipelines since the receiving stream has a Chapter 93 designated use of Exceptional Value (EV).

The project will include the installation of new natural gas piping, followed by the hydrostatic testing of the new pipe. The municipal water used for hydrostatic testing will be clean of any pollutants, since all piping to be tested at the station will be new. The hydrostatic test water will be sampled prior to, and at the beginning of, and at the end of discharge to verify compliance with NPDES Individual permit limits. If elevated sampling parameters exist prior to discharge onsite, the hydrostatic test water will be treated by an approved on-site water filtration system before being discharged onsite. The water, either treated or directly released, will be discharged to uplands at the project site through a filter bag placed within a straw bale enclosure underlain by a geotextile fabric. Water will be discharged at a controlled rate to prevent scouring and erosion at the discharge point.

Approve	Deny	Signatures	Date
		Brenda T Fruchtl	
х		Brenda J. Fruchtl, P.G. / Licensed Professional Geologist	December 28, 2021
х		Scott M Arwood Scott M. Arwood, P.E. / Environmental Engineer Manager	12/28/2021

## **Summary of Review**

There is one waterbody identified at the project, a perennial stream, a tributary (01452) to the West Branch Perkiomen Creek that enters the western property boundary and flows along the southwestern fence line before it exits the property through a stormwater culvert. This stream is designated as an Exceptional Value stream under Chapter 93 of the PADEP's regulations. Therefore, an Anti- Degradation – Module 4 was included with the submittal. Because the discharged hydrostatic test water will be clean of pollutants and will be discharged through a filter bag and straw bale enclosure, it is not anticipated that the tributary and West Branch Perkiomen Creek will be degraded.

Approximately 21,200 linear feet of 2-inch to 36-inch diameter piping will be hydrostatically tested throughout the course of the project.

The system is designed for a flow rate of 100 gpm (0.144 MGD) but will likely operate at a lower flow rate. It is estimated discharge of hydrostatic test water will occur on 4 days throughout the year at an estimated 60,000 gallons each day for a total of approximately 240,000 gallons each year.

The discharges are anticipated to occur during 2022 and 2023.

See Figure 1 for project location and outfall location.

### **TIMELINE**

- 1. October 29, 2021. PADEP sent an email outlining the technical deficiencies that need addressed.
- 2. November 10, 2021. Texas Eastern (SWCA) addressed the technical deficiencies.
- 3. November 17, 2021. PADEP sent an email asking some additional questions.
- 4. December 1, 2021. Texas Eastern (SWCA) responded to the additional questions.

#### **Public Participation**

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information					
Outfall No. 001	<u> </u>	Design Flow (MGD)	.144		
Latitude 40°	25' 10.43"	Longitude	-75° 37' 27.92"		
Wastewater Desc	cription: Hydrostatic Test Water				
Receiving Waters	25971380	Stream Code RMI	01452 0.5		
Drainage Area*	0.5 sq mi	Yield (cfs/mi <sup>2</sup> )			
Q <sub>7-10</sub> Flow (cfs)*	0.1	Q <sub>7-10</sub> Basis	StreamStats		
Elevation (ft)	665	Slope (ft/ft)			
Watershed No.	3E	Chapter 93 Class.	EV, MF		
Existing Use		<b>Existing Use Qualifier</b>			
Exceptions to Use	e	Exceptions to Criteria			
Assessment Statu	us Attaining Use(s)				
Cause(s) of Impa	•				
Source(s) of Impa	airment				
TMDL Status		Name			
Nearest Downstre		American Water (Norristov	vn Boro, Montgomery Co)		
PWS Waters	Schuylkill River	Flow at Intake (cfs)			
PWS RMI	25	Distance from Outfall (mi) 41			

## Other Comments:

The discharge water will flow approximately 600 feet through existing groundcover towards the stream where it will have the opportunity for groundwater recharge before reaching its ultimate discharge point at the waterbody.

<sup>\*</sup>USGS StreamStats

## **Treatment Facility Summary**

Treatment Facility Name: Hydrostatic Test Water Dewatering.

Texas Eastern requested an approval of both potential water discharge methods for the hydrostatic water, directly to ground surface and uplands or through the onsite water treatment system.

The hydrostatic test water will be sampled prior to, and at the beginning of, and at the end of discharge to verify compliance with NPDES Individual permit limits. If hydrostatic test water does not meet the permit threshold related to specific sampling parameters levels, it can be treated via an onsite water treatment system. Texas Eastern will have a water treatment system located at the northwest side of the Compressor Station to address water generated during the hydrovac excavation procedure, whose discharge is covered by a temporary discharge approval.

The water, either treated or directly released, will be discharged to uplands at the project site through a filter bag placed within a straw bale enclosure underlain by a geotextile fabric. Water will be discharged at a controlled rate to prevent scouring and erosion at the discharge point.

The maximum flow is 100 GPM (or 144,000 GPD), which won't be sustained.

The design flow is 60,000 GPD which will discharge 240,000 gallons over four 10-hour days.

If the discharge rate is reduced significantly below the design flow (to 40,000 to 50,000 GPD), the discharge will be spread out over a longer period of time.

Texas Eastern has developed an erosion and sediment control plan in accordance with the Pennsylvania Erosion and Sedimentation Pollution Control Program Manual (PA E&S Manual 363-2134-008) as part of the Individual Permit Application. An ESCGP-3 coverage was obtained from the Berks County Conservation District and the PADEP. The components of the erosion and sediment control plan (e.g., rock construction entrances, filter socks, diversion fencing, sediment traps, and inlet protections) were designed and sized based on the PA E&S Manual. Texas Eastern has also prepared a post-construction stormwater management plan as part of its ESCGP-3 NOI submittal. The PCSM was designed in accordance with 25 Pa. Code Chapter 102 and the Pennsylvania Stormwater.

See **Attachment A** for the BMPs in place to address erosion and sedimentation.

Development of Effluent Limitations							
Outfall No.	001	Design Flow (MGD)	.144				
Latitude	40° 25' 7.00"	Longitude	-75° 37' 19.00"				
Wastewater	<b>Description:</b> Hydrostatic Test Water						

#### Antidegradation

Module 4 – Antidegradation was completed since the discharge is located in an Exception Value (EV) watershed.

This Project is required by the PADEP to update the existing compressor units and reduce emissions. Texas Eastern considered several alternatives to avoid discharges within an Exceptional Value (EV) watershed. The site has historical polychlorinated biphenyl (PCB)-impacted areas that cannot be avoided to complete the Project; however, Texas Eastern is committed to prevent the emigration of unacceptable limits of PCBs.

## Non-Discharge Alternatives:

- 1. Change the process and prevent the potential pollution through a non-discharge option. The non-discharge option is considered cost-prohibitive.
- 2. Alternative project siting. The alternative was determined infeasible because the station is existing and requires upgrades. Since the Project updates are required by the state to continue operations, this alternative project site would include the shutdown of the existing Station facilities and create a new, nearby compressor station. This is an environmentally unsound alternative because the environmental impacts associated with greenfield construction of a new facility would be much greater than updating the existing facility.
- 3. Alternative discharge locations. The treatment system requires adequate space to be set up throughout construction. The location selected is the only feasible location with adequate space, no direct resource impacts (upland discharge), and is outside of active construction area. Furthermore, the entire Project area is within an EV watershed and cannot be avoided.
- 4. Trucking the impacted water off-site for disposal. This option is technically feasible and would involve removing potentially PCB-impacted water through individual truck loads for off-site disposal. This would avoid discharges within an EV watershed. The estimated cost of removing construction water (approximately 240,000 gallons total) from the site for off-site disposal is approximated at \$100,000 to \$125,000. The non-discharge option is considered cost-prohibitive, which triggers the need to allow for construction water to be discharged on-site.

Despite the infeasibility of full avoidance alternatives, Texas Eastern has been able to partially implement some alternative scenarios such as utilization of the permitted temporary wastewater treatment system discharge point on site. The 120,000 gallons will be discharged over a 2-day period, and low flow rates and excess discharges will be avoided. The hydrostatic test water will be discharged at a controlled rate through a filter bag. Texas Eastern will implement antidegradation best available combination of technologies (ABACTs) appropriate for EV watersheds on site where possible. Specifically, Texas Eastern will surround the filter bag and the Project site with compost filter socks to remove suspended solids from the water before it drains out of the basin and infiltrates into the surrounding, well vegetated upland area. The discharge water will flow approximately 600 feet through existing groundcover towards the stream where it will have the opportunity for groundwater recharge before reaching its ultimate discharge point at the waterbody.

#### **Parameters and Monitoring Frequency**

Parameters chosen were taken directly from the NPDES PAG-10 General Permit for discharges from hydrostatic testing of tanks and pipelines (effective July 11, 2015) for new tanks and pipelines.

The sampling frequency for all concentration based effluent limits, Dissolved Oxygen, pH, TRC, Total Suspended Solids, Oil and Grease, and Dissolved Iron are twice per discharge to ensure the discharge is non-degrading during the entire discharge event. The sampling frequency differs from the PAG-10 General Permit for TSS, Oil and Grease, and Dissolved Iron due to the discharge being an exceptional value watershed.

The sampling frequency for Duration of Discharge and Flow will be once per discharge since they are measuring a total value for the entire discharge event.

Total Volume Discharged (aka Total Flow) will need reported 1x/month in order to monitor the overall project.

## **Development of limits:**

The limits for Outfall 001 are based on both the antidegradation regulations, which require no measurable change to any receiving streams located in an exceptional value watershed from an additional discharge, and best professional judgment.

The limits proposed are taken direction from the NPDES PAG-10 General Permit for discharges from hydrostatic testing of tanks and pipelines (effective July 11, 2015) for new tanks and pipelines. Per the Fact Sheet for the PAG-10 General Permit (3800-PM-BCW0173i 2/2017), Average monthly limitations for Total Suspended Solids (TSS) (30 mg/L) and Oil and Grease (15 mg/L) are based on best professional judgment (BPJ) using DEP's standard multipliers for conventional and toxic pollutants per established guidance. Additionally, the Oil and Grease limitation of 15 mg/L is a treatment standard in 25 Pa. Code Chapter 95.

## Part A - Effluent Limitations, Monitoring, Recordkeeping and Reporting Requirements

The following applicable footnotes, obtained from the PAG-10 NPDES General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines, effective 7/11/15, were added to Part A.1:

- 1. Footnote (2) or Minimum Measurement Frequency in Part A.I:
  - (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the number of sampling events.
- 2. Footnote (3) for Minimum Measurement Frequency in Part A.I:
  - (3) The permittee shall collect samples at the point of discharge (outfall) prior to the discharge entering the receiving waters. For measurement frequencies of 1/discharge, the permittee shall collect samples within the first 30 minutes of commencing a discharge. For measurement frequencies of 2/discharge, the permittee shall collect one sample at the start of a discharge and one sample at the end of a discharge.
- 3. Footnote (4) for Flow (GPM), Duration of Discharge (hours), and Total Volume (Gallons) in Part A.I.
  - (4) The permittee shall report the average monthly flow, in gallons per minute (GPM), for all discharges occurring during the month. The permittee shall measure the flow and the duration of the discharge (in hours) for each discharge and shall report this information to DEP in the Annual Report as specified in Part C II of this permit. The permittee shall report the total volume discharged each month, in gallons.
- 4. Footnote (5) for Total Residual Chlorine (TRC) in Part A.I:
  - (5) The permittee shall comply with the effluent limitations and monitoring requirements for Total Residual Chlorine (TRC) only when a public water supply or other source of chlorinated water is used in hydrostatic testing.

## PART C SPECIAL CONDITIONS

\*Indicates the Special Condition was obtained / adapted from Part C of the PAG-10 NPDES General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines, effective 7/11/15.

^ Indicates the Special Condition was obtained / adapted from Part A.III.C.1. of the PAG-10 NPDES General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines, effective 7/11/15.

\*Included this requirement since the discharge is in the Delaware River Basin

#### I. OTHER REQUIREMENTS

- A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste,

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requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

- C. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.
- \*D. The permittee shall not discharge any other wastewaters such as cleaning wastewaters, tank bottom water, sewage, raw product, etc. to waters of the Commonwealth. The permittee may discharge these other wastewaters to an available sanitary sewer system, if the permittee obtains permission from the owner. If discharge to a local sanitary sewer system is not an option, the permittee shall properly dispose of these other wastewaters off-site, unless otherwise authorized by DEP.
- \*E. The permittee shall not introduce chemical additives, including but not limited to corrosion inhibitors, bactericides and dyes, into hydrostatic test water unless the permittee completely removes the constituents of such additives from the effluent prior to discharge (i.e., the permittee shall analyze the effluent for the constituents of such additives using the analytical method available that achieves the lowest quantitation limit, and the constituents shall not be detectable). The permittee shall notify DEP prior to introducing chemical additives to the hydrostatic test water.
- #F. This discharge may also be subject to effluent limitations and conditions as developed and required by the Delaware River Basin Commission (DRBC). The DRBC limits may be more stringent. Please contact the DRBC for more information at (690) 883-9500.
- ANNUAL REPORT The permittee shall submit a complete Annual Report to the DEP office that issued the permit by March 1 each year using DEP's Annual Report template, attached to this permit. The Annual Report shall address activities under the permit for the previous calendar year. The permittee shall submit the Annual Report electronically if notified by DEP in writing. (25 Pa. Code § 92a.61(g))

#### \*III. BEST MANAGEMENT PRACTICES (BMPs)

#### A. General

- The permittee shall not discharge in a manner that causes erosion of stream banks or scouring of stream beds. The permittee shall properly direct the discharge of all water discharged so that it does not cause nuisance conditions and does not pool or pond prior to reaching surface waters.
- 2. The permittee shall implement erosion and sedimentation control practices at the discharge point in accordance with 25 Pa. Code Chapter 102 (relating to Erosion and Sediment Control) and DEP's Erosion and Sedimentation Pollution Control Manual (DEP ID: 363-2134-008).
- 3. Wherever possible, the permittee shall not use water that has been chlorinated for hydrostatic testing. If no alternatives to chlorinated water exist, the permittee shall retain the water in the tank or pipeline for at least 24 hours prior to discharge and shall sample the water prior to discharge to confirm that the Total Residual Chlorine limits in Part A of this permit will be achieved.
- 4. If the permittee withdraws water from a stream to conduct its hydrostatic testing, the permittee shall not withdraw a volume of water that exceeds 25 percent of the volume of the stream at the time of withdrawal. The permittee shall not discharge a volume of test water that increases the volume of the receiving stream by more than 25 percent downstream regardless of the source of the test water. The permittee shall not dewater the stream to the extent that downstream users, including aquatic life, are impacted during pipe filling

operations. The permittee shall prevent the impingement and entrainment of fish when withdrawing water from surface waters.

- 5. The permittee shall limit the volume to be discharged to the lowest possible rate to minimize any potential impact on aquatic life and to reduce the potential for erosion. In addition, the permittee shall avoid withdrawals and discharges during critical stream conditions such as low flow, trout stocking season, spawning seasons, recreational seasons, etc. The permittee shall not discharge to trout stocked streams from March 1 to June 15. The listing of trout stock streams can be found on the Pennsylvania Fish and Boat Commission's website: <a href="https://www.fish.state.pa.us">www.fish.state.pa.us</a>.
- 6. The permittee shall clean all tanks and pipelines prior to hydrostatic testing and discharge under this General Permit. The permittee shall collect wastewaters and solids from the cleaning process and shall transport them to an authorized disposal facility.
- 7. The permittee shall not discharge hydrostatic test water and cleaning wastewaters into a combined sewer system or a separate sanitary sewer.
- 8. The permittee shall develop and implement a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), and its NPDES-specific addendum. The permittee shall evaluate and, if necessary, update the PPC Plan on an annual basis, at a minimum, and when one or more of the following occur:
  - a. The PPC Plan fails in an emergency;
  - b. A change in design, industrial process, operation, maintenance, or other circumstance occurs in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
  - c. The list of emergency coordinators or equipment changes; or
  - d. When notified in writing by DEP.

The PPC Plan must be maintained on-site at the location of hydrostatic testing and be made available to DEP upon request.

#### B. Hydrostatic Testing of Pipelines

For pipelines, the permittee shall, at a minimum, place hay bales in a circular fashion at the discharge point with oil absorbent pads and a decant pipe for sampling purposes. The permittee shall install an energy dissipater in the containment areas and shall line the bottom of the containment areas with an impermeable material.

## **Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

	Effluent Limitations						Monitoring Requirements	
Parameter	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2), (3)	Required
raiametei	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (GPM) (4)	Report	XXX	XXX	XXX	XXX	XXX	1/discharge	Measured
Total Flow (M Gal) (4)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Duration of Discharge (hours)	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	2/discharge	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	2/discharge	Grab
TRC (5)	XXX	XXX	XXX	Report	XXX	0.05	2/discharge	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/discharge	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	XXX	7.0	2/discharge	Grab

Compliance Sampling Location: At the Outfall

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#### Footnotes

- (1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.
- (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.
- (3) The permittee shall collect samples at the point of discharge (outfall) prior to the discharge entering the receiving waters. For measurement frequencies of 1/discharge, the permittee shall collect samples within the first 30 minutes of commencing a discharge. For measurement frequencies of 2/discharge, the permittee shall collect one sample at the start of a discharge and one sample at the end of a discharge.
- (4) The permittee shall report the average monthly flow, in gallons per minute (GPM), for all discharges occurring during the month. The permittee shall measure the flow and the duration of the discharge (in hours) for each discharge and shall report this information to DEP in the Annual Report as specified in Part C II of this permit. The permittee shall report the total volume discharged each month, in gallons.
- (5) The permittee shall comply with the effluent limitations and monitoring requirements for Total Residual Chlorine (TRC) only when a public water supply or other source of chlorinated water is used in hydrostatic testing.

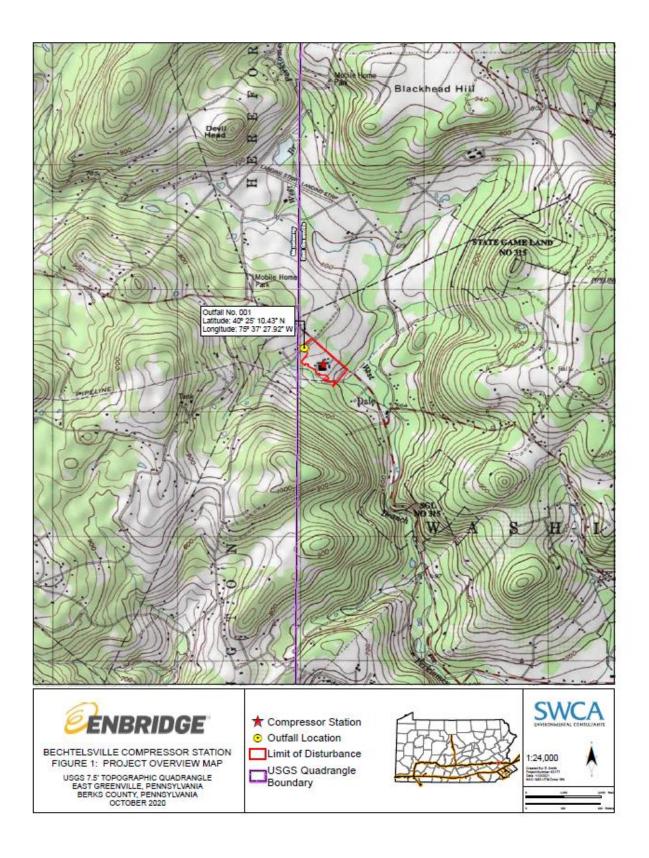


Figure 1. Topographic map showing Outfall location

# Attachment A

Discharge Structure Details and BMPs

