pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0216607**
Facility Type	**Industrial**	APS ID	**627376**
Major / Minor	**Minor**	Authorization ID	**1348480**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Texas Eastern Transmission LP**	Facility Name	**Delmont Compressor Station**
Applicant Address	5400 Westheimer Court	Facility Address	160 Adele Lane
	Houston, TX 77056-5353		Greensburg, PA 15601-8790
Applicant Contact	Niti Tottempudi	Facility Contact	Niti Tottempudi
Applicant Phone	(713) 989-5967	Facility Phone	(713) 989-5967
Client ID	82786	Site ID	260127
SIC Code	4922	Municipality	Salem Township
SIC Description	Trans. & Utilities - Natural Gas Transmission	County	Westmoreland
Date Application Received	April 2, 2021	EPA Waived?	Yes
Date Application Accepted		If No, Reason	Discharge to TMDL waters

Purpose of Application: Renewal of an NPDES permit for treated groundwater discharges.

Summary of Review

On April 02, 2021, the Department received an NPDES Individual Wastewater Permit Renewal Application from Texas Eastern Transmission LP for the Delmont Compressor Station located in Salem Township, Westmoreland County. Texas Eastern Transmission LP submitted revised application forms dated April 28, 2021, to correct errors and omissions in the original NPDES renewal application. The facility is a natural gas compressor station, which is classified by SIC Code 4922. As required by a May 1991 Consent Order and Adjudication (CO&A) entered into by Texas Eastern and the Department, Texas Eastern treats groundwater at the site for PCBs. The PCBs, which remain in the groundwater are low, but relatively stable concentrations (1 - 3 µg/L). They were released from former unlined wastewater disposal pits that contained PCB-bearing lubricating oils. The groundwater treatment systems were permitted under Water Quality Management (WQM) Permit No. 6500202 (as amended) and discharge through the Delmont Compressor Station's two NPDES Outfalls 001 and 002.

The Delmont Compressor Station treats groundwater in two remediation systems before discharge via Outfalls 001 and 002. Jobe 001 treatment system is operating normally, and Turbine 002 system is currently not operating and has not discharged water to Outfall 002 since September 2019. Once the Turbine 002 remediation system resumes operation, all permit required sampling will resume. Currently the groundwater collected in the Outfall 002 treatment system storage tank is hauled to an off-site treatment plant.

Outfall 001 discharges treated PCB-impacted groundwater from an activated carbon treatment system with a design flow of 0.058 MGD and average flow during production of 0.008 MGD. The treated groundwater discharges via Outfall 001 to a pond located at the base of the hillside near Sump C and the springhouse and uphill of Beaver Run, a designated High-Quality

Approve	Deny	Signatures	Date
X		Curtis Holes, P.E. / Environmental Engineering Specialist	June 28, 2021
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	June 29, 2021

Summary of Review

stream. There is not a direct point source discharge from the pond to Beaver Run; however, the pond is unlined, so there is presumed to be groundwater flow from the pond to the stream. Texas Eastern has stated that PCBs have never been found in either the pond water or sediments, although neither is sampled regularly.

The historic Outfall 001 collection system consists of the western French drain. Texas Eastern subsequently determined that the French drains were only capturing runoff from the adjacent hillside; the drains were located above the water table and thus received no water at base flow conditions. It was also determined that sediments from French drains were contributing to treatment system interferences and likely contributed to the blockage in the collection system. Since the concrete collection basin was effectively capturing all of the spring flow after the blocked pipe was replaced, the French drains were disconnected from the system in July 2014.

A WQM permit amendment (6500202, Amendment No. 1) was issued in October 2014 to authorize other upgrades to the Outfall 001 collection and treatment systems. Increasing spring water flow rates combined with inefficiencies within the former system (i.e., pumping twice: from Sump C to Sump B and Sump B to treatment) that prevented use of the system's full capacity are what prompted Texas Eastern to pursue the upgrades.

A new concrete collection vault was installed to replace the existing concrete collection basin. The new vault has an open face into the hillside to capture spring flow. The vault has an overflow leading to Sump C. A new 40 gpm submersible pump was installed in Sump C, which pumps water to new 10 µm bag filters. This change eliminated the intermediate pumping step in the springhouse (Sump B) and was intended to help reduce the incidence of overflows from the collection system. The new bag filters operate in the same capacity as the old cartridge filters by removing sediment (and adsorbed PCBs) from the wastewater. Due to the easier filter elements change-out, the bag filters were selected to replace the cartridge filters. The GAC filters were not modified, but the equalization tank was removed from service. A new 1 µm post-filter acts as a polishing unit for effluent from the GAC filters.

Outfall 002 discharges air compressor condensate and PCB-impacted groundwater that infiltrates the basements and sumps of the station's compressor and turbine buildings. Pumps rated for 50 gpm direct the infiltrated water to an 8,800-gallon aboveground storage tank. The treatment system for Outfall 002 includes a 20 gpm centrifugal transfer pump to pump water out of the storage tank; a fiberglass coalescing oil/water separator; a second 20 gpm centrifugal transfer pump to pump water from the oil/water separator; a cartridge filter with twenty 1 µm filters; two parallel treatment trains consisting of one clay/coal filter and two granular activated carbon filters in series; a cartridge post-filter with five 1 µm filters; a 100 gallon transfer tank with a 25 gpm pump; and a 12,600-gallon treated water tank. The fiberglass, corrosion-resistant coalescing oil/water separator was installed in December 2013 to replace the old oil/water separator, which was in a state of disrepair and needed to be replaced to ensure uninterrupted treatment.

The Outfall 002 treatment system is operated in batch mode and is only manually started when there is a sufficient amount of wastewater in the storage tank. The maximum design flow of the Outfall 002 system is 20 gpm with a normal operating flow rate of 16 gpm. According to correspondence from the previous permit application review, treated water at Outfall 002 typically goes to the same pond as Outfall 001 (under normal groundwater infiltration and batch discharge flow rates) and will only discharge to Beaver Run via a separate drainage pathway under heavy rainfall conditions (the defined portion of this alternative Outfall 002 drainage pathway does not reach all the way to Beaver Run).

The Permittee has requested a reduction in monitoring frequency for both Outfalls 001 and 002 along with removing TSS, $CBOD_5$, and Oil and Grease from monitoring requirements of Outfall 002. Since 2016, there have been no detection of total polychlorinated biphenyls (PCBs) at the respective discharge locations for Outfalls 001 and 002. Prior to September 2019, when Outfall 002 was discharging, TSS was detected once at a maximum concentration of 5.8 $^{mg}/_{L}$; $CBOD_5$ was detected three (3) times with a maximum concentration of 10.4 $^{mg}/_{L}$; and O&G has never been detected. The Development of Effluent Limits section, of this Fact Sheet, contains the evaluation of eligibility for a reduction in monitoring frequency.

The client has no open violations with the Clean Water Program.

Residual waste disposal must meet solid waste regulations.

It is recommended that a draft permit be published for public comment in response to this application.

Summary of Review
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	Design Flow (MGD)	0.008
Latitude	40º 23' 4.11"	Longitude	-79º 33' 7.19"
Quad Name		Quad Code	
Wastewater Description:	Treated groundwater from a spring		
Receiving Waters	Beaver Run (HQ-CWF)	Stream Code	42931
NHD Com ID	125291961	RMI	17.8100
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-B	Chapter 93 Class.	HQ-CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	SILTATION		
Source(s) of Impairment	GRAZING IN RIPARIAN OR SHORELINE ZONES		
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	Westmoreland Municipal Authority – Sweeny Plant		
PWS Waters	Beaver Run Reservoir	Flow at Intake (cfs)	
PWS RMI	12.0	Distance from Outfall (mi)	5.0

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.013 (manual batch)
Latitude	40º 23' 3.83"	Longitude	-79º 33' 7.08"
Quad Name		Quad Code	
Wastewater Description:	Treated groundwater from the turbine compressor building basement and sump and air compressor condensate		
Receiving Waters	Beaver Run (HQ-CWF)	Stream Code	42931
NHD Com ID	125291961	RMI	17.51
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-B	Chapter 93 Class.	HQ-CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	SILTATION		
Source(s) of Impairment	GRAZING IN RIPARIAN OR SHORELINE ZONES		
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	Westmoreland Municipal Authority – Sweeny Plant		
PWS Waters	Beaver Run Reservoir	Flow at Intake (cfs)	
PWS RMI	12.0	Distance from Outfall (mi)	5.0

Treatment Facility Summary

Treatment Facility Name: Delmont Compressor Station

WQM Permit No.	Issuance Date
6500202	10/23/2000
6500202 A-1	10/17/2014

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Tertiary	Bag Filters Carbon Filters	N/A	

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.058				

Compliance History	
Summary of DMRs:	No exceedances with permit effluent limits.
Summary of Inspections:	The Department did not inspect the facility during the last permit cycle.

Compliance History

DMR Data for Outfall 001 (from March 1, 2020 to February 28, 2021)

Parameter	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20
Flow (MGD) Average Monthly	0.0404	0.0076	0.0092	0.0044	0.0020	0.0025	0.0018	0.0051	0.0024	0.0054	0.0108	0.0144
Flow (MGD) Daily Maximum	0.0095	0.0314	0.0278	0.0233	0.0120	0.0203	0.0083	0.0240	0.0044	0.0123	0.0296	0.0416
pH (S.U.) Minimum	7.1	7.2	7.4	6.9	7.4	7.4	7.1	7.1	7.1	7.1	6.8	7.3
pH (S.U.) Maximum	7.4	7.8	7.8	7.7	7.9	7.4	7.1	7.45	7.1	7.1	7.8	7.6
Total PCBs (ug/L) Average Monthly	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total PCBs (ug/L) Daily Maximum	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

DMR Data for Outfall 002 (from March 1, 2020 to February 28, 2021)

Outfall 002 has not discharge since September 2019.

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	0.008
Latitude	40° 23' 4.11"	**Longitude**	-79° 33' 7.19"

Wastewater Description: Treated groundwater from a spring

Technology-Based Effluent Limitations (TBELs)

The treated groundwater discharges at Outfall 001 are not subject to any Federal Effluent Limitations Guidelines. Therefore, TBELs are developed based on DEP's Best Professional Judgment and applicable regulatory effluent standards and monitoring requirements.

As described at the beginning of this Fact Sheet: pursuant to a May 1991 Consent Order and Adjudication entered into by Texas Eastern and the Department, Texas Eastern installed granular activated carbon treatment systems at the Delmont Compressor Station to treat PCB-impacted groundwater. Granular Activated Carbon (GAC) is recognized as the Best Available Treatment (BAT) technology for the removal of PCBs from wastewater. Based on the effectiveness of GAC, DEP expects that total PCBs will not be detected above DEP's minimum recommended target quantitation limit of 1.75 µg/L. In practice, much more stringent limitations for PCBs are required pursuant to Pennsylvania's water quality standards; however, since concentrations of PCBs cannot be quantified at the very low level of Pennsylvania's total PCB water quality standard (0.000064 µg/L), compliance with PCB limits is evaluated pursuant to the 1.75 µg/L target quantitation limit.

Regulatory Effluent Standards and Monitoring Requirements

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(b).

Effluent standards for pH (6.0 to 9.0 S.U.) are imposed on industrial wastes by 25 Pa. Code § 95.2(1).

Table 1: TBELs and Monitoring Requirements for Outfall 001

Parameter	Monthly Average (µg/L)	Daily Maximum (µg/L)
Flow (MGD)	Report	Report
PCBs, Total	1.75 (QL)	1.75 (QL)
pH	6.0 (Minimum)	9.0 (Maximum)

Water Quality-Based Effluent Limitations (WQBELs)

No water quality analysis is performed for discharges from Outfall 001. For the previous NPDES permit issued for the Delmont Compressor Station, DEP calculated WQBELs for total PCBs based on dilution of the discharge by the Q_{7-10} flow of Beaver Run. However, as the site plan shows, Outfall 001 actually discharges to a pond adjacent to Beaver Run. There is presumably some groundwater flow from the pond and Beaver Run, but there is otherwise no direct surface water connection between the pond and Beaver Run. With respect to the Q_{7-10} design stream flow conditions required for water quality modeling (per 25 Pa. Code § 96.4(g)), there is no consistent flow into the pond other than the treated spring, which is the NPDES-permitted discharge. Since Q_{7-10} flow is effectively zero in the pond, water quality criteria must be met at the end-of-pipe.

Other than pH, "total PCBs" is currently the only pollutant parameter identified for limitation at Outfall 001. End-of-pipe limits equivalent to water quality criteria for total PCBs will be as follows:

Table 2: WQBELs for Outfall 001

Parameter	Monthly Average (µg/L)	Daily Maximum (µg/L)
PCBs, Total	0.000064	0.000128

The concentration limits in Table 2 are calculated based on the following: where the most stringent applicable numeric water quality criterion is a chronic fish, human health or cancer risk level criterion (the most stringent PCBs criterion is a cancer risk level criterion), the average monthly limit is set equal to the value of the corresponding criterion with maximum

daily limits calculated as two times the average monthly limit pursuant to the recommendations in DEP's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits*.

Total Dissolved Solids (TDS)

Integral to the implementation of 25 Pa. Code § 95.10 is the principle that existing, authorized mass loadings of TDS are exempt from any treatment requirements under these provisions. Existing mass loadings of TDS up to and including the maximum daily discharge loading for any existing discharge, provided that the loading was authorized prior to August 21, 2010 are exempt. Discharge loadings of TDS authorized by the Department are typically exempt from the treatment requirements of Chapter 95.10 until the net TDS loading is increased, an existing discharge proposes a hydraulic expansion or a change in the waste stream. If there are existing mass or production-based TDS effluent limits, then these are used as the basis for the existing mass loading. The facility is not new or expanding waste loading of TDS, therefore, the facility is exempt from 25 Pa. Code § 95.10 treatment requirements.

Antidegradation

As permitted, Outfall 001 discharges to Beaver Run, which has a designated use for High-Quality Cold-Water Fishes (HQ-CWF). Regulations at 25 Pa. Code § 93.4a(b) require that "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."[1] Additionally, § 93.4a(c) requires that "the water quality of High Quality Waters shall be maintained and protected, except as provided in § 93.4c(b)(1)(iii) (relating to implementation of antidegradation requirements)."

With regard to the implementation of antidegradation requirements under § 93.4c, Texas Eastern is not proposing a new, additional or increased discharge to High Quality Waters, so the non-discharge alternatives analysis and public participation requirements of §§ 93.4c(b)(1)(i) and (ii) are not triggered. Section 93.4c(b)(1)(iii) provides for a social or economic justification ("SEJ") in High-Quality Waters that would allow lower water quality if necessary, to accommodate important economic or social development in the area in which the waters are located. No SEJ appears to have been provided for the Delmont Compressor Station's discharges—if one was, it would have been developed when the discharges first commenced in the early-1990s (or in 2000 when the Outfall 001 treatment system capacity was doubled to its current flow capacity of 0.058 MGD).

Regardless of whether an SEJ was provided, the permit limits should ensure that the existing, HQ-CWF use of Beaver Run is protected (note: Beaver Run's existing use = designated use). First, Outfall 001 does not discharge directly to Beaver Run, so there is a physical separation between the discharge and the "receiving" stream. Second, discharges to the pond adjacent to Beaver Run are justified because if Texas Eastern did not collect and treat the PCB-contaminated groundwater expressed in the spring, then any mobilized PCBs present in the site's groundwater would simply flow to Beaver Run without treatment. In addition, requiring end-of-pipe compliance with water quality criteria would not result in any degradation of Beaver Run as a result of mixing and dilution of the discharge with the stream. For these reasons, antidegradation requirements are satisfied for Outfall 001.

Total Maximum Daily Load for Streams Impaired by Acid Mine Drainage in the Kiskiminetas-Conemaugh River Watersheds

A Total Maximum Daily Load (TMDL) for the Kiskiminetas-Conemaugh River Watersheds (Kiski-Conemaugh TMDL)—of which Beaver Run is a part—was completed on January 29, 2010 for the control of acid mine drainage pollutants: iron, aluminum, manganese, sediment, and pH. As part of the TMDL, EPA developed aggregate WLAs for facilities in the watersheds that are currently without metals permits limits (identified in the TMDL as "Negligible Discharge Facilities"). In the report accompanying the TMDL (p. 65), EPA states:

> EPA developed aggregate WLAs based on the sum of the available information regarding flow from each facility multiplied by the applicable numeric water quality criterion. If information on effluent flows was unavailable, effluent flow was determined on the basis of best professional judgment using flows from the permits of similar facilities. These facilities do not currently have permit limits for the pollutants of concern, and there may not be reasonable potential for the NPDES permitting authority to determine a numeric effluent limit in the permit is necessary. The decision to provide an aggregate WLA to these sources does not reflect any determination by EPA that an effluent limit is needed or required in a NPDES permit.

[1] When an existing use is not specified for a stream, the stream's existing use is its designated use.

Texas Eastern listed the TMDL's metals as "believed absent" in the NPDES permit renewal application. Although there is no corroborating analytical data to support that conclusion, the facility's treatment systems should help to mitigate any metals that may be present in the groundwater. The factors described above with regard to antidegradation should also alleviate any metals contributions from the Delmont Compressor Station to the Kiskiminetas-Conemaugh River Watersheds. Based on these factors and given that no facility specific WLAs were assigned to the Delmont Compressor Station, no TMDL WQBELs will be imposed in the permit for TSS, iron, aluminum, or manganese. The only TMDL parameter-of-concern that remains is pH, which is already controlled based on 25 Pa. code § 95.2(1).

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 *(l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.*

The facility is not seeking to revise the previously permitted effluent limits.

Effluent Limitations and Monitoring Requirements for Outfall 001

Effluent limits applicable at Outfall 001 are the more stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements.

Table 3: Effluent Limits and Monitoring Requirements for Outfall 001

Pollutant	Mass (pounds/day)		Concentration (µg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code §92a.61(b)
PCBs, Total	—	—	0.000064*	0.000128*	—	WQBELs
pH	within the range of 6.0 to 9.0					25 Pa. Code § 95.2(1)

*Compliance is evaluated using a target quantitation limit of <1.75 µg/L. A result of "<1.75 µg/L" will be considered to be in compliance with the total PCBs limits in Table 3.

Monitoring Frequency for Outfall 001

The Delmont Compressor Station is an existing facility with no history of non-compliance with effluent limitations over the past two (2) years according to the DMR data. This meets the requirements contained in the statistical procedures in EPA's guidance, "*Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies*" (April 1996) to conduct a parameter-by-parameter analysis on eligibility for reduced monitoring frequency.

At a minimum, the two (2) most current years of Monthly Average effluent data representative of the current operating conditions for the parameter at the particular outfall will be used to calculate the Long-Term Average discharge rate for use in Tables 1 and 2 of the EPA's guidance document. Table 4 below, is a summary of the referenced Tables.

Table 4: Ratio of Long-Term Effluent Average to Monthly Average Limit

Baseline Monitoring	100-76%	75-66%	65-50%	49-25%	<25%
7/wk.	6/wk.	5/wk.	4/wk.	3/wk.	1/wk.
6/wk.	5/wk.	4/wk.	3/wk.	2/wk.	1/wk.
5/wk.	4/wk.	4/wk.	3/wk.	2/wk.	1/wk.
4/wk.	4/wk.	3/wk.	2/wk.	1/wk.	1/wk.
3/wk.	3/wk.	3/wk.	2/wk.	1/wk.	1/wk.
2/wk.	2/wk.	2/wk.	1/wk.	2/month	1/month
1/wk.	1/wk.	1/wk.	1/wk.	2/month	1/2 months
2/month	2/month	2/month	2/month	2/month	1/qtr.
1/month	1/month	1/month	1/month	1/qtr.	1/6 months

The baseline monitoring of 2/month is consistent with the existing monitoring frequency for Delmont Compressor Station Outfall 001 and will be used for the comparison of the parameter-by-parameter analysis. For the analysis, the most current two (2) years of DMR data for Outfall 001 to calculate the Long-Term Average for each parameter to see if the monitoring frequency on a parameter-by-parameter basis can be relaxed. Below is a summary of the performance-based analysis for Outfall 001.

Table 5: Performance-Base Reduction of NPDES Permit Monitoring Frequency Analysis

Parameter	Monthly Average Permit Limit ($^{\mu g}/_{L}$)	Long-Term Average ($^{\mu g}/_{L}$)	Ratio Long-Term Average to Monthly Average Limit (%)	Recommended Monitoring Frequency
PCB, Total	1.75	0.537	30.7	2/month

Monitoring requirements are based on the previous permits' monitoring requirements for Delmont Compressor Station along with recommendations from the Performance-Based Reduction Analysis and displayed in Table 6 below.

Table 6: Monitoring Requirements for Outfall 001

Parameter	Sample Type	Minimum Sample Frequency
Flow (MGD)	Meter	2/month
PCBs, Total	Grab	2/month
pH	Grab	2/month

Development of Effluent Limitations

Outfall No.	002	**Design Flow (MGD)**	0.013 (batch)
Latitude	40° 23' 3.83"	**Longitude**	-79° 33' 7.08"

Wastewater Description: Treated groundwater from the turbine compressor building basement and sump and air compressor condensate

Technology-Based Effluent Limitations (TBELs)

As with Outfall 001, the discharges at Outfall 002 are not subject to any Federal Effluent Limitations Guidelines. DEP previously imposed the following TBELs at Outfall 002.

Table 7: TBELs for Outfall 002

Parameter	Monthly Average (mg/L)	Instant. Maximum (mg/L)
$CBOD_5$	10	20
Total Suspended Solids	30	60
Oil and Grease	15	30
pH	6.0 (Min)	9.0 (Max)

The $CBOD_5$, TSS, and oil and grease TBELs were imposed due to the presence of those pollutants in significant concentrations in the influent wastewater to the Outfall 002 treatment system from the 2003 permit renewal application. The permittee requested removing $CBOD_5$, TSS, and oil and grease from monitoring requirements. The influent to Outfall 002 treatment system has not shown that these parameters no longer have a Reasonable Potential (RP) and the contaminated groundwater PCB source was lubricant oils containing PCBs, so the RP remains for these parameters. At this time, the TBELs previously imposed will be maintained in the renewed permit (pursuant to EPA's anti-backsliding regulation at 40 CFR 122.44(l)); however, based on DMR results, a monitoring frequency reduction for CBOD-5, TSS and oil and grease will be evaluated below in the Outfall 002 section of this Fact Sheet.

Regulatory Effluent Standards and Monitoring Requirements

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(b).

Effluent standards for pH (6.0 to 9.0 S.U.) are imposed on industrial wastes by 25 Pa. Code § 95.2(1).

Water Quality-Based Effluent Limitations (WQBELs)

The rationale for the total PCB WQBELs and antidegradation evaluation described in the Development of Effluent Limitations of Outfall 001 of this Fact Sheet also apply to Outfall 002. Outfall 002 discharges to the same pond as Outfall 001, so Outfall 002 will be subject to the same end-of-pipe PCB WQBELs as Outfall 001. Antidegradation requirements are satisfied.

TMDL for Streams Impaired by Acid Mine Drainage in the Kiskiminetas-Conemaugh River Watersheds

As with Outfall 001, the TMDL's metals are not considered to be parameters-of-concern for Outfall 002's groundwater discharges. Consistent with that determination and given the absence of site-specific TMDL WLAs in the Kiski-Conemaugh TMDL for the Delmont Compressor Station, no TMDL WQBELs will be imposed at Outfall 002.

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 *(l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit*

(unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

The facility is not seeking to revise the previously permitted effluent limits.

Effluent Limitations and Monitoring Requirements for Outfall 002

Effluent limits applicable at Outfall 002 are the more stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements.

Table 8: Effluent Limits and Monitoring Requirements for Outfall 002

Pollutant	Mass (pounds/day)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code §92a.61(d)(1)
CBOD-5	—	—	10	—	20	TBELs; 40 CFR §122.44(l)
Total Suspended Solids	—	—	30	—	60	TBELs; 40 CFR §122.44(l)
Oil and Grease	—	—	15	—	30	25 Pa. Code § 95.2(2)(ii)
PCBs, Total (µg/L)	—	—	0.000064*	0.000128*	—	WQBELs
pH	within the range of 6.0 to 9.0					25 Pa. Code § 95.2(1)

*Compliance is evaluated using a target quantitation limit of <1.75 µg/L. A result of "<1.75 µg/L" will be considered to be in compliance with the total PCBs limits in Table 3.

Monitoring Frequency for Outfall 002

The Delmont Compressor Station is an existing facility with no history of non-compliance with effluent limitations over the past two (2) years according to the DMR data. This meets the requirements contained in the statistical procedures in EPA's guidance, "*Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies*" (April 1996) to conduct a parameter-by-parameter analysis on eligibility for reduced monitoring frequency.

At a minimum, the two (2) most current years of Monthly Average effluent data representative of the current operating conditions for the parameter at the particular outfall will be used to calculate the Long-Term Average discharge rate for use in Tables 1 and 2 of the EPA's guidance document. $CBDO_5$ had one (1) concentration of <121 mg/L and is not eligible for a monitoring frequency reduction. Table 9 below, is a summary of the referenced Tables.

Table 9: Ratio of Long-Term Effluent Average to Monthly Average Limit

Baseline Monitoring	100-76%	75-66%	65-50%	49-25%	<25%
7/wk.	6/wk.	5/wk.	4/wk.	3/wk.	1/wk.
6/wk.	5/wk.	4/wk.	3/wk.	2/wk.	1/wk.
5/wk.	4/wk.	4/wk.	3/wk.	2/wk.	1/wk.
4/wk.	4/wk.	3/wk.	2/wk.	1/wk.	1/wk.
3/wk.	3/wk.	3/wk.	2/wk.	1/wk.	1/wk.
2/wk.	2/wk.	2/wk.	1/wk.	2/month	1/month
1/wk.	1/wk.	1/wk.	1/wk.	2/month	1/2 months
2/month	2/month	2/month	2/month	2/month	1/qtr.
1/month	1/month	1/month	1/month	1/qtr.	1/6 months

The baseline monitoring of the existing monitoring frequency for Delmont Compressor Station Outfall 002 and will be used for the comparison of the parameter-by-parameter analysis. For the analysis, the most current two (2) years of DMR data for Outfall 002 to calculate the Long-Term Average for each parameter to see if the monitoring frequency on a parameter-by-parameter basis can be relaxed. Below is a summary of the performance-based analysis for Outfall 002.

Table 10: Performance-Base Reduction of NPDES Permit Monitoring Frequency Analysis

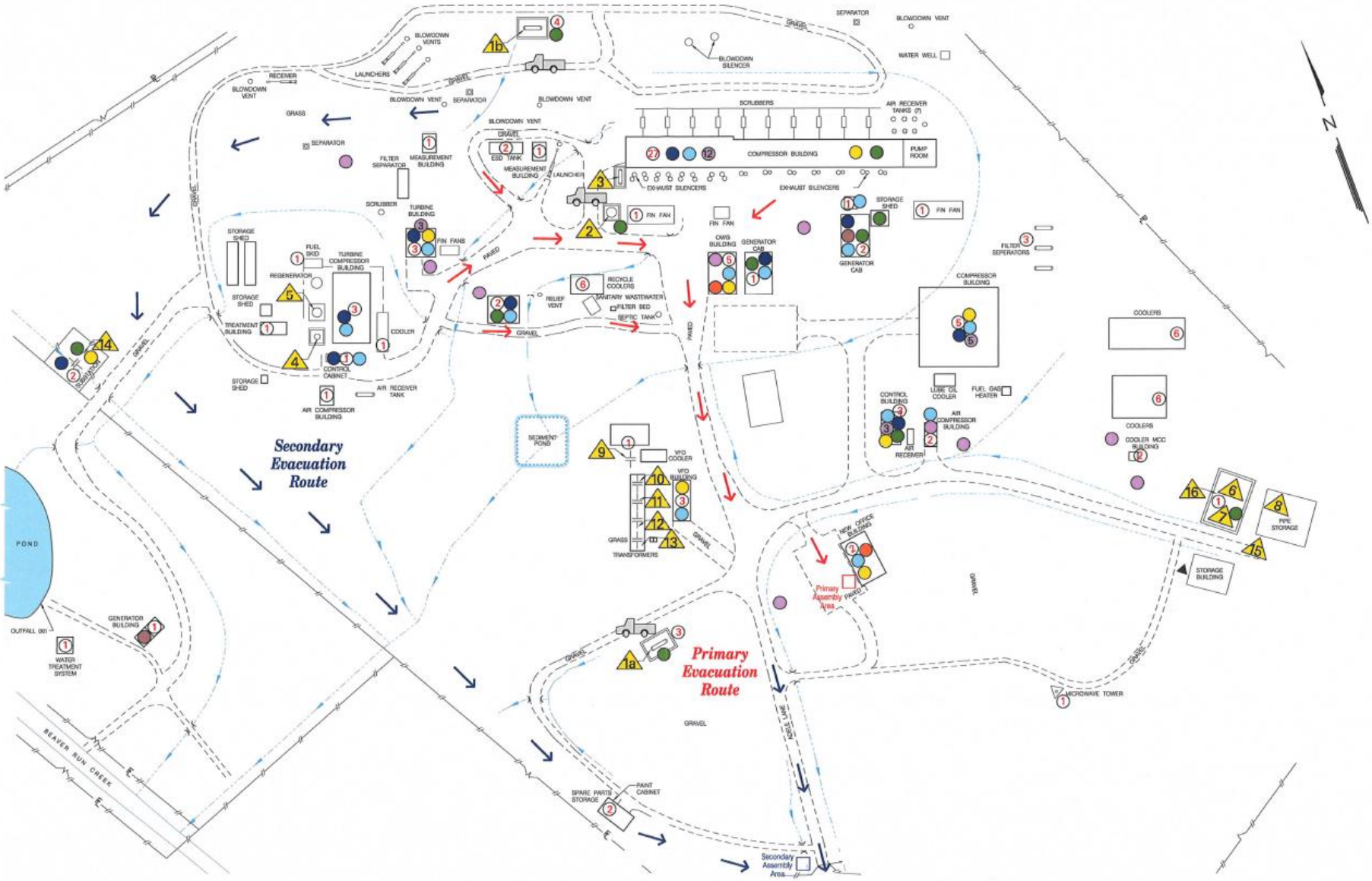
Parameter	Baseline Monitoring Frequency	Monthly Average Permit Limit ($\mu g/L$)	Long-Term Average ($\mu g/L$)	Ratio Long-Term Average to Monthly Average Limit (%)	Recommended Monitoring Frequency
PCB, Total	2/Month	1.75	0.5	28.5	2/month
Total Suspended Solids	2/Quarter	30.0	0.98	3.2	1/6 months
Oil and Grease	2/Quarter	15.0	4.2	28.0	2/quarter

Monitoring requirements are based on the previous permits monitoring requirements for Delmont Compressor Station along with recommendations from the Performance-Based Reduction Analysis and displayed in Table 11 below.

Table 11: Monitoring Requirements for Outfall 002

Parameter	Sample Type	Minimum Sample Frequency
Flow (MGD)	Meter	2/Month
PCBs, Total	Grab	2/Month
CBOD-5	Grab	2/Quarter
Total Suspended Solids	Grab	1/6 Months
Oil and Grease	Grab	2/Quarter
pH	Grab	2/Quarter

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☒	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☒	Other: Facility Site Plan



DELMONT COMPRESSOR STATION PLOT PLAN (OPERATIONS AREA)