

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0252701
APS ID 1026007
Authorization ID 1331762

Applicant and Facility Information

Applicant Name	<u>Eastern Gas Transmission & Storage, Inc.</u>	Facility Name	<u>South Bend Compressor Station</u>
Applicant Address	<u>925 White Oaks Boulevard</u> <u>Bridgeport, WV 26330-6919</u>	Facility Address	<u>104 CNG Street</u> <u>Shelocta, PA 15774-3014</u>
Applicant Contact	<u>Ian Whitlock</u>	Facility Contact	<u>Ian Whitlock</u>
Applicant Phone	<u>(804) 461-0281</u>	Facility Phone	<u>(804) 461-0281</u>
Client ID	<u>81074</u>	Site ID	<u>633618</u>
SIC Code	<u>4922</u> <u>Trans. & Utilities - Natural Gas</u> <u>Transmission</u>	Municipality	<u>South Bend Township</u>
SIC Description		County	<u>Armstrong</u>
Date Application Received	<u>October 19, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 2, 2020</u>	If No, Reason	
Purpose of Application	<u>Renewal of an NPDES Permit for an existing discharge of industrial waste.</u>		

Summary of Review

The facility is primarily engaged in storage of natural gas and a compressor station. Wastewater is generated by groundwater that infiltrates the compressor building basement which is then pumped out and treated prior to discharge.

The permittee is changing their name from Dominion Energy Transmission, Inc. to Eastern Gas Transmission and Storage, Inc. will be incorporated in this permit renewal.

The permittee requested a sampling frequency reduction for all parameters in their current permit from 2/month to 1/month based on discharge data over the last two years showing that the non-process water discharge is consistent in nature/water quality and in compliance with the permit limitations. Based on a review of the last five years of DMR data, and the very small volume of flow of the discharge, the Department changed the sampling frequency for all parameter to 1/month in the proposed draft permit.

There are currently nine open violations listed in EFACTS for this permittee (10/13/2021). The permittee will be advised to try to resolve these violations during the draft comment period.

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.

Approve	Deny	Signatures	Date
X		Adam J. Pesek Adam J. Pesek, E.I.T. / Environmental Engineer	October 13, 2021
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	October 14, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.001
Latitude	40° 38' 19"	Longitude	-79° 21' 26"
Quad Name	Elderton	Quad Code	1311
Wastewater Description: Treated Groundwater			
Receiving Waters	Crooked Creek	Stream Code	46216
NHD Com ID	123858494	RMI	26.82
Drainage Area	199.3	Yield (cfs/mi ²)	0.0658
Q ₇₋₁₀ Flow (cfs)	19.7	Q ₇₋₁₀ Basis	USGS Gage 03038000 (April 1984 – April 2015)
Elevation (ft)	983	Slope (ft/ft)	0.006
Watershed No.	17-E	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Background/Ambient Data		Data Source	
pH (SU)	7.0	Default	
Temperature (°F)			
Hardness (mg/L)	152	Background Stream Sample from 2020 Application	
Other:			
Nearest Downstream Public Water Supply Intake	Buffalo Township MA – Freeport		
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI	29.4	Distance from Outfall (mi)	37.53

Changes Since Last Permit Issuance:

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: South Bend Compressor Station				
WQM Permit No.		Issuance Date		
0307203		12/18/20007		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial				
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0025				

Changes Since Last Permit Issuance:

Other Comments: Treatment consists of oxygenation, equalization, and filtration.

Compliance History	
Summary of DMRs:	One effluent violation reported on eDMRs since January 2016. Violation was for an exceedance of the IMAX dissolved iron limit in January 2019
Summary of Inspections:	Facility was last inspected on 3/16/2019. Inspection report indicated that the pH meter needed to be registered. Otherwise, no issues were reported.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from August 1, 2020 to July 31, 2021)

Parameter	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20
Flow (MGD) Average Monthly	0.00033 7	0.00042 7	0.00038 5	0.00019 6	0.00023 1	0.00021 6	0.00028 8	0.00009 9	0.00007 5	0.00010 3	0.00013 9	0.00018 1
Flow (MGD) Daily Maximum	0.00055 0	0.00077 7	0.00078 2	0.00061 0	0.00062 6	0.00054 5	0.00061 0	0.00043 7	0.00034 3	0.00020 3	0.00025 4	0.00033 5
pH (S.U.) Minimum	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.5	7.8	7.6	7.4
pH (S.U.) Maximum	7.4	7.3	7.3	7.4	7.4	7.3	7.4	7.5	7.6	7.8	7.6	7.4
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	< 7.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 6.0	< 4.0
TSS (mg/L) Instantaneous Maximum	< 4.0	< 4.0	< 4.0	10.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 8.0	4.0
Dissolved Iron (mg/L) Average Monthly	< 0.071	0.178	< 0.313	2.565	1.043	0.641	1.920	0.167	< 0.070	< 0.070	< 0.070	< 0.070
Dissolved Iron (mg/L) Instantaneous Maximum	0.1	0.3	0.6	3.0	1.5	0.7	2.5	0.2	< 0.07	< 0.07	< 0.07	< 0.07
Total Iron (mg/L) Average Monthly	2.195	0.539	1.100	4.000	1.350	1.155	2.305	0.562	0.324	< 0.412	1.255	1.008
Total Iron (mg/L) Instantaneous Maximum	2.890	1.020	1.160	5.250	1.670	1.270	2.940	0.601	0.531	0.754	1.430	1.150
Total Manganese (mg/L) Average Monthly	1.050	1.305	1.470	3.055	1.215	1.075	1.335	0.589	0.17	0.0591	0.155	0.570
Total Manganese (mg/L) Instantaneous Maximum	1.060	1.530	1.540	3.240	1.310	1.090	1.550	0.677	0.324	0.0885	0.167	0.652

Development of Effluent Limitations

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.001</u>
Latitude	<u>40° 38' 19.00"</u>	Longitude	<u>-79° 21' 26.00"</u>
Wastewater Description: <u>Groundwater from compressor building</u>			

Technology-Based Limitations

The South Bend Compressor Station's groundwater discharges are not subject to any Federal Effluent Limitations Guidelines. Therefore, TBELs are imposed based on effluent limits in the previous permit and on DEP's Best Professional Judgment (BPJ) pursuant to sections 304(b)(2)(B), 304(b)(4)(B), and 402(a)(1) of the Clean Water Act.

DEP has already imposed BPJ TBELs based on 40 CFR Part 434. The BPJ TBELs from 40 CFR Part 434 that will remain in the permit pursuant to EPA's antibacksliding regulation (40 CFR 122.21(l)) are pH limits (6.0 – 9.0 s.u.) and monthly average and daily maximum TSS limits of 35 mg/L and 70 mg/L, respectively. Other TBELs for total iron and total manganese were removed as part of the 2006 Consent Order and Agreement. No new TBELs are imposed under this permit renewal.

Regulatory Effluent Standards and Monitoring Requirements

Based on applicable state regulations, the following effluent standards and monitoring requirements are imposed:

- Flow monitoring will be required in accordance with 25 Pa. Code § 92a.61(b).
- Limits for pH (6.0 minimum and 9.0 maximum) will be imposed at Outfall 001 based on 25 Pa. Code § 95.2(1). The limits are the same as the BPJ TBELs for pH.
- An instantaneous maximum limit of 7.0 mg/L is imposed for dissolved iron in accordance with 25 Pa. Code §95.2(4).

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attached) determined the following parameters were candidates for limitations: None

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
N/A			

Comments: No limits or monitoring was determined as a result of water quality modeling

Anti-Backsliding

N/A

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.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TSS	XXX	XXX	XXX	35.0	XXX	70.0	1/month	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	XXX	7.0	1/month	Grab
Total Iron	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Manganese	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab

Compliance Sampling Location: Outfall 001 (prior to mixing with any other waters)

Other Comments:



Discharge Information

Instructions Discharge Stream

Facility: **South Bend Compressor Station** NPDES Permit No.: **PA0252701** Outfall No.: **001**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Treated Groundwater**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q ₇₋₁₀	Q _h
0.001	119	7.4						

				0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
	Discharge Pollutant	Units	Max Discharge Conc	Trib Conc	Stream Conc	Daily CV	Hourly CV	Strea m CV	Fate Coeff	FOS	Criteri a Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L	192.7									
	Chloride (PWS)	mg/L	49.5									
	Bromide	mg/L	< 0.5									
	Sulfate (PWS)	mg/L	19.1									
	Fluoride (PWS)	mg/L	0.2									
Group 2	Total Aluminum	µg/L	< 50									
	Total Antimony	µg/L	< 6									
	Total Arsenic	µg/L	< 5									
	Total Barium	µg/L	82.1									
	Total Beryllium	µg/L	< 1									
	Total Boron	µg/L	< 50									
	Total Cadmium	µg/L	33.7									
	Total Chromium (III)	µg/L	< 5									
	Hexavalent Chromium	µg/L	< 0.1									
	Total Cobalt	µg/L	< 5									
	Total Copper	µg/L	< 5									
	Free Cyanide	µg/L	< 10									
	Total Cyanide	µg/L	< 10									
	Dissolved Iron	µg/L	2100									
	Total Iron	µg/L	3830									
	Total Lead	µg/L	< 5									
	Total Manganese	µg/L	1810									
	Total Mercury	µg/L	< 0.2									
	Total Nickel	µg/L	< 10									
	Total Phenols (Phenolics) (PWS)	µg/L	< 50									
	Total Selenium	µg/L	< 8									
	Total Silver	µg/L	< 6									
	Total Thallium	µg/L	< 10									
	Total Zinc	µg/L	22.8									
	Total Molybdenum	µg/L	< 20									
	Acrolein	µg/L	<									
	Acrylamide	µg/L	<									
	Acrylonitrile	µg/L	<									
	Benzene	µg/L	<									
	Bromoform	µg/L	<									

Group 3	Carbon Tetrachloride	µg/L	<																			
	Chlorobenzene	µg/L																				
	Chlorodibromomethane	µg/L	<																			
	Chloroethane	µg/L	<																			
	2-Chloroethyl Vinyl Ether	µg/L	<																			
	Chloroform	µg/L	<																			
	Dichlorobromomethane	µg/L	<																			
	1,1-Dichloroethane	µg/L	<																			
	1,2-Dichloroethane	µg/L	<																			
	1,1-Dichloroethylene	µg/L	<																			
	1,2-Dichloropropane	µg/L	<																			
	1,3-Dichloropropylene	µg/L	<																			
	1,4-Dioxane	µg/L	<																			
	Ethylbenzene	µg/L	<																			
	Methyl Bromide	µg/L	<																			
	Methyl Chloride	µg/L	<																			
	Methylene Chloride	µg/L	<																			
	1,1,2,2-Tetrachloroethane	µg/L	<																			
	Tetrachloroethylene	µg/L	<																			
	Toluene	µg/L	<																			
	1,2-trans-Dichloroethylene	µg/L	<																			
	1,1,1-Trichloroethane	µg/L	<																			
	1,1,2-Trichloroethane	µg/L	<																			
	Trichloroethylene	µg/L	<																			
	Vinyl Chloride	µg/L	<																			
Group 4	2-Chlorophenol	µg/L	<																			
	2,4-Dichlorophenol	µg/L	<																			
	2,4-Dimethylphenol	µg/L	<																			
	4,6-Dinitro-o-Cresol	µg/L	<																			
	2,4-Dinitrophenol	µg/L	<																			
	2-Nitrophenol	µg/L	<																			
	4-Nitrophenol	µg/L	<																			
	p-Chloro-m-Cresol	µg/L	<																			
	Pentachlorophenol	µg/L	<																			
	Phenol	µg/L	<																			
	2,4,6-Trichlorophenol	µg/L	<																			
Group 5	Acenaphthene	µg/L	<																			
	Acenaphthylene	µg/L	<																			
	Anthracene	µg/L	<																			
	Benzidine	µg/L	<																			
	Benzo(a)Anthracene	µg/L	<																			
	Benzo(a)Pyrene	µg/L	<																			
	3,4-Benzofluoranthene	µg/L	<																			
	Benzo(ghi)Perylene	µg/L	<																			
	Benzo(k)Fluoranthene	µg/L	<																			
	Bis(2-Chloroethoxy)Methane	µg/L	<																			
	Bis(2-Chloroethyl)Ether	µg/L	<																			
	Bis(2-Chloroisopropyl)Ether	µg/L	<																			
	Bis(2-Ethylhexyl)Phthalate	µg/L	<																			
	4-Bromophenyl Phenyl Ether	µg/L	<																			
	Butyl Benzyl Phthalate	µg/L	<																			
	2-Chloronaphthalene	µg/L	<																			
	4-Chlorophenyl Phenyl Ether	µg/L	<																			
	Chrysene	µg/L	<																			
	Dibenzo(a,h)Anthracene	µg/L	<																			
	1,2-Dichlorobenzene	µg/L	<																			
	1,3-Dichlorobenzene	µg/L	<																			
	1,4-Dichlorobenzene	µg/L	<																			
	3,3-Dichlorobenzidine	µg/L	<																			
	Diethyl Phthalate	µg/L	<																			
	Dimethyl Phthalate	µg/L	<																			
	Di-n-Butyl Phthalate	µg/L	<																			
	2,4-Dinitrotoluene	µg/L	<																			

	2,6-Dinitrotoluene	µg/L	<																
	Di-n-Octyl Phthalate	µg/L	<																
	1,2-Diphenylhydrazine	µg/L	<																
	Fluoranthene	µg/L	<																
	Fluorene	µg/L	<																
	Hexachlorobenzene	µg/L	<																
	Hexachlorobutadiene	µg/L	<																
	Hexachlorocyclopentadiene	µg/L	<																
	Hexachloroethane	µg/L	<																
	Indeno(1,2,3-cd)Pyrene	µg/L	<																
	Isophorone	µg/L	<																
	Naphthalene	µg/L	<																
	Nitrobenzene	µg/L	<																
	n-Nitrosodimethylamine	µg/L	<																
	n-Nitrosodi-n-Propylamine	µg/L	<																
	n-Nitrosodiphenylamine	µg/L	<																
	Phenanthrene	µg/L	<																
	Pyrene	µg/L	<																
	1,2,4-Trichlorobenzene	µg/L	<																
Group 6	Aldrin	µg/L	<																
	alpha-BHC	µg/L	<																
	beta-BHC	µg/L	<																
	gamma-BHC	µg/L	<																
	delta BHC	µg/L	<																
	Chlordane	µg/L	<																
	4,4-DDT	µg/L	<																
	4,4-DDE	µg/L	<																
	4,4-DDD	µg/L	<																
	Dieldrin	µg/L	<																
	alpha-Endosulfan	µg/L	<																
	beta-Endosulfan	µg/L	<																
	Endosulfan Sulfate	µg/L	<																
	Endrin	µg/L	<																
	Endrin Aldehyde	µg/L	<																
	Heptachlor	µg/L	<																
	Heptachlor Epoxide	µg/L	<																
	PCB-1016	µg/L	<																
	PCB-1221	µg/L	<																
	PCB-1232	µg/L	<																
	PCB-1242	µg/L	<																
	PCB-1248	µg/L	<																
	PCB-1254	µg/L	<																
	PCB-1260	µg/L	<																
	PCBs, Total	µg/L	<																
	Toxaphene	µg/L	<																
	2,3,7,8-TCDD	ng/L	<																
Group 7	Gross Alpha	pCi/L	<																
	Total Beta	pCi/L	<																
	Radium 226/228	pCi/L	<																
	Total Strontium	µg/L	<																
	Total Uranium	µg/L	<																
	Osmotic Pressure	mOs/kg																	



Stream / Surface Water Information

South Bend Compressor Station, NPDES Permit No. PA0252701, Outfall 001

Instructions Discharge **Stream**

Receiving Surface Water Name: **Crooked Creek**

No. Reaches to Model: **1**

- ☒ Statewide Criteria
☐ Great Lakes Criteria
☐ ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi ²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	046216	37.53	983	199.3	0.006		Yes
End of Reach 1	042122	0	746	11200			Yes

Q₇₋₁₀

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	37.53	0.0658										152	7		
End of Reach 1	0	0.0658	2070									100	7		

Q_h

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	37.53														
End of Reach 1	0														



Toxics Management Spreadsheet
Version 1.3, March 2021

Model Results

South Bend Compressor Station, NPDES Permit No. PA0252701, Outfall 001

☒ Instructions
 ☒ Results

☒ All
 ☐ Inputs
 ☐ Results
 ☐ Limits

☒ Hydrodynamics

Q_{7-10}

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
37.53	13.11		13.11	0.002	0.006	0.831	56.124	67.54	0.281	8.155	73.565
0	2070.00		2,070								

Q_h

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
37.53	70.45		70.45	0.002	0.006	1.741	56.124	32.234	0.721	3.181	24.259
0	5876.881		5876.88								

☒ Wasteload Allocations

☒ AFC

CCT (min):

PMF:

Analysis Hardness (mg/l):

Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	2,871,632	
Total Antimony	0	0		0	1,100	1,100	4,211,727	
Total Arsenic	0	0		0	340	340	1,301,807	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	80,405,697	
Total Boron	0	0		0	8,100	8,100	31,013,626	
Total Cadmium	0	0		0	3.025	3.26	12,501	Chem Translator of 0.926 applied
Total Chromium (III)	0	0		0	802.794	2,540	9,727,131	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	62,384	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	363,740	

NPDES Permit Fact Sheet
South Bend Compressor Station

NPDES Permit No. PA0252701

Total Copper	0	0		0	19.938	20.8	79,520	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	22	22.0	84,235	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	101.556	139	532,664	Chem Translator of 0.73 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	6,306	Chem Translator of 0.85 applied
Total Nickel	0	0		0	667.242	669	2,559,885	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	6.609	7.78	29,771	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	248,875	
Total Zinc	0	0		0	167.075	171	654,092	Chem Translator of 0.978 applied

☒ **CFC**

CCT (min): **73.565**

PMF: **1**

Analysis Hardness (mg/l): **152**

Analysis pH: **7.00**

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	1,865,163	
Total Arsenic	0	0		0	150	150	1,271,702	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	34,759,856	
Total Boron	0	0		0	1,600	1,600	13,564,822	
Total Cadmium	0	0		0	0.329	0.37	3,129	Chem Translator of 0.891 applied
Total Chromium (III)	0	0		0	104.430	121	1,029,484	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	88,129	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	161,082	
Total Copper	0	0		0	12.808	13.3	113,110	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	5.2	5.2	44,086	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	12,717,020	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	3.958	5.42	45,963	Chem Translator of 0.73 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	7,680	Chem Translator of 0.85 applied
Total Nickel	0	0		0	74.112	74.3	630,213	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	42,298	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	110,214	
Total Zinc	0	0		0	168.446	171	1,448,362	Chem Translator of 0.986 applied

☒ **THH**

CCT (min): **73.565**

PMF: **1**

Analysis Hardness (mg/l): **N/A**

Analysis pH: **N/A**

Model Results

9/30/2021

Page 6

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Fluoride (PWS)	0	0		0	2,000	2,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	47,477	
Total Arsenic	0	0		0	10	10.0	84,780	
Total Barium	0	0		0	2,400	2,400	20,347,233	
Total Boron	0	0		0	3,100	3,100	26,281,842	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Free Cyanide	0	0		0	4	4.0	33,912	
Dissolved Iron	0	0		0	300	300	2,543,404	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	8,478,014	
Total Mercury	0	0		0	0.050	0.05	424	
Total Nickel	0	0		0	610	610	5,171,588	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	2,035	
Total Zinc	0	0		0	N/A	N/A	N/A	

☒ CRL

CCT (min): 24.259

PMF: 1

Analysis Hardness (mg/l): N/A

Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	

Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Free Cyanide	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	

☒ **Recommended WQBELs & Monitoring Requirements**

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			

☒ **Other Pollutants without Limits or Monitoring**

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Fluoride (PWS)	N/A	N/A	PWS Not Applicable
Total Aluminum	1,840,600	µg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	47,477	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	84,780	µg/L	Discharge Conc ≤ 10% WQBEL
Total Barium	20,347,233	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	13,564,822	µg/L	Discharge Conc < TQL
Total Cadmium	3,129	µg/L	Discharge Conc ≤ 10% WQBEL

NPDES Permit Fact Sheet
South Bend Compressor Station

NPDES Permit No. PA0252701

Total Chromium (III)	1,029,484	µg/L	Discharge Conc ≤ 10% WQBEL
Hexavalent Chromium	39,986	µg/L	Discharge Conc < TQL
Total Cobalt	161,082	µg/L	Discharge Conc ≤ 10% WQBEL
Total Copper	50,969	µg/L	Discharge Conc ≤ 10% WQBEL
Free Cyanide	33,912	µg/L	Discharge Conc ≤ 25% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	2,543,404	µg/L	Discharge Conc ≤ 10% WQBEL
Total Iron	12,717,020	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	45,963	µg/L	Discharge Conc ≤ 10% WQBEL
Total Manganese	8,478,014	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	424	µg/L	Discharge Conc < TQL
Total Nickel	630,213	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	42,298	µg/L	Discharge Conc ≤ 10% WQBEL
Total Silver	19,082	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	2,035	µg/L	Discharge Conc ≤ 10% WQBEL
Total Zinc	419,247	µg/L	Discharge Conc ≤ 10% WQBEL
Total Molybdenum	N/A	N/A	No WQS

South Bend Compressor Station
South Bend Township, Armstrong County
NPDES# PA0252701

<u>Date</u>	<u>pH min</u>	<u>pH max</u>	Ave (10 [^] pH min			
			<u>10[^]-pH min</u>	<u>10[^]-pH max</u>	<u>& pH max)</u>	<u>-Log (Ave pH)</u>
Jul-18	6.4	6.5	3.98E-07	3.16E-07	3.57E-07	6.4
Aug-18	6.5	6.6	3.16E-07	2.51E-07	2.84E-07	6.5
Sep-18	6.8	6.9	1.58E-07	1.26E-07	1.42E-07	6.8
Jul-19	7.4	7.5	3.98E-08	3.16E-08	3.57E-08	7.4
Aug-19	7.5	7.5	3.16E-08	3.16E-08	3.16E-08	7.5
Sep-19	7.5	7.6	3.16E-08	2.51E-08	2.84E-08	7.5
Jul-20	7.3	7.5	5.01E-08	3.16E-08	4.09E-08	7.4
Aug-20	7.4	7.4	3.98E-08	3.98E-08	3.98E-08	7.4
Sep-20	7.6	7.6	2.51E-08	2.51E-08	2.51E-08	7.6
Jul-21	7.4	7.4	3.98E-08	3.98E-08	3.98E-08	7.4
Aug-21	7.6	7.7	2.51E-08	2E-08	2.25E-08	7.6
Median:						7.4