

Application Type **New**
 Facility Type **Industrial**
 Major / Minor **Minor**

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

Application No. **PA0285188**
 APS ID **1095269**
 Authorization ID **1451596**

Applicant and Facility Information

Applicant Name	<u> Hyperion Midstream LLC </u>	Facility Name	<u> Champion Compressor Station </u>
Applicant Address	<u> 501 Technology Drive Suite 1200 Canonsburg, PA 15317-7535 </u>	Facility Address	<u> 2340 Douglas Run Road Sutersville, PA 15037 </u>
Applicant Contact	<u> Brian Dillemath </u>	Facility Contact	<u> ***same as applicant*** </u>
Applicant Phone	<u> (724) 754-0110 </u>	Facility Phone	<u> ***same as applicant*** </u>
Applicant Email	<u> bdillemath@olympusenergy.com </u>	Facility Email	<u> ***same as applicant*** </u>
Client ID	<u> 353211 </u>	Site ID	<u> 857713 </u>
SIC Code	<u> 1311 </u>	Municipality	<u> Elizabeth Township </u>
SIC Description	<u> Mining - Crude Petroleum and Natural Gas </u>	County	<u> Allegheny </u>
Date Application Received	<u> August 21, 2023 </u>	EPA Waived?	<u> Yes </u>
Date Application Accepted	<u> August 22, 2023 </u>	If No, Reason	<u> </u>
Purpose of Application	<u> NPDES permit for discharges of storm water from a natural gas compressor station and diverted runoff from abandoned mine lands. </u>		

Summary of Review


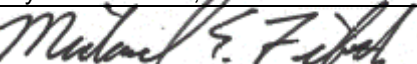
On August 21, 2023, on behalf of Hyperion Midstream LLC (Hyperion), Civil & Environmental Consultants, Inc. (CEC) submitted an 'Application for Individual NPDES Permit to Discharge Industrial Wastewater' for discharges associated with the proposed Champion Compressor Station. The Champion Compressor Station will facilitate the transmission of natural gas from wells north of the compressor station to an existing gas transmission pipeline south of the compressor station.

The site where the compressor station will be built historically was used as a preparation plant associated with the former Warden Mine, a nearby bituminous surface mine. Deep mining also was conducted near the site and the Pittsburgh coal seam outcrops within the project area. Also, there are approximately seventeen acres of un-reclaimed coal refuse/mine spoil located upgradient of the site. Storm water from the upland coal refuse/mine spoil drains across the property to a vegetated roadside channel that flows northeast to an unnamed tributary to Gillespie Run. The site currently consists of existing utility rights-of-way (gas, sanitary), meadow, and woodlands.

The compressor station will be located on an approximately 500-foot long by 120-foot wide paved pad with a paved access road from Douglas Run Road.

Storm water run-on from upgradient offsite areas will be controlled using vegetated swales. The offsite storm water is expected to exhibit impacts from coal and coal refuse/mine spoil. However, Hyperion intends to route offsite storm water around the compressor station and discharge it through two outfalls (001 and 003) to the same roadside channel that currently drains that area. The offsite storm water will essentially bypass the compressor station, but Hyperion is responsible for the quality of those discharges as the property owner.

Storm water runoff from the compressor pad will be controlled using collection inlets and storm sewers; an underground storm water detention system to control peak runoff rates because post-construction runoff rates are expected to increase without

Approve	Deny	Signatures	Date
✓		 Ryan C. Decker, P.E. / Environmental Engineer	January 11, 2024
X		 Michael E. Fifth, P.E. / Environmental Engineer Manager	January 11, 2024

Summary of Review

detention; and a Contech JellyFish filtering system to control water quality (TSS, phosphorus, and nitrates). Storm water from the compressor pad will be discharged through Outfall 002 to the roadside channel.

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.	<u>001</u>	Design Flow (MGD)	<u>Variable</u>
Latitude	<u>40° 14' 25.3"</u>	Longitude	<u>-79° 48' 55.6"</u>
Quad Name	<u>Donora</u>	Quad Code	<u>1707</u>
Wastewater Description: <u>Discharges from abandoned mine lands</u>			
Receiving Waters	<u>Unnamed Tributary to Gillespie Run (WWF)</u>	Stream Code	<u>37521</u>
NHD Com ID	<u>69913211</u>	RMI	<u>0.83</u>
Drainage Area (mi ²)	<u>1.61</u>	Yield (cfs/mi ²)	<u>0.00857</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.0138</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>776.88</u>	Slope (ft/ft)	<u>0.01877</u>
Watershed No.	<u>19-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Municipal Authority of Westmoreland County - McKeesport</u>		
PWS ID	<u>5020025</u>	PWS Withdrawal (MGD)	<u>12</u>
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>510</u>
PWS RMI	<u>1.30</u>	Distance from Outfall (mi)	<u>14.16</u>

Changes Since Last Permit Issuance: N/A

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>002</u>	Design Flow (MGD)	<u>Variable</u>
Latitude	<u>40° 14' 29.0"</u>	Longitude	<u>-79° 48' 52.5"</u>
Quad Name	<u>Donora</u>	Quad Code	<u>1707</u>

Wastewater Description: Storm water discharges from a natural gas compressor station

Receiving Waters	<u>Unnamed Tributary to Gillespie Run (WWF)</u>	Stream Code	<u>37521</u>
NHD Com ID	<u>69913211</u>	RMI	<u>0.02</u>
Drainage Area (mi ²)	<u>1.61</u>	Yield (cfs/mi ²)	<u>0.00857</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.0138</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>770.6</u>	Slope (ft/ft)	<u>0.01877</u>
Watershed No.	<u>19-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Assessment Status Attaining Use(s)

Cause(s) of Impairment

Source(s) of Impairment

TMDL Status Name

Nearest Downstream Public Water Supply Intake	<u>Municipal Authority of Westmoreland County - McKeesport</u>		
PWS ID	<u>5020025</u>	PWS Withdrawal (MGD)	<u>12</u>
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>510</u>
PWS RMI	<u>1.30</u>	Distance from Outfall (mi)	<u>14.16</u>

Changes Since Last Permit Issuance: N/A

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>003</u>	Design Flow (MGD)	<u>Variable</u>
Latitude	<u>40° 14' 30.8"</u>	Longitude	<u>-79° 48' 53.5"</u>
Quad Name	<u>Donora</u>	Quad Code	<u>1707</u>

Wastewater Description: Discharges from abandoned mine lands

Receiving Waters	<u>Unnamed Tributary to Gillespie Run (WWF)</u>	Stream Code	<u>37521</u>
NHD Com ID	<u>69913211</u>	RMI	<u>0.02</u>
Drainage Area (mi ²)	<u>1.61</u>	Yield (cfs/mi ²)	<u>0.00857</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.0138</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>771.5</u>	Slope (ft/ft)	<u>0.01877</u>
Watershed No.	<u>19-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Assessment Status Attaining Use(s)

Cause(s) of Impairment

Source(s) of Impairment

TMDL Status Name

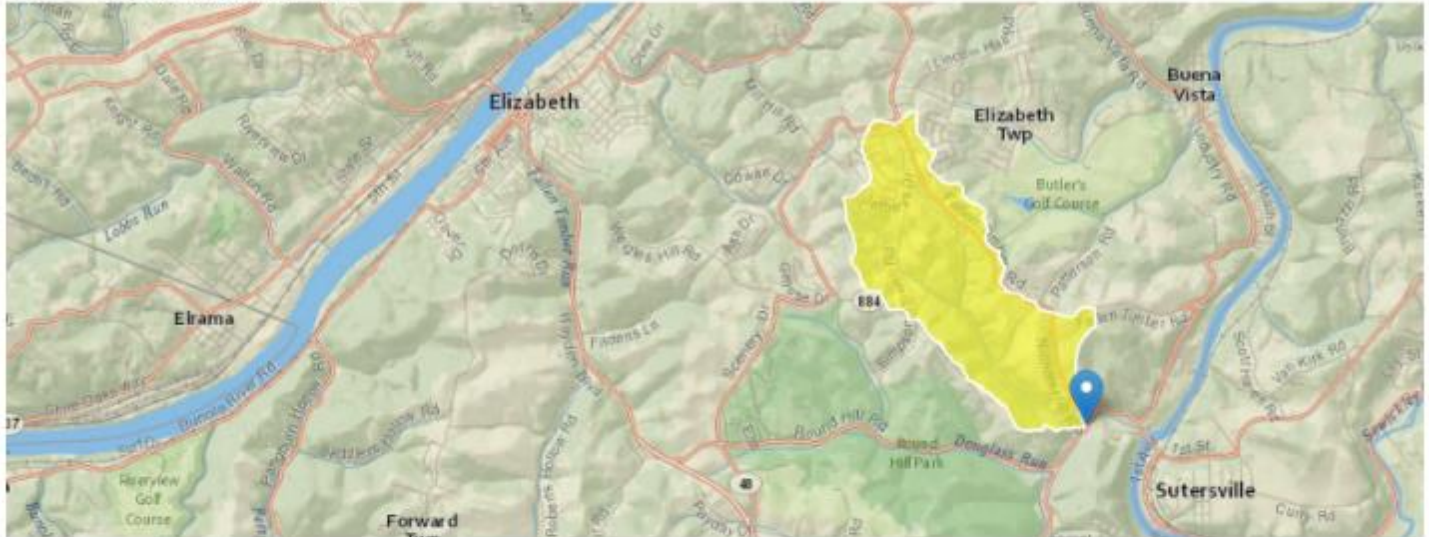
Nearest Downstream Public Water Supply Intake	<u>Municipal Authority of Westmoreland County - McKeesport</u>		
PWS ID	<u>5020025</u>	PWS Withdrawal (MGD)	<u>12</u>
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>510</u>
PWS RMI	<u>1.30</u>	Distance from Outfall (mi)	<u>14.16</u>

Changes Since Last Permit Issuance: N/A

Other Comments:

StreamStats Report

Region ID: PA
 Workspace ID: PA20240103213529302000
 Clicked Point (Latitude, Longitude): 40.24268, -79.81329
 Time: 2024-01-03 16:35:50 -0500



Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.61	square miles
ELEV	Mean Basin Elevation	1068	feet

> Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.61	square miles	2.26	1400
ELEV	Mean Basin Elevation	1068	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0438	ft ³ /s
30 Day 2 Year Low Flow	0.0821	ft ³ /s
7 Day 10 Year Low Flow	0.0138	ft ³ /s
30 Day 10 Year Low Flow	0.0283	ft ³ /s
90 Day 10 Year Low Flow	0.0551	ft ³ /s

Low-Flow Statistics Citations

Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

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Application Version: 4.19.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.3.2

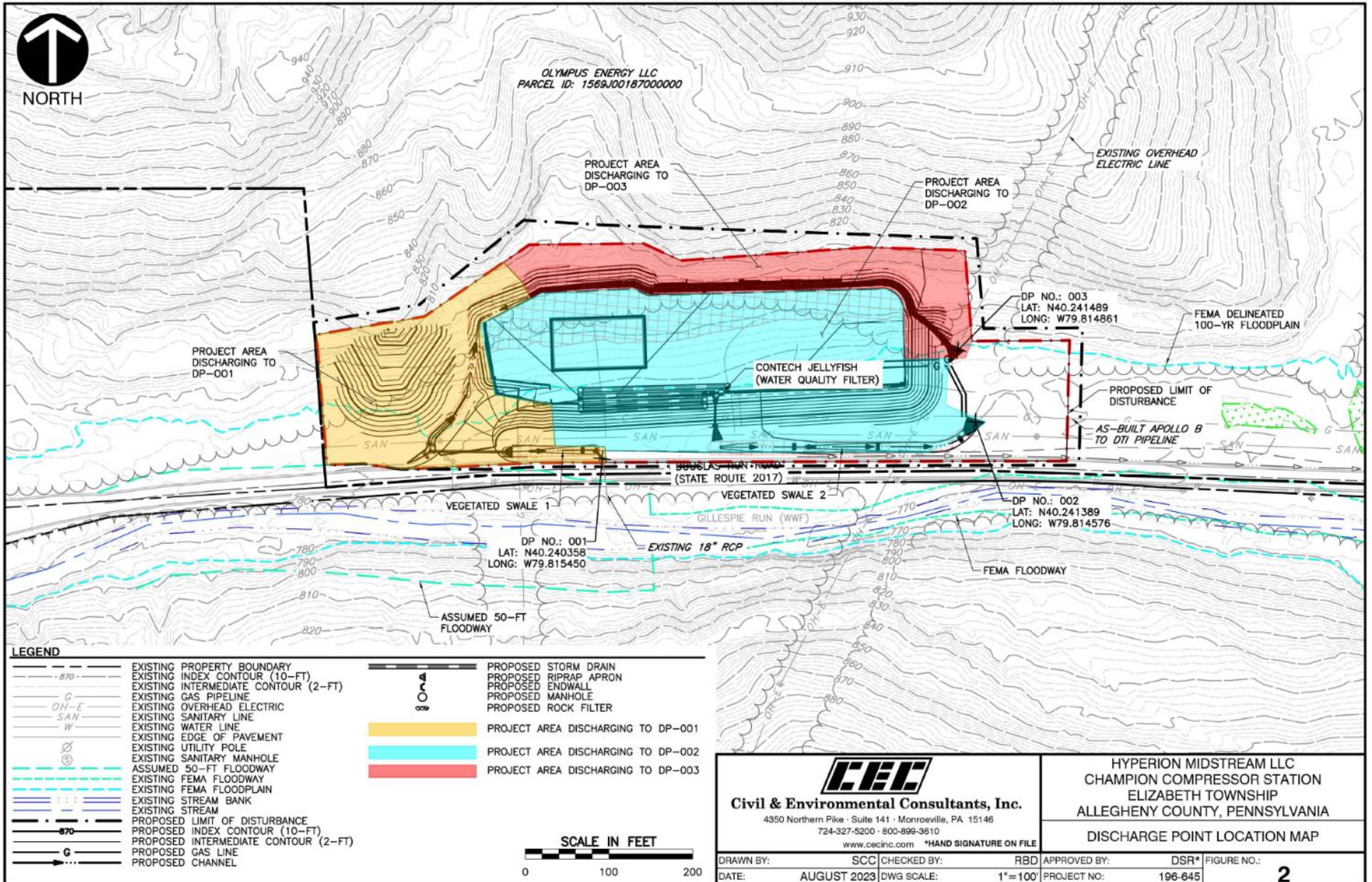




Image Source and Date: Google Earth Pro; November 2021. Annotations by DEP.

Statutes and Regulations Relating to the Champion Compressor Station

Pursuant to Section 402(l)(2) of the Clean Water Act (33 U.S.C. § 1342(l)(2)) and 40 CFR § 122.26(a)(2) (incorporated by reference into DEP's regulations at 25 Pa. Code § 92a.32(a)), storm water discharges associated with oil and gas field activities generally are not required to obtain an NPDES permit. Section 402(l)(2) of the Clean Water Act states:

- (l) Limitation on Permit Requirement
 - (2) Stormwater runoff from oil, gas, and mining operations

The Administrator shall not require a permit under this section, nor shall the Administrator directly or indirectly require any State to require a permit, for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site of such operations.

Section 502(24) of the Clean Water Act (33 U.S.C. § 1362(24)) defines "**oil and gas exploration, production, processing, or treatment operations or transmission facilities**" to mean "all field activities or operations associated with exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities."

The Section 502(24) definition of "oil and gas exploration, production, processing, or treatment operations or transmission facilities" was added to the Clean Water Act by Section 323 of the 2005 Energy Policy Act. On June 12, 2006, EPA published a final rule (71 FR 33628-33640) that revised 40 CFR § 122.26(a)(2) to codify the CWA § 402(l)(2) statutory exemption considering the CWA § 502(24) definition. Section 122.26(a)(2) states:

- (2) The Director may not require a permit for discharges of storm water runoff from the following: [...]
 - (ii) Mining operations composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that have not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site of such operations, except in accordance with paragraph (c)(1)(iv) of this section.
 - (iii) All field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities, except in accordance with paragraph (c)(1)(iii) of this section. Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities are not subject to the provisions of paragraph (c)(1)(iii)(C) of this section.

Note to paragraph (a)(2)(ii): EPA encourages operators of oil and gas field activities or operations to implement and maintain Best Management Practices (BMPs) to minimize discharges of pollutants, including sediment, in storm water both during and after construction activities to help ensure protection of surface water quality during storm events. Appropriate controls would be those suitable to the site conditions and consistent with generally accepted engineering design criteria and manufacturer specifications. Selection of BMPs could also be affected by seasonal or climate conditions.

In the final rule, EPA states that it "interprets the specific phrase "all field activities or operations"...to include the construction of drilling sites, drilling waste management pits, access roads, in-field treatment plants and the transportation infrastructure (e.g., crude oil and natural gas pipelines, natural gas treatment plants and both natural gas pipeline compressor and crude oil pump stations) necessary for the operation of most production oil and gas fields". (71 FR 33635)

EPA also states that it "interprets the term "transmission facilities" to include all necessary infrastructure to deliver natural gas or crude oil from the producing fields to the final distribution center (in the case of natural gas) or the refinery (for crude oil)" including "all pipelines, compressor stations (for natural gas) and pump stations (for crude oil)." (71 FR 33636)

Based on EPA's interpretation of the CWA § 502(24) definition in concert with the CWA § 402(l)(2) exemption, the Champion Compressor Station does not presumptively require an NPDES permit. However, DEP may issue NPDES permits to natural gas compressor stations under the authority of 40 CFR 122.26(c)(1)(iii) (referenced as an exception in 40 CFR § 122.26(a)(2) and incorporated by reference into DEP's regulations at 25 Pa. Code § 92a.32(a)), which states:

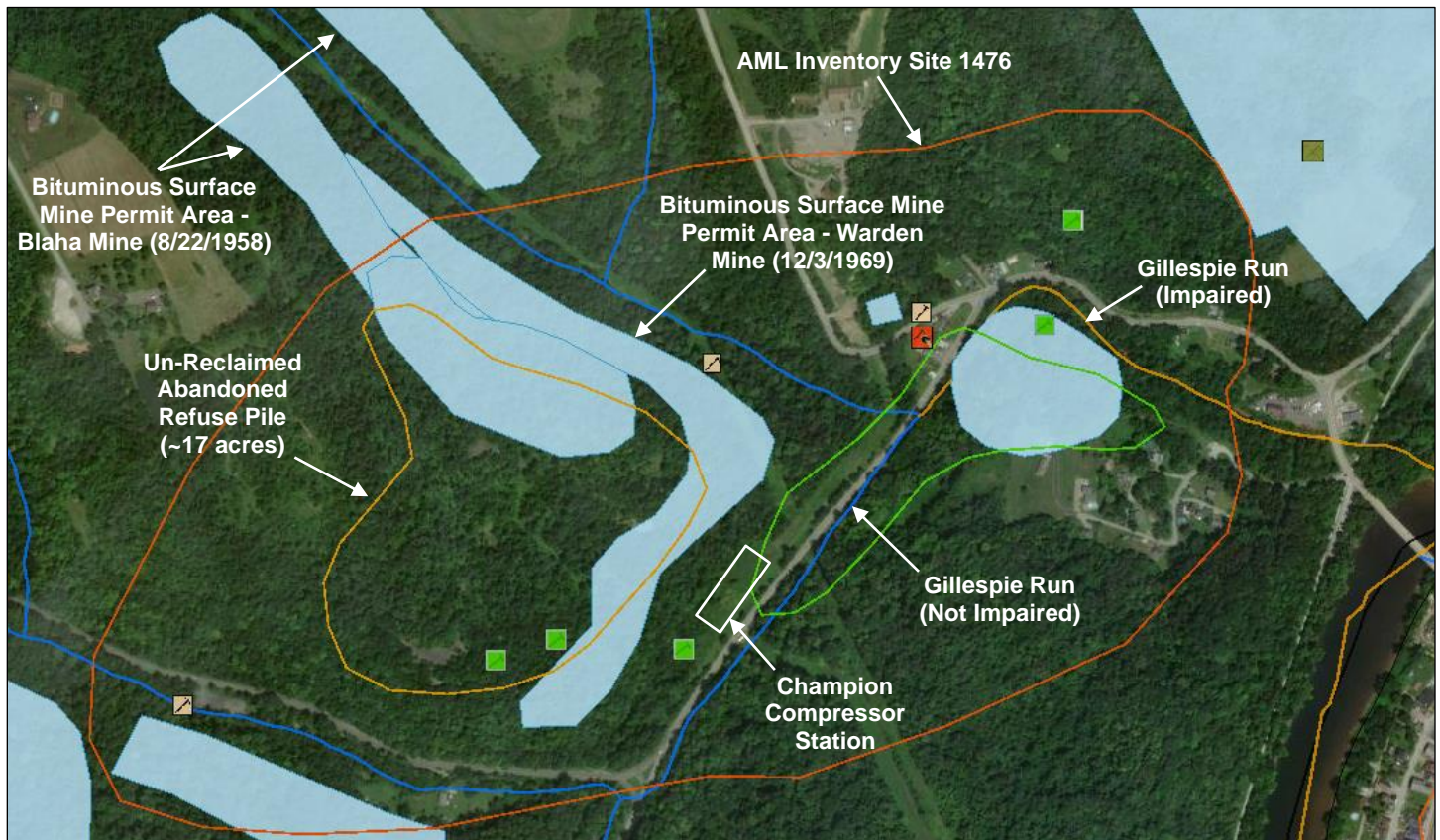
(c) **Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity —**

(iii) The operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application in accordance with paragraph (c)(1)(i) of this section, unless the facility:

- (A) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or
- (B) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- (C) Contributes to a violation of a water quality standard.

DEP does not expect discharges from the Champion Compressor Station itself (Outfall 002) to cause or contribute to a violation of a water quality standard or for those discharges to exceed reportable quantities. However, the Champion Compressor Station will be constructed at a site that is impacted by abandoned mine lands, which may contribute to the downstream impairment of Gillespie Run (see Figure 1). Construction of the compressor station may result in the disturbance, removal, and/or relocation of overburden material and post-construction conditions will result in the diversion of AML-impacted runoff from upgradient, un-reclaimed coal refuse piles (SMCRA Priority 3)¹ around the compressor station to an unnamed tributary of Gillespie Run (Outfalls 001 and 003).

Figure 1. Abandoned Mine Lands (AML) Features in the Vicinity of the Champion Compressor Station



¹ The most serious "high priority" AML sites (Priority 1 and 2) are those posing an immediate threat to the health, safety and general welfare of people. Priority 3 AML sites are lesser priority sites that are impacting the environment but do not pose an immediate threat to the health, safety and general welfare of people.

As discharges of diverted storm water runoff from abandoned mine lands, discharges from Outfalls 001 and 003 are not discharges of storm water runoff from oil and gas field activities or operations. Therefore, those discharges are not eligible for the NPDES permit exemption under 40 CFR § 122.26(a)(2)(iii).

Abandoned Mine Lands

Due to the presence of abandoned mine land features and potential impacts to those features from Hyperion’s activities, DEP referred to requirements under 25 Pa. Code Chapter 87, Subchapter F – Surface Coal Mines: Minimum Requirements for Remining Areas with Pollutational Discharges, 25 Pa. Code §§ 87.201 - 87.213.

Section 87.202 defines a “pre-existing discharge” as “any discharge resulting from mining activities that have been abandoned prior to the time of a remining permit application”. The term includes pre-existing discharges that are relocated. Separately, § 87.202 defines an “encountered discharge” as “a pre-existing discharge intercepted in the course of active surface mining activities, including, but not limited to, overburden removal, coal extraction and backfilling, or that occurs in the pit, any mining-related conveyance, sedimentation pond or treatment pond.” An “encountered discharge” excludes “diversions of surface water and shallow groundwater flow from undisturbed areas...which would otherwise drain into the affected area so long as they are designed, operated and maintained in accordance with § 87.105(b)—(g) (relating to hydrologic balance: diversions)”.

Figure 2. Site overview. Facing northeast. April 14, 2020



(Image Source: Civil & Environmental Consultants, Inc., Wetland and Stream Delineation Report)

Documentation included with the NPDES permit application states that a cut is required along the west edge of the compressor pad with encountered materials hauled offsite for disposal. Grades on the eastern half of the site will be raised with clean fill. The cut excavation would be classified as “overburden removal”, which is not a “coal remining activity” under Chapter 87, Subchapter F (thus not requiring the implementation of those regulations for this site) but “overburden removal” is a surface mining activity identified in the “encountered discharge” definition. The geotechnical report states that all near surface overburden soils across the proposed compressor pad area consist of fill/mine spoils with relatively high concentrations of carbonaceous shale and coal (see Figure 2 at left).

Based on Hyperion’s statements in the NPDES permit application and corresponding regulations in Chapter 87, any existing discharges from the

proposed compressor pad cut-and-fill area and any over-excavation of overburden soils by Hyperion during construction could be classified as both “pre-existing discharges” and “encountered discharges” and any diversions of upland flow from undisturbed areas could be classified as “pre-existing discharges”.

Under § 87.207(a), encountered/pre-existing discharges from disturbed areas must comply with limits in § 87.102. Under § 87.207(b), any pre-existing discharges that are not “encountered discharges” (e.g., diversions from undisturbed areas) must comply with either: 1) limits established based on best professional judgement that are not less than baseline pollution load; or 2) limits from § 87.102 if the baseline pollutant concentrations are already less than the limits in § 87.102.

Limits in § 87.102 are expressed in three groupings that apply to: 1) dry weather discharges (Group A); 2) discharges resulting from storm events less than or equal to the 10-year, 24-hour storm (Group B); and 3) discharges resulting from storm events greater than the 10-year, 24-hour storm (Group C).

Table 1. Group A Effluent Limits

Parameter	30-day Average	Daily Maximum	Instant. Maximum
Iron, Total	3.0 mg/L	6.0 mg/L	7.0 mg/L
Manganese, Total	2.0 mg/L	4.0 mg/L	5.0 mg/L

Table 1 (cont'd). Group A Effluent Limits

Parameter	30-day Average	Daily Maximum	Instant. Maximum
Suspended Solids (Total)	35 mg/L	70 mg/L	90 mg/L
pH (standard units)	greater than 6.0; less than 9.0		
alkalinity greater than acidity at all times			

Table 2. Group B Effluent Limits

Parameter	30-day Average	Daily Maximum	Instant. Maximum
Iron, Total	—	—	7.0 mg/L
Settleable Solids	—	—	0.5 mL/L
pH (standard units)	greater than 6.0; less than 9.0		
alkalinity greater than acidity at all times			

Table 3. Group C Effluent Limits

Parameter	30-day Average	Daily Maximum	Instant. Maximum
pH (standard units)	greater than 6.0; less than 9.0		
alkalinity greater than acidity at all times			

Effluent Limitations Rationale

In accordance with the preceding discussion, discharges that occur during construction of the compressor station could be classified as “encountered discharges” due to the disturbance, removal, and/or relocation of overburden materials and the attendant impacts to surface runoff likely to occur during construction. The Oil and Gas Program is responsible for regulating Hyperion’s construction activities at the site.

After construction is complete, discharges from the site will consist of either storm water runoff from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities (Outfall 002 for storm water runoff from the compressor station itself); or “pre-existing discharges” from abandoned mine lands (Outfalls 001 and 003) consisting of storm water runoff from upland abandoned mine lands diverted around the compressor station. For post-construction conditions, discharges from the latter outfalls would no longer be classified as “encountered discharges” due to the cessation of ‘surface mining activities’ including overburden removal and/or overburden disturbance.

Pursuant to 25 Pa. Code § 92a.48(a)(3) incorporating by reference 40 CFR § 125.3 regarding the authority to establish case-by-case effluent limits using best professional judgement, post-construction Outfall 001 and Outfall 003 would be subject to the more stringent of baseline pollution load limits (i.e., limits based on pre-construction conditions), which would mean that Hyperion can’t make the pre-existing, diverted discharges from upland abandoned mine lands any worse than they already are; or § 87.102 limits if baseline pollution loads are less than the § 87.102 limits. Post-construction Outfall 002 likely qualifies for the NPDES permit exemption—or, rather, exemption from limits and monitoring requirements under the NPDES permit because an NPDES permit is required for post-construction Outfalls 001 and 003 that do not originate from oil and gas field activities and operations.

Baseline Pollution Load

Section 87.202 defines “**baseline pollution load**” as “[t]he characterization of the pollution material being discharged from or on the pollution abatement area, described in terms of mass discharge for each parameter, including seasonal variations and variations in response to precipitation events. The Department will establish in each authorization the specific parameters, including, at a minimum, iron and acid loadings, it deems relevant for the baseline pollution load.”

Sections 87.211 through 87.213 describe the procedures for calculating baseline pollution loads and monthly and annual triggers for follow-up actions (e.g., treatment when baseline pollution loadings are exceeded). Under § 87.211, baseline pollution loadings generally require at least one sample result per month for 12 months.

Effluent limits for each outfall are discussed separately in the following sections of this Fact Sheet.

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	Variable
Latitude	40° 14' 25.30"	Longitude	-79° 48' 55.60"
Wastewater Description: Storm water discharges from abandoned mine lands			

001.A. Technology-Based Effluent Limitations (TBELs)

As described in the preceding section, post-construction discharges of storm water from Outfall 001 will consist of storm water runoff from upland areas diverted around the Champion Compressor Station. Based on 25 Pa. Code § 87.207, those “pre-existing” discharges would be subject to either the baseline pollution load or limits from § 87.102. That does not preclude the imposition of WQBELs necessary to comply with water quality criteria in-stream (see Section 001.B). For reference, § 87.207(b) states:

- (b) Except as provided in § 87.210(d) (relating to effluent limitations), the operator shall treat the pre-existing discharges which are not encountered during mining or implementation of the pollution abatement plan to comply with the effluent limitations established by best professional judgment. The effluent limitations established by best professional judgment may not be less than the baseline pollution load. If the baseline pollution load, when expressed as a concentration for a specific parameter, satisfies the effluent limitations at § 87.102 for that parameter, the operator shall treat the pre-existing discharge for that parameter to comply with either effluent limitations established by best professional judgment or the effluent limitations at § 87.102.

On behalf of Hyperion, CEC delineated two flow pathways for shallow concentrated flow from the upland AML areas (see Attachment A). However, no storm water runoff flow has been observed. Hyperion did estimate the quality of AML storm water by compositing soil samples from the upland AML areas and performing the Synthetic Precipitation Leaching Procedure (SPLP) on those samples. Average and maximum SPLP results from those tests are summarized in Table 4.

Table 4. SPLP Results for AML Storm Water

Parameter	Average	Maximum	Parameter	Average	Maximum
Oil and Grease (mg/L)	<5.0	<5.0	Chromium, VI (mg/L)	<0.005	<0.005
BOD5 (mg/L)	16.5	25.4	Iron (mg/L)	1.52	1.94
COD (mg/L)	69.0	98.7	Molybdenum (mg/L)	<0.005	<0.005
TSS (mg/L)	4.1	7	Nickel (mg/L)	<0.02	<0.02
Total Nitrogen (mg/L)	2.87	3.67	Lead (mg/L)	<0.02	<0.02
Total Phosphorus (mg/L)	0.16	0.23	Thallium (mg/L)	<0.002	<0.002
pH (standard units)	6.87 (Minimum)	8.58	Zinc (mg/L)	<0.02	<0.02
Chloride (mg/L)	1.0	1.22	Manganese (mg/L)	0.04	0.05
Fluoride (mg/L)	0.28	0.29	Selenium (mg/L)	<0.005	<0.005
Aluminum (mg/L)	3.27	4.56	Mercury (mg/L)	<0.200	<0.200
Boron (mg/L)	0.38	0.45	Phenolics (mg/L)	0.024	0.037
Barium (mg/L)	0.09	0.2	Total Hardness (mg/L as CaCO ₃)	16.9	18.3
Cadmium (mg/L)	<0.002	<0.002	Sulfate (mg/L)	21.0	24.4
Chromium (mg/L)	<0.02	<0.02	Sulfide (mg/L)	0.024	0.037

Hyperion/CEC also collected groundwater samples from piezometers (identified as P-1 and P-2) upgradient of the site and surface waters samples in Gillespie Run upstream and downstream of the site. Those results are summarized in Table 5.

Table 5. Groundwater and Surface Water Results

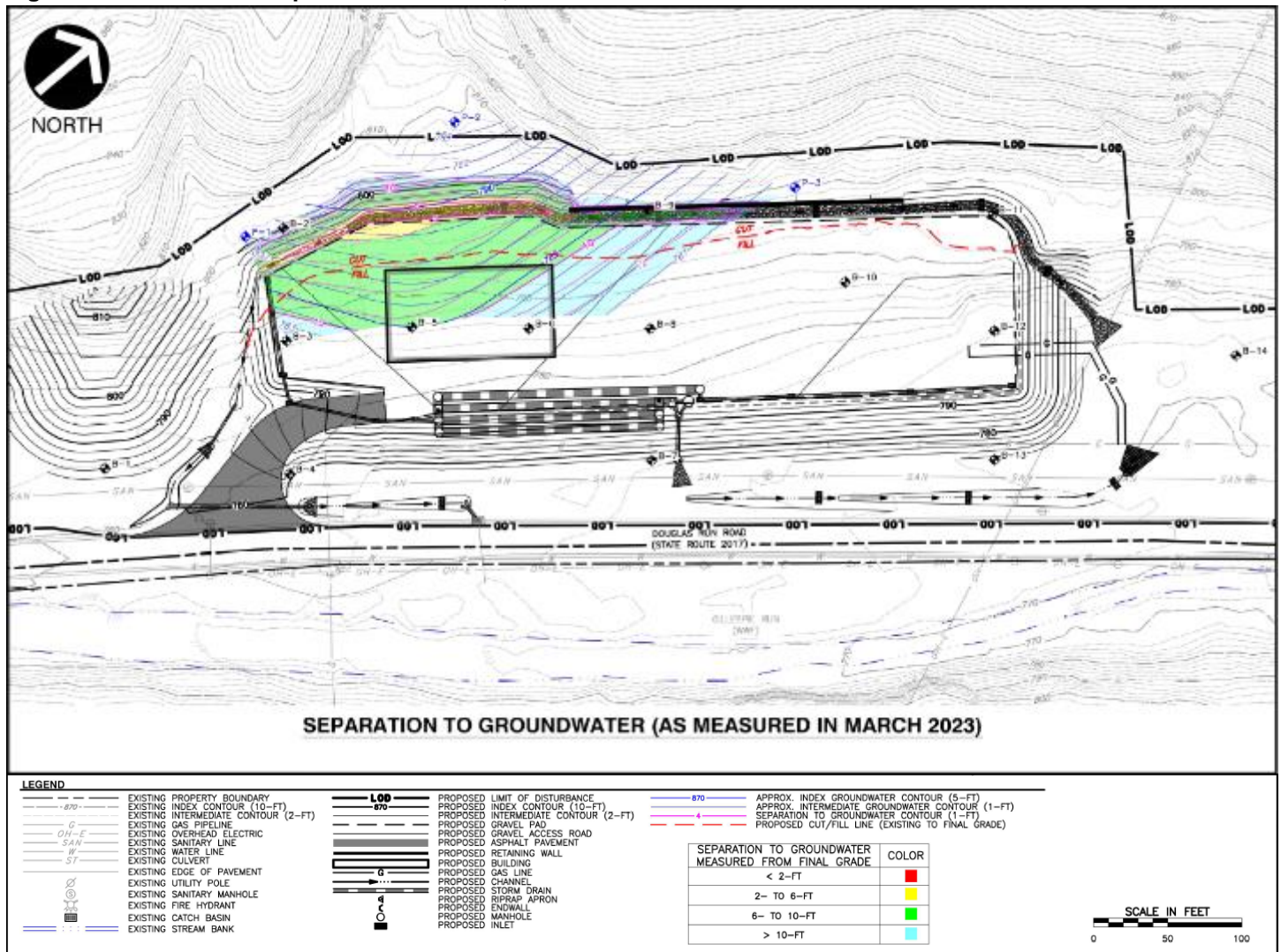
Constituents	Units	Analytical Method	Groundwater				Surface Water	
			P-1		P-2		Upstream	Downstream
			11/3/2022	3/14/2023	11/3/2022	3/14/2023	11/3/2022	11/3/2022
General Chemistry								
Acidity to pH 8.3	mg/L as CaCO ₃	SM 2540B	-94	-41	140	93	-245	-248
Alkalinity to pH 4.5	mg/L as CaCO ₃	ASTM D1067-16	108	56	<10	<10	256	259
Hardness	mg/L as CaCO ₃	SM 2540B	688	741	3020	1410	311	325
TDS	mg/L	SM 2540C	1010	1050	4630	2240	590	592
TSS	mg/L	SM 2540D	58	9	21	4	<2	<2

Table 5 (cont'd). Groundwater and Surface Water Results

Constituents	Units	Analytical Method	Groundwater				Surface Water	
			P-1		P-2		Upstream	Downstream
			11/3/2022	3/14/2023	11/3/2022	3/14/2023	11/3/2022	11/3/2022
Sulfate	mg/L	ASTM D516-16	774	651	3730	1400	177	197
Metals								
Aluminum, Total	mg/L	EPA 200.7	5.4	0.2	25.5	14.7	<0.01	<0.01
Calcium, Total	mg/L	EPA 200.7	171	171	613	279	81.5	85.3
Iron, Total	mg/L	EPA 200.7	9.44	0.43	0.33	<0.05	<0.05	<0.05
Magnesium, Total	mg/L	EPA 200.7	63.3	76.6	361	173	26.1	27.3
Manganese, Total	mg/L	EPA 200.7	11.5	1.32	11.5	6.37	<0.01	<0.01
Zinc, Total	mg/L	EPA 200.7	0.03	0.14	1.55	0.94	<0.01	<0.01
Field Parameters								
pH	S.U.	Field	6.79	6.33	4.36	4.42	6.93	7.75
Specific Conductance	µS/cm	Field	1236	1356	3821	2526	974	958
Temperature	°C	Field	15.3	8	14.8	11	11.2	10.9

In DEP's preliminary discussions about permitting the site, groundwater was a concern due to the potential to intercept groundwater along the hillside cut needed to construct a level pad for the compressor station. Hyperion decided to raise the pad's grade to stay above observed groundwater elevations. Figure 3 is an excerpt from E&S Drawing C500 included with the permit application that shows the most recent groundwater separation distances from March 2023.

Figure 3. Groundwater Separation Distances, March 2023



Section 5.0 of the Geotechnical Investigation Report prepared by Pennsylvania Soil and Rock Inc. dated November 6, 2020 and revised on May 24, 2023 states that there is a potential for seeps and springs to develop during and after completion of construction of the pad. However, Section 3.0 of the Post-Construction Stormwater Management Plan (PCSM Plan) prepared by CEC in May 2022 with revisions through June 30, 2023 states that final grading will remain greater than two feet higher than the highest measured groundwater elevation (as interpolated between piezometers and geotechnical borings). The PCSM Plan further states that no groundwater is anticipated to be encountered after construction and that if groundwater is encountered during or after construction activities, then the groundwater will be collected by the contractor, removed from the site, and disposed of properly. Separately, in the "Treatment Facility Information" section of the NPDES permit application, Hyperion states: "Given the nature of the offsite areas, stormwater flow is expected to occur only under extreme precipitation events. Stormwater discharge structures have been designed to convey the 100 year, 24 hour storm flows."

Based on the various descriptions of expected and potential discharge sources in Hyperion's NPDES permit application and supporting documentation, and pursuant to DEP's best professional judgement in accordance with 25 Pa. Code § 92a.48(a)(3) & 40 CFR § 125.3, the instantaneous maximum (IMAX) effluent limits for TSS, Total Iron, and Total Manganese from Group A of 25 Pa. Code § 87.102 are imposed at Outfall 001. Imposing only Group A's IMAX limits recognizes that intermittent/infrequent storm water discharges are the most likely sources to be present at Outfall 001 but that groundwater with higher pollutant loadings also may be present at the outfall.

Effluent limits in 25 Pa. Code § 87.102 include minimum and maximum pH limits of 6.0 S.U. and 9.0 S.U., respectively, for all discharge circumstances. However, storm water is known to be slightly acidic (about 5.0 to 5.5 S.U.). Also, the minimum pH from the SPLP results (6.87 S.U.) is higher than the minimum pH limit, which suggests that pH results less than 6.0 S.U. at Outfall 001 likely would be attributable to regular rainwater and not impacts to runoff from upgradient coal refuse areas. Therefore, only the maximum pH limit of 9.0 S.U. is imposed.

The Group A limits' requirement that alkalinity be greater than acidity will be implemented with reporting requirements for acidity and alkalinity and a minimum net alkalinity limit of 0.0 mg/L. In addition, pursuant to 25 Pa. Code § 92a.61(b), reporting will be required for aluminum due to its presence in elevated concentrations in the SPLP results.

Regulatory Effluent Standards and Monitoring Requirements

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

001.B. Water Quality-Based Effluent Limitations (WQBELs)

Storm Water

Generally, DEP does not develop numerical WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at Q_{7-10} low flow conditions. Precipitation-induced discharges generally do not occur at Q_{7-10} conditions because the precipitation that causes a storm water discharge also will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event. However, that does not preclude the development of WQBELs for storm water discharges to prevent adverse impacts from intermittent acute exposures, or the imposition of WQBELs based on a TMDL's waste load allocations (if applicable).

With the exception aluminum and iron, the pollutant concentrations from the SPLP results generally do not exhibit a reasonable potential to cause or contribute to excursions above water quality criteria. The acute water quality criterion for aluminum in 25 Pa. Code § 93.8c, Table 5 is 0.75 mg/L versus average and maximum SPLP results of 3.27 mg/L and 4.56 mg/L, respectively, and the 30-day average criterion for total iron in 25 Pa. Code § 93.7, Table 3 is 1.5 mg/L versus average and maximum SPLP results of 1.52 mg/L and 1.92 mg/L, respectively.

The SPLP results are only estimates of expected effluent quality and, while useful as a screening tool for this initial NPDES permit, do not represent a statistically significant dataset upon which to conclude that reasonable potential exists. The monitoring required according to Section 001.A of this Fact Sheet will help to establish the frequency and characteristics of Outfall 001's discharges after site development is complete and conditions have stabilized.

Groundwater

If base groundwater flow develops after construction, then there may be a discharge at Q_{7-10} conditions. TBELs for Outfall 001 conservatively assume that groundwater seeps/springs may develop during and after completion of construction of the

pad. However, WQBELs will not be considered unless data collected during the permit term show that groundwater is a component of Outfall 001's discharges.

DEP also notes that downstream samples show that pollutants of concern for diverted AML discharges from the site (aluminum, iron, manganese, TSS) were not detected or, in the case of pH, were circumneutral. It is unknown whether the stream samples were wet weather samples that included any AML storm water impacts.

While the reported stream concentrations do not suggest abandoned mine lands are currently impacting Gillespie Run, the data are limited, and stream quality may change after AML storm water discharge pathways are altered by construction of the compressor station.

Impairment of Gillespie Run

Gillespie Run is listed on Pennsylvania's 303(d) list with an impaired aquatic life use caused by metals from acid mine drainage. There is no Total Maximum Daily Load (TMDL) to restore water quality. It is possible that AML discharges from Outfall 001 will contribute to the impairment, but DEP does not have enough data to draw conclusions. TBELs at Outfall 001 will control metals associated with mine drainage and data collected during the permit term will allow DEP to evaluate whether discharges from Outfall 001 contribute to the impairment.

001.C. Effluent Limitations and Monitoring Requirements for Outfall 001

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 001 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements developed for this permit renewal, as applicable. Numerical effluent limits and monitoring requirements are summarized in the table below.

Table 6. Effluent Limits and Monitoring Requirements for Outfall 001

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	—	Report	—	—	—	25 Pa. Code § 92a.61(b)
Total Suspended Solids	—	—	—	—	90.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Aluminum, Total	—	—	—	—	Report	25 Pa. Code § 92a.61(b) or (h)
Iron, Total	—	—	—	—	7.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Manganese, Total	—	—	—	—	5.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Alkalinity	—	—	—	—	Report	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Acidity	—	—	—	—	Report	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Net Alkalinity [†]	—	—	0.0 (Minimum)	—	—	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
pH (s.u.)	—	—	—	—	9.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)

[†]Net Alkalinity is the sum of alkalinity (+) and acidity (-). A minimum limit of zero for net alkalinity will require alkalinity to always be greater than acidity as required by 25 Pa. Code § 87.102's Group A limits.

Monitoring frequencies and sample types are imposed based on those given in the existing permit and on Chapter 6, Table 6-4 of DEP's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits*. The guidance recommends annual reporting frequencies for storm water, but 1/quarter grab sampling will be required for TSS, aluminum, iron, manganese, alkalinity, and acidity for this initial permit issuance to capture seasonal variation among results. Flow must be measured 1/quarter. Net alkalinity must be calculated 1/quarter using alkalinity and acidity values.

Development of Effluent Limitations

Outfall No.	<u>002</u>	Design Flow (MGD)	<u>Variable</u>
Latitude	<u>40° 14' 29.00"</u>	Longitude	<u>-79° 48' 52.50"</u>
Wastewater Description: <u>Storm water discharges from a natural gas compressor station</u>			

As explained previously in this Fact Sheet and pursuant to 40 CFR § 122.26(a)(2)(iii), discharges of storm water from oil and gas field activities and operations generally are not required to obtain an NPDES permit. The exceptions to that permit exemption in 40 CFR 122.26(c)(1)(iii)(B) and (C) would require an NPDES permit if there is a discharge of a reportable quantity for which a notification is or was required pursuant to 40 CFR 110.6, or of the facility contributes to a violation of a water quality standard.

The compressor station has not been constructed, so there have been no discharges for which a reportable quantity notification is or was required and there have been no violations of water quality standards related to compressor station operations since those operations have not commenced.

To determine whether the compressor station contributes to a violation of a water quality standard, the NPDES permit will require Hyperion to collect one round of post-construction storm water samples (after oil and gas field activities and operations have commenced) from Outfall 002 and analyze those samples for the parameters in Pollutant Group 1 (General Chemistry) and Pollutant Group 2 (Metals) and to submit the results to DEP. This initial characterization will allow DEP to determine whether effluent limits or monitoring requirements are necessary for Outfall 002 consistent with 40 CFR 122.26(c)(1)(iii)(C). Apart from the requirement for initial characterization, Outfall 002 will be listed as a storm water discharge point in the permit without any requirements consistent with 40 CFR § 122.26(a)(2)(iii).

Development of Effluent Limitations

Outfall No. 003 **Design Flow (MGD)** Variable
Latitude 40° 14' 30.80" **Longitude** -79° 48' 53.50"
Wastewater Description: Storm water discharges from abandoned mine lands

As described previously in this Fact Sheet, post-construction discharges of storm water from Outfall 003 will consist of storm water runoff from upland areas diverted around the Champion Compressor Station. The discharges are expected to consist solely of AML storm water consistent with the raised elevation of the compressor station pad and corresponding increase in separation distances to groundwater. However, it is possible for groundwater seeps or springs to develop during or after construction as reported in the geotechnical report included with the application.

The circumstances in which discharges from Outfall 003 are expected to occur and the characteristics of those discharges are generally the same as those at Outfall 001. Therefore, Outfall 003 will be subject to the same effluent limits and monitoring requirements as Outfall 001. Refer to Sections 001.A, 001.B, and 001.C of this Fact Sheet and the "Statutes and Regulations Relating to the Champion Compressor Station" discussion for the applicable effluent limitations' rationale.

Effluent Limitations and Monitoring Requirements for Outfall 003

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 003 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements developed for this permit renewal, as applicable. Numerical effluent limits and monitoring requirements are summarized in the table below.

Table 7. Effluent Limits and Monitoring Requirements for Outfall 003

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(b)
Total Suspended Solids	—	—	—	—	90.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Aluminum, Total	—	—	—	—	Report	25 Pa. Code § 92a.61(b) or (h)
Iron, Total	—	—	—	—	7.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Manganese, Total	—	—	—	—	5.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Alkalinity	—	—	—	—	Report	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Acidity	—	—	—	—	Report	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
Net Alkalinity [†]	—	—	0.0 (Minimum)	—	—	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)
pH (s.u.)	—	—	—	—	9.0	25 Pa. Code §§ 89.207(b), 87.102(a), & 92a.48(a)(3)

[†]Net Alkalinity is the sum of alkalinity (+) and acidity (-). A minimum limit of zero for net alkalinity will require alkalinity to always be greater than acidity as required by 25 Pa. Code § 87.102's Group A limits.

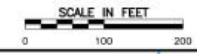
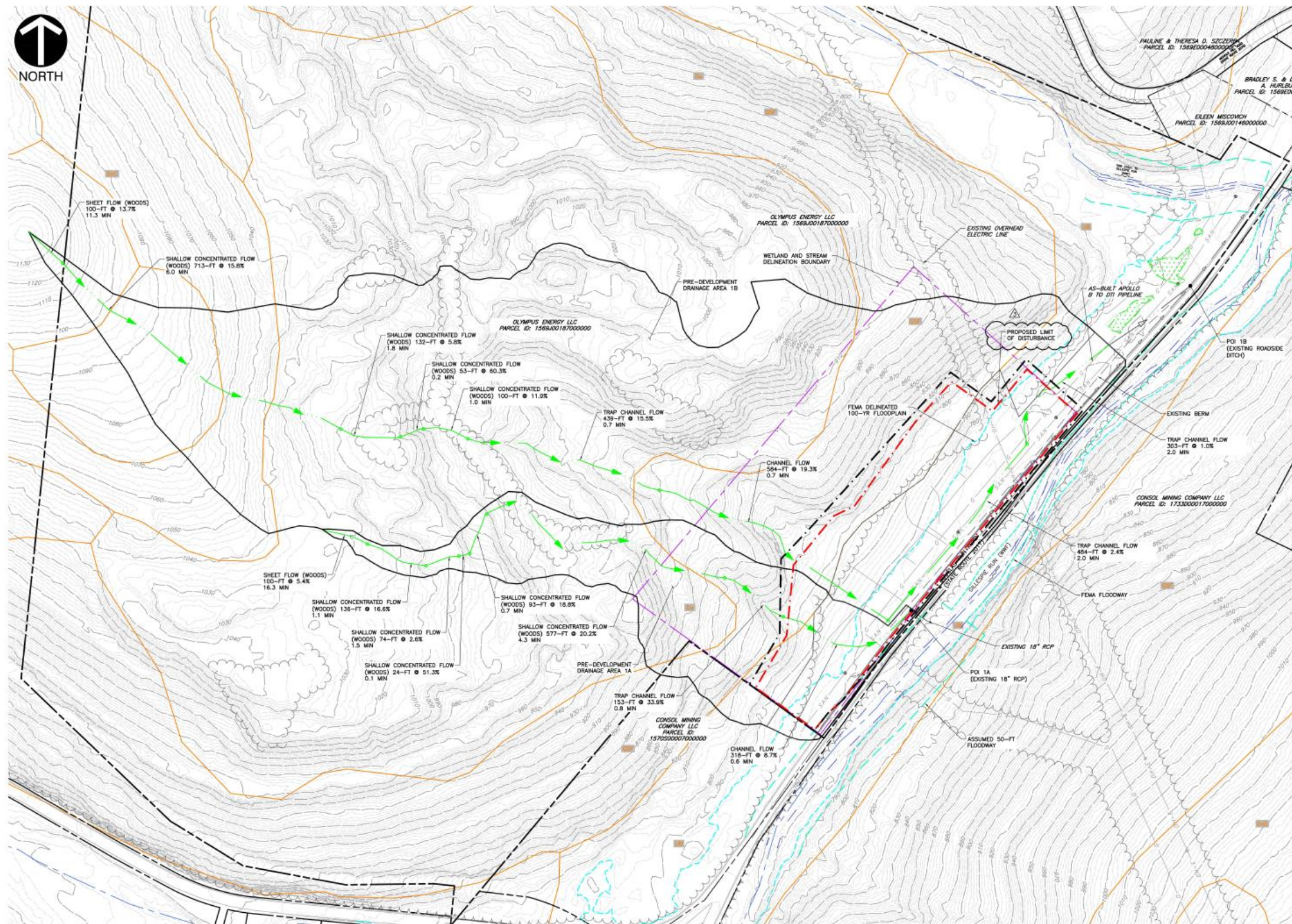
As explained in Section 001.C of this Fact Sheet, 1/quarter grab sampling will be required for TSS, aluminum, iron, manganese, alkalinity, and acidity for this initial permit issuance to capture seasonal variation among results. Flow must be measured 1/quarter. Net alkalinity must be calculated 1/quarter using alkalinity and acidity values.

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment)
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	Standard Operating Procedure (SOP) for Clean Water Program: Establishing Effluent Limitations for Individual Industrial Permits [SOP No. BCW-PMT-032, Version 1.6, October 1, 2023]
<input type="checkbox"/>	Other:

ATTACHMENT A

Delineated Flow Pathways from Upland Areas

Pre-Development



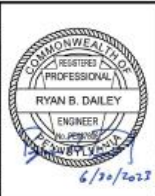
- REFERENCES**
- EXISTING CONTOURS DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL CONSTRUCTED FROM PUMP LEAK LIGHT DETECTION AND REMEDIATION EDIATION POINTS, TOPOGRAPHIC CONTOURS MAPS AT AN INTERVAL OF 2 FEET OBTAINED BY PUMP PROGRAM, IN DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED 2006.
 - FACILITY LAYOUT PROVIDED BY HYPERION MIDSTREAM LLC.
 - SURVEYED PROPERTY LINES OBTAINED FROM FIELD SURVEY BY CCL INC. CONDUCTED IN AUGUST 2018. EXISTING UTILITIES SHOWN PER A COMBINATION OF FIELD DATA AND FEATURES DERIVED FROM AERIAL IMAGERY.
 - THE SITE WAS INVESTIGATED FOR STREAMS AND WETLANDS BY CCL, INC. IN APRIL 2020.
 - FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) STUDY CONDUCTED IN MAY 2010.
 - MAKERY OBTAINED FROM GOOGLE EARTH PRO, ACCESSSED APRIL 20, 2020.

- LEGEND**
- EXISTING PROPERTY BOUNDARY
 - EXISTING INDEX CONTOUR (10'-FT)
 - EXISTING INTERMEDIATE CONTOUR (2'-FT)
 - EXISTING GAS PIPELINE
 - EXISTING OVERHEAD ELECTRIC
 - EXISTING SANITARY LINE
 - EXISTING WATER LINE
 - EXISTING MISCELLANEOUS UTILITY
 - EXISTING CULVERT
 - EXISTING RIGHT-OF-WAY
 - EXISTING EDGE OF PAVEMENT
 - EXISTING UTILITY POLE
 - EXISTING CLANDESTINE GAS/HAZARDOUS F
 - EXISTING FIRE HYDRANT
 - EXISTING CATCH BASIN

- ASSUMED 50'-FT FLOODWAY
- EXISTING FEMA FLOODPLAIN
- EXISTING FEMA FLOODPLAIN
- EXISTING STREAM BANK
- EXISTING STREAM
- EXISTING ADJACENT PROJECT LOD
- WETLAND AND STREAM DELINEATION BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- PRE-DEVELOPMENT DRAINAGE AREA BOUNDARY
- PRE-DEVELOPMENT TIME OF CONCENTRATION PATH
- EXISTING SOIL TYPE BOUNDARY
- EXISTING SOIL TYPE
- EXISTING BERM

REVISION RECORD

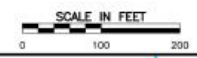
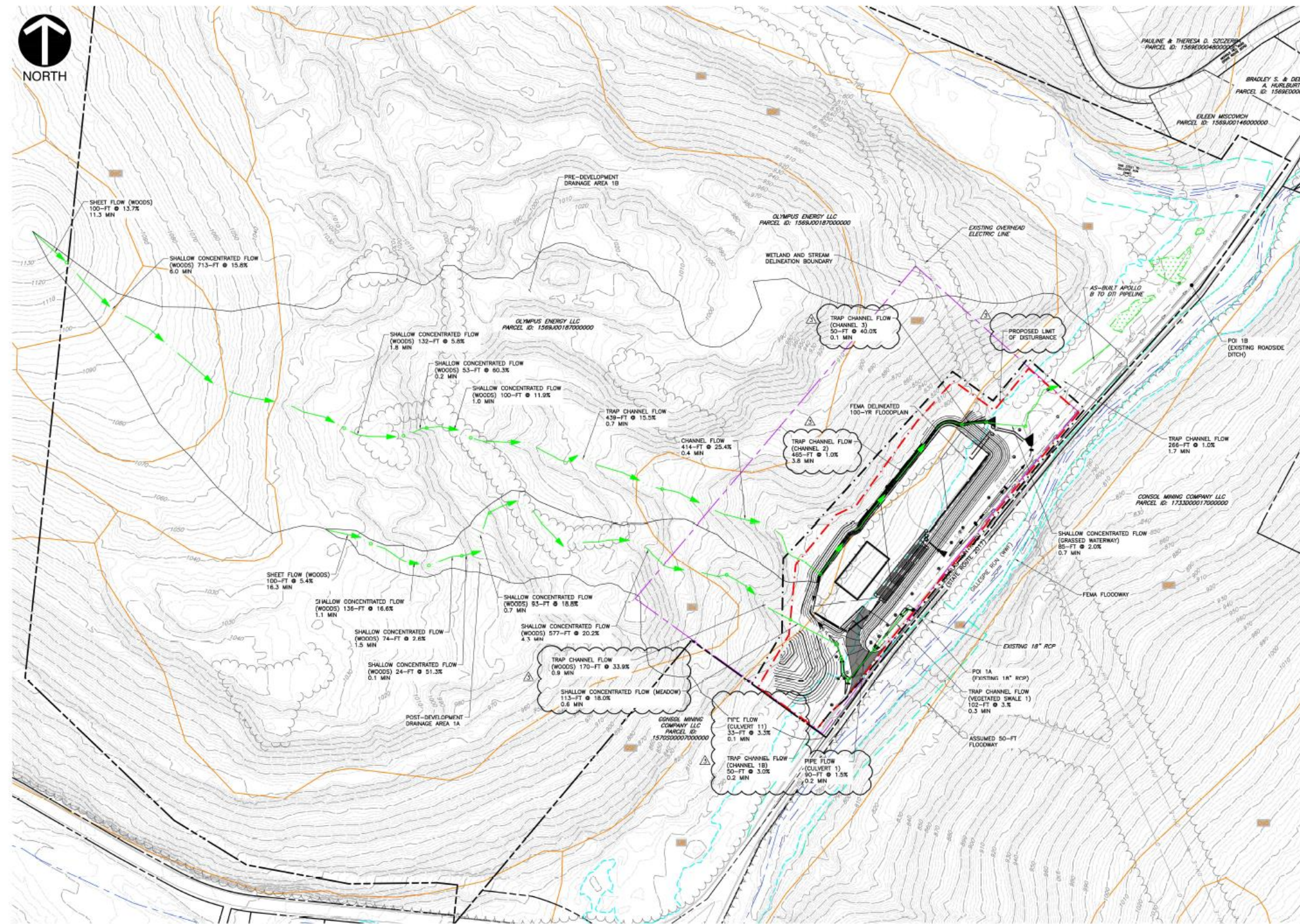
NO.	DATE	DESCRIPTION
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02	05/25/22	REVISED PER COMMENTS PROVIDED BY PACEP ON 05/25/22.
03	05/25/22	REVISED PER COMMENTS PROVIDED BY PACEP ON 05/25/22.



HYPERION MIDSTREAM LLC
CHAMPION COMPRESSOR STATION
PRE-DEVELOPMENT
HYDROLOGIC DRAINAGE MAP
ELIZABETH TOWNSHIP
ALLEGHENY COUNTY, PENNSYLVANIA

DATE: 05/24/22
DRAWN BY: [Name]
CHECKED BY: [Name]
APPROVED BY: [Name]

Post-Development



- REFERENCES**
- EXISTING CONTOURS DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL, CONSTRUCTED FROM PUMP LEAK LIGHT DETECTION AND RANGING ELEVATION POINTS, TOPOGRAPHIC CONTOURS MARKED AT AN INTERVAL OF 2 FEET, OBTAINED BY PUMP PROGRAM, IN DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATE: 2006.
 - FACILITY LAYOUT PROVIDED BY HYPERION MIDSTREAM LLC.
 - UNIMPROVED PROPERTY LINES OBTAINED FROM FIELD SURVEY BY CCL, INC. IN APRIL 2020. CONDUCTED IN AUGUST 2020. EXISTING UTILITIES SHOWN PER A COMBINATION OF FIELD DATA AND FEATURES DERIVED FROM AERIAL IMAGERY.
 - THE SITE WAS INVESTIGATED FOR STREAMS AND WETLANDS BY CCL, INC. IN APRIL 2020.
 - FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) STUDY CONDUCTED IN MAY 2020.
 - MASTERY OBTAINED FROM GOOGLE EARTH PRO, ACCESSSED APRIL 20, 2020.

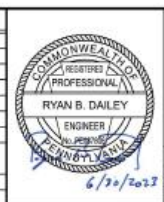
- LEGEND**
- EXISTING PROPERTY BOUNDARY
 - EXISTING INDEX CONTOUR (10-FT)
 - EXISTING INTERMEDIATE CONTOUR (2-FT)
 - EXISTING GAS PIPELINE
 - EXISTING OVERHEAD ELECTRIC
 - EXISTING SANITARY LINE
 - EXISTING WATER LINE
 - EXISTING MISCELLANEOUS UTILITY
 - EXISTING RIGHT-OF-WAY
 - EXISTING EDGE OF PAVEMENT
 - EXISTING UTILITY POLE
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 - EXISTING FIRE HYDRANT
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- EXISTING STREAM
- EXISTING ADJACENT PROJECT LOD
- WETLAND AND STREAM DELINEATION BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED INTERMEDIATE CONTOUR (2-FT)
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED ASPHALT PAVEMENT
- PROPOSED FENCE
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- PROPOSED GAS LINE
- PROPOSED 100-YR FLOODPLAIN

- PROPOSED CHANNEL
- PROPOSED STORM DRAIN
- PROPOSED RIPRAP APRON
- PROPOSED ENWALL
- PROPOSED MANHOLE
- PROPOSED INLET
- APPROXIMATE SUBSURFACE DRAIN LOCATION
- APPROXIMATE TIE BENCH (DESIGNED BY OTHERS)
- PROPOSED COMPOST FILTER SOCK
- PROPOSED ROCK FILTER
- PROPOSED COMPOST FILTER SOCK INLET PROTECTION
- PROPOSED SOIL STABILIZATION
- SOIL BOUNDARY
- SOIL TYPE
- POST-DEVELOPMENT DRAINAGE AREA BOUNDARY
- POST-DEVELOPMENT TIME OF CONCENTRATION PATH

REVISION RECORD

NO	DATE	DESCRIPTION
1	05/20/20	ISSUED FOR PERMITS
2	05/20/20	REVISED PER COMMENTS PROVIDED BY PADEP ON 05/20/20 AND REVISED FACILITY LAYOUT.
3	05/20/20	REVISED PER COMMENTS PROVIDED BY PADEP ON 05/20/20.
4	05/20/20	REVISED PER COMMENTS PROVIDED BY PADEP ON 05/20/20.



HYPERION MIDSTREAM LLC
CHAMPION COMPRESSOR STATION
POST-DEVELOPMENT
HYDROLOGIC DRAINAGE MAP
ELIZABETH TOWNSHIP
ALLEGHENY COUNTY, PENNSYLVANIA

HYPERION
CCL

DRAWN BY: VLP DATE: 05/20/20 A/E: []

CHECKED BY: RBD DATE: 05/20/20 S/E: []

APPROVED BY: MBS DATE: 05/20/20 S/EET NAME: HYD-2