pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Southwest Regional Office**
**CLEAN WATER PROGRAM**

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0024252** |
| Facility Type | **Storm Water** | APS ID | **1037015** |
| Major / Minor | **Minor** | Authorization ID | **1350946** |

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

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **Sunoco Partners Marketing & Terminals, LP** | Facility Name | **Delmont Terminal** |
| Applicant Address | 5733 Butler Street | Facility Address | 1734 Old Route 66 |
| | Pittsburgh, PA 15201-2115 | | Delmont, PA 15626-1020 |
| Applicant Contact | David Kopolovich | Facility Contact | David Kopolovich |
| Applicant Phone | (412) 495-7823 | Facility Phone | (412) 495-7823 |
| Client ID | 161585 | Site ID | 236458 |
| SIC Code | 4226 | Municipality | Salem Township |
| SIC Description | Trans. & Utilities - Special Warehousing and Storage, Not Elsewhere Classified | County | Westmoreland |
| Date Application Received | April 5, 2021 | EPA Waived? | Yes |
| Date Application Accepted | April 26, 2021 | If No, Reason | N/A |
| Purpose of Application | Renewal of NPDES permit PA0024252 | | |

## Summary of Review

The Department received an IW NPDES permit renewal application from Sunoco Partners Marketing & Terminals, L.P. (SPMT) on April 5, 2021 for their Delmont Terminal facility in Salem Township of Westmoreland County. The facility's SIC Code is 5171, Petroleum Bulk Terminal, and is not subject to an Effluent Limitation Guideline (ELG). The current permit was issued on September 21, 2016 and expires September 30, 2021. The permit will be administratively extended while the renewal application remains under technical review by the Department.

The facility has three point-source discharges of stormwater– Outfall 001, 002 and 003 which all discharge to High-Quality (HQ) streams. Outfall 001 discharges into a drainage swale along the street from a catch basin network and flows north to Thorn Run along Old Route 66. The drainage to this outfall includes the 0.2 acre loading rack area, biodiesel tanks containment, additives containment and fueling area, vapor recovery unit, grass area, garage, general building, office and pavement drains. The water flows through an A.P.I. certified oil/water separator prior to discharge.

Outfall 002 discharges to an unnamed tributary of Beaver Run in back of the facility. This outfall receives stormwater from the 3-acre diked storage tank farm containing Tanks #1, 2, 3, 4, 5, 6 and 7. Drains connect between the different diked containment areas and ultimately discharges from the Tank #7 containment. Outfall 003 is the drain from the 2.6-acre southern portion of the tank farm which contains Tanks 701, 702 and 703 and flows to the same tributary as Outfall 002. Flow in the containment area moves east and discharges by Tank #703. Throughout the tank farms the drains are normally closed and any liquid in the containment is visually inspected prior to discharge.

The tank farms do not have oil/water separators prior to the discharge from Outfall 002 and 003. Because the drains are normally shut, any product is contained. If any petroleum product was present, it would be contained in the normally closed

| Approve | Deny | Signatures | Date |
|---|---|---|---|
| X | | Nicole H. Benoit, P.E. / Environmental Engineering Specialist | November 18, 2021 |
| X | | Michael E. Fifth, P.E. / Environmental Engineer Manager | November 18, 2021 |

**Summary of Review**

diked areas, and a third party would be contacted to vacuum and dispose of the contaminated water offsite. This was first addressed in a letter dated April 18, 1994 by the prior owner of the terminal, Sun Company, Inc. The Department accepted this approach and justification. The current permit issued in 2016 includes Petroleum Marking Terminal BMPs from the PAG-03 General Permit, oil/water separator BMPs, and hydrostatic test water requirements. This will be re-evaluated in the Development of Effluent Limitations section below.

The receiving streams from the facility are designated in Chapter 93 as High Quality Cold Water Fisheries. Both the unnamed tributary and Thorn Run flow to Beaver Run. Beaver Run was designated a high-quality stream on October 8, 1979 to protect the Westmoreland water supply. Per a topographic map dated 1954 and overlayed aerial photo dated 1969, the facility was already in existence prior to the designation. The facility does not need to evaluate a non-discharge alternative for the general property as it was grandfathered before the HQ stream designation. The facility did install two biodiesel tanks within a new containment dike (Tanks 19 and 20) since the designation. As part of the 2016 renewal evaluation, Best Professional Judgment was applied, and it was determined the runoff rate and volume will likely be controlled to the level of pre-development conditions. This satisfied the anti-degradation analysis for discharge of stormwater to the high-quality stream. There have been no additional changes to the facility since 2016.

Hydrostatic testing is infrequent and has not occurred since August 2019. Hydrostatic testing wastewater from tanks in the Outfall 001 drainage area will not be discharged to surface water. The test water will be hauled offsite for treatment and disposal. The large, existing storage tanks in the containment areas discharging through Outfalls 002 and 003 will be released to the unnamed tributary of Beaver Run. The discharge through Outfall 002 will be sampled under IMP 201, and the discharge through Outfall 003 will be sampled under IMP 301. The hydrostatic test water should not be discharged with stormwater, and a Part C condition will continue to state that.

Act 14 notifications were sent to the Westmoreland County Controller and the Salem Township Supervisor.

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) | Intermittent and Variable |
| Latitude | 40º 25' 45" | Longitude | -79º 34' 39" |
| Quad Name | Slickville | Quad Code | 1509 |
| Wastewater Description: | Stormwater discharge of loading racks and biodiesel tanks through oil/water separator | | |
| Receiving Waters | Thorn Run (HQ-CWF) | Stream Code | 74872 |
| NHD Com ID | 125291718 | RMI | 0.3300 |
| 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 | Metals | | |
| Source(s) of Impairment | Acid Mine Drainage | | |
| TMDL Status | Final, Tentative | Name | Kiskiminetas-Conemaugh River Watersheds TMDL, Thorn Run Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | Westmoreland Municipal Authority – Sweeney Plant | | |
| PWS Waters | Beaver Run | Flow at Intake (cfs) | |
| PWS RMI | 7.09 | Distance from Outfall (mi) | 6.4 |

Changes Since Last Permit Issuance: None

Other Comments: None

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 002 | Design Flow (MGD) | Intermittent and Variable |
| Latitude | 40º 25' 46" | Longitude | -79º 34' 29" |
| Quad Name | Slickville | Quad Code | 1509 |
| Wastewater Description: | Stormwater from diked storage tank containment area (and hydrostatic test water IMP 201) | | |

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 003 | Design Flow (MGD) | Intermittent and Variable |
| Latitude | 40º 25' 39" | Longitude | -79º 34' 26" |
| Quad Name | Slickville | Quad Code | 1509 |
| Wastewater Description: | Stormwater from diked storage tank containment area (and hydrostatic test water IMP 301) | | |
| Receiving Waters | Unnamed Tributary of Beaver Run (HQ-CWF) | Stream Code | 43017 |
| NHD Com ID | 125291713 | RMI | 1.1 |
| 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 | Nutrients, Siltation | | |
| Source(s) of Impairment | Agriculture, Grazing in Riparian or Shoreline Zones | | |
| TMDL Status | Final | Name | Kiskiminetas-Conemaugh River Watersheds TMDL |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | Westmoreland Municipal Authority – Sweeney Plant | | |
| PWS Waters | Beaver Run | Flow at Intake (cfs) | |
| PWS RMI | 7.09 | Distance from Outfall (mi) | 7.9 |

Changes Since Last Permit Issuance: None

Other Comments: None

**Compliance History**

**Summary of DMRs:**

During the past twelve months, the facility had one effluent limitation exceedance at Outfall 003. The pH was 9.1 S.U. which was above the IMAX limit of 9.0 S.U. This occurred in the first half of 2021. In the second half of 2020 it was elevated at 8.81 S.U. The permittee believes this occurred because of prolonged retention of the stormwater in contact with the 2B limestone-based riprap of the dike. The sample collectors are trained to collect a field pH test prior to discharge. Employees were retrained on this practice and the need to notify the internal EHS department of an exceedance prior to discharging. Employees were also retrained to discharge the water soon after the rain event to minimize contact time.

The facility has not had any detected concentrations of oil and grease at any of the outfalls except for Outfall 001 in the second half of 2020. The reported concentration was 3.1 mg/L which is less than the normal detection level of 5.0 mg/L. Oil and grease have been managed at the facility.

The following table is a summary of the TSS concentrations at the three outfalls since the permit was issued in September 2016

| TSS IMAX (mg/L) | End 2016 | Start 2017 | End 2017 | Start 2018 | End 2018 | Start 2019 | End 2019 | Start 2020 | End 2020 | Start 2021 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Outfall 001** | <9.0 | 21.7 | 580 | 137 | 9.7 | 26.8 | 30.3 | 12.1 | 13 | 150 |
| **Outfall 002** | 110 | 173 | 122 | 44.8 | 435 | 290 | 114 | 110 | 28 | 19 |
| **Outfall 003** | 51.0 | 107 | 238 | 118 | 402 | 126 | 350 | 350 | 1400 | 81 |

The permittee believes the elevated TSS at Outfall 001 in the first half of 2021 was due to a large snow melt on the day of sampling and introduced higher than normal sediment. In 2017 the TSS was very elevated at 580 mg/L. During other months, the TSS has been less than 50 mg/L. The facility should evaluate the possible cause of elevated TSS when it occurs and review BMPs to see if maintenance or a more permanent change is needed.

Outfall 002 has historically not been as elevated as Outfall 003 and during the past two sampling events has been less than 50 mg/L. There has been some

Outfall 003 elevated TSS is believed to be due to sediment build-up at the outfall inlet piping. There are plans to dig out the inlet area and install new stone. Employees are also being trained to modulate the flow from the outfall so as to minimize any turbulence at the inlet that may entrain solids. The permittee recently reworked the outlet discharge area by adding additional riprap and placing a 90-degree bend to maximize flowtime through the riprap channel.

Metals have occasionally been elevated but appear to generally coincide with elevated TSS levels. The permittee believes the metals could be the result of residual scaling from the piping in addition to the solids contribution. Sampling results should be regularly reviewed by the permittee and analyzed for trends and feedback from BMPs. This will be a new Part C condition.

The most recent hydrostatic test discharge was from IMP 201 in August 2019. There were no exceedances of the effluent limitations.

**Summary of Inspections:**

A routine inspection was conducted on July 28, 2021. No violations were noted. The Department recommendations included the following:

| | |
|---|---|
| | • Permittee should ensure outfall valves at the diked areas are closed and secured at all times. Valves should be opened only after conducting inspections of the contained stormwater. Valves should be reclosed and secured after each draining.<br>• Sediment filters/BMPs should be considered at outfalls 001 and 003, if suspended solids become a concern. |

## Operations Compliance Check Summary Report

**Facility:** Sunoco Delmont Terminal

**NPDES Permit No.:** PA0024252

**Compliance Review Period:** 4/1/2014 – 4/3/2019

**Inspection Summary:**

| INSP ID | INSPECTED DATE | INSP TYPE | AGENCY | INSPECTION RESULT DESC |
|---|---|---|---|---|
| 3224007 | 07/28/2021 | Compliance Evaluation | PA Dept of Environmental Protection | No Violations Noted |
| 3210381 | 06/22/2021 | Administrative/File Review | PA Dept of Environmental Protection | No Violations Noted |
| 3087584 | 09/30/2020 | Administrative/File Review | PA Dept of Environmental Protection | No Violations Noted |

**Violation Summary:**

No violations

**Open Violations by Client ID:**

No open CW violations for Client ID 161585

**Enforcement Summary:**

No enforcements

**DMR Violation Summary:**

| MONITORING START DATE | MONITORING END DATE | REPORT FREQUENCY | OUTFALL | PARAMETER | SAMPLE VALUE | PERMIT VALUE |
|---|---|---|---|---|---|---|
| 01/01/2021 | 06/30/2021 | Semi-Annually | 003 | pH | 9.10 | 9.0 |

**Compliance Status:**

Permittee is in compliance.

**Completed by:** John Murphy

**Completed date:** 10/8/2021

## Development of Effluent Limitations

***Analysis of Stormwater Discharges:***

| | | | |
|---|---|---|---|
| **Outfall No.** | 001 | **Design Flow (MGD)** | Intermittent and Variable |
| **Latitude** | 40º 25' 45" | **Longitude** | -79º 34' 39" |

**Wastewater Description:** Stormwater discharge of loading racks and biodiesel tanks through oil/water separator

Review of effluent limitations was conducted in accordance with SOP Establishing Effluent Limitations for Individual Industrial Permits (SOP No. BCW-PMT-032, Final October 1, 2020, Revised Version 1.6.

Section III of the SOP recommends that permit writers consider the following when evaluating the need for effluent limits and monitoring requirements for industrial storm water discharges:

A. Effluent limits and monitoring requirements for industrial stormwater discharges may be important for ensuring that Best Management Practices (BMPs) are adequately implemented.

B. Application managers will consider, where appropriate, applying treatment standards contained in Chapter 95.

C. The applicable appendix of the PAG-03 General Permit should be considered the minimum standards for limits, benchmarks and monitoring requirements for individual industrial stormwater permits. The application manager may include other limits, benchmarks and monitoring requirements as justified in the fact sheet.

D. In general, if actual stormwater concentrations exceed 100 times the most stringent Chapter 93 criterion (or a lesser amount for large industrial areas that drain to small streams), or exceed 100 mg/L for pollutants without criteria, the application manager should consider applying effluent limits for the applicable parameters and/or the implementation of BMPs with compliance schedules as necessary to achieve the limits or otherwise reduce stormwater concentrations.

### Technology-Based Effluent Limitations (TBELs)

*Current Effluent Limitations*

The 2016 NPDES permit imposed the following TBEL effluent limitations:

| Parameter (mg/L) | Instant. Minimum | Average | Daily Maximum | Instant. Maximum | Minimum Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| Flow (MGD) | | Report | Report | | 2/6 months | Estimate |
| pH (S.U.) | 6.0 | | | 9.0 | 2/6 months | Grab |
| TSS | | Report | Report | | 2/6 months | Grab |
| Oil and Grease | | 15.0 | | 30.0 | 2/6 months | Grab |

*Chapter 95*

25 Pa Code Chapter 95.2 states that industrial wastes must meet certain effluent standards. Waste is not limited to the generalized definition of waste and can include liquid, such as stormwater, that has been contaminated by industrial activity.

Chapter 95.2(1) states that "Wastes must have a pH of not less than 6 and not greater than 9. The exceptions do not apply. The permit has already established an instantaneous minimum and maximum of 6.0 and 9.0 S.U., respectively. The limitations will continue to apply per anti-backsliding.

Chapter 95.2(2) applies to oil-bearing wastewaters. Discharges from a petroleum marketing terminal are considered oil-bearing, or have the potential to be oil-bearing due to oils and other sheen producing products stored and loaded onsite. 95.2(2)(i) states "At no time cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining

shoreline." This prohibition is included in Part A of the permit. 95.2(2)(ii) states "At no time contain more than 15 milligrams of oil per liter as a daily average value nor more than 30 milligrams of oil per liter at any time, or whatever lesser amount the Department may specify for a given discharge or type of discharge as being necessary for the proper protection of the public interest or to meet any requirements based upon the State Act or the Federal Act, as defined in § 92.1 (relating to definitions)." The permit currently imposes 15.0 mg/L as an average and 30.0 mg/L as an instantaneous maximum. Both limits will continue to be imposed in the renewed permit.

Chapter 95.2(3) specifically addresses petroleum marketing terminals and states:

Petroleum marketing terminals must:

(i) Be provided with facilities to remove oil from waters, including stormwater runoff, before discharge into waters of this Commonwealth. Compliance with this paragraph constitutes compliance with paragraph (2)(i) except to the extent that the State Act or Federal Act or regulations promulgated thereunder impose a more stringent requirement.

(ii) Develop, implement and keep up to date pollution incident prevention plans as described in § 91.34 (relating to activities utilizing pollutants).

(iii) Design, maintain and utilize oil removal facilities that consist of an American Petroleum Institute (A.P.I.) listed oil separator, unless the person operating the facility can demonstrate to the Department that an alternate design is equivalent or better in removing oil from water to maintain and protect the waters of this Commonwealth, including all existing and designated uses established under Chapter 93 (relating to water quality standards).

Just prior to Outfall 001 is a 10,000 gallon A.P.I. oil/water separator. The previous fact sheet noted that the facility maintains a combined SPCC/PPC Plan which was first implemented November 1, 2010. Requirement 95.2(3)(ii) will be included as a Part C condition in the renewed permit.

Chapter 95.2(4) states "Waste may not contain more than 7.0 milligrams per liter of dissolved iron." The facility's sampling to date does not demonstrate a potential to exceed 7.0 mg/L. Monitoring of dissolved iron will no longer be required in the renewed permit.

Chapter 95.2(5) addresses surface water use. The facility does not withdraw surface water, so this regulation does not apply.

Chapter 95.10 addresses TDS for new and expanding mass loadings of TDS. TDS is not required to be analyzed in stormwater per the Module 1 instructions unless it is contained in an ELG application to the facility or is known or believed to be present. The facility does not have an applicable ELG, and the permittee does not believe TDS to be present. It has not been analyzed as it is not an expected pollutant of concern. Chapter 95.10 is not appliable to the discharge as there is no new or expanding mass loading of TDS.

*Applicable PAG-03 General Permit Appendix*

The permittee stated the applicable SIC for the facility is 4226 – Special Warehousing and Storage, Not Elsewhere Classified. This code falls within the 4212-4231 Motor Freight Transportation and Warehousing category of Appendix L – Land Transportation and Petroleum Stations and Terminals per the PAG-03 instructions.

The monitoring requirements for Appendix L of the PAG-03 permit are as follows:

| Discharge Parameter | Units | Sample Type | Measurement Frequency | Benchmark Values |
|---|---|---|---|---|
| Total Suspended Solids | mg/L | Grab | 1/6 months | 100 |
| Oil and Grease | mg/L | Grab | 1/6 months | 30 |

TSS monitoring will continue to be imposed, and oil and grease will be limited as discussed above. The SOP recommends the benchmarks be included in the individual permit as the minimum standards and that other limits, benchmarks and monitoring requirements may be imposed as justified in the fact sheet.

As these are the minimum recommended standards, lower benchmarks can be warranted. The benchmarks of 100 mg/L TSS and 30 mg/L oil and grease are not specific to the discharge of an oil/water separator, nor were they considered protective for HQ receiving streams. In fact, discharges to HQ streams are not eligible for the PAG-03 general permit

because the permit is not protective enough. The Department has developed benchmark values for No Exposure Certification which are considered indicative of stormwater that has not contacted industrial activity nor industrial materials. To protect high quality streams, industrial activity and material contact should be minimized to the extent possible, and where necessary, heavily controlled through Best Management Practices (BMPs). It is reasonable at this site to impose the No Exposure Benchmark values of 5.0 mg/L oil and grease and 30 mg/L TSS rather than the PAG-03 benchmarks. The TSS eDMR data since the permit was issued is provided in a table in the DMR Summary section above. The TSS exceeded 50 mg/L during several sampling events, and between July 2017 to June 2018 exceeded 50 mg/L for two consecutive sampling periods. All of the eDMR reported oil and grease values have been less than 5 mg/L.

Exceedance of a benchmark does not constitute a violation of the permit, but rather triggers the facility to further investigate the cause of the elevated concentration and BMP modifications to reduce the concentration in the future. To ensure that the discharge does not degrade the stream, the No Exposure Certification benchmark values will be used as the benchmark values in the renewed permit. The goal for the permittee is to be consistently below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters

Like the PAG-03 permit, if the benchmark value of a pollutant is exceeded at an outfall, the permittee will be required to develop and submit a Corrective Action Plan (CAP). As this is a high-quality stream, a CAP will be required for any exceedance of a benchmark value rather than two consecutive monitoring periods. A CAP is defined in the PAG-03 permit as "a document or correspondence submitted to DEP that identifies additional pollutant control measures or BMPs that will be implemented by the permittee in order to reduce the concentration of pollutants in stormwater discharges to levels at or below benchmark values specified in sector-specific appendices of the PAG-03 General Permit, along with an implementation schedule." The PAG-03 permit also states "The permittee shall submit the corrective action plan to DEP within 90 days of the end of the monitoring period triggering the need for the plan, and shall implement the plan immediately upon submission or at a later time if authorized by DEP in writing. The permittee shall, in developing the plan, evaluate alternatives to reduce stormwater concentrations and select one or more BMPs or control measures for implementation, unless the permittee can demonstrate in the plan that (1) the exceedances are solely attributable to natural background sources; (2) no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice; or (3) further pollutant reductions are not necessary to prevent stormwater discharges from causing or contributing to an exceedance of applicable water quality standards." These requirements will be added to the permit and modified to eliminate references to the PAG-03 permit.

## Water Quality-Based Effluent Limitations (WQBELs)

*Current Effluent Limitations*

The 2016 NPDES permit imposed the following monitoring requirements:

| Parameter (mg/L) | Instant. Minimum | Average | Daily Maximum | Instant. Maximum | Minimum Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| Aluminum, Total | | | Report | | 1/6 months | Grab |
| Iron, Dissolved | | | Report | | 1/6 months | Grab |
| Iron, Total | | | Report | | 1/6 months | Grab |
| Manganese, Total | | | Report | | 1/6 months | Grab |

*Total Maximum Daily Loads*

The facility discharges to UNT Beaver Run and Thorn Run, both in the Kiskiminetas-Conemaugh River Watershed TMDL, finalized on January 29, 2010. The TMDL is to address metals, pH and sediment impairments associated with abandoned mine drainage. The modeling determined iron, aluminum and manganese to be the selected pollutants for meeting the load reductions required for instream concentration targets for metals. Waste load allocations (WLAs) and load allocations (LAs) were developed for all point and non-point source discharges along the streams in the TMDL watershed. A facility is either given an individualized waste load allocation, or the facility has low potential to contribute to the pollutant levels and its discharge is collectively accounted for as part of the aggregate WLA for negligible discharges.

The facility's discharge from Outfall 001 is a Negligible Discharge Facility per Appendix C of the Kiskiminetas-Conemaugh TMDL. Therefore, a TMDL waste load allocation will not be assigned to this facility in the effluent limitations. Monitoring for the metals was imposed in the 2016 permit. Total iron and aluminum have occasionally been elevated at the facility and will continue to be monitored. Manganese and dissolved iron concentrations have been low and do not have a potential to exceed water quality standards. Monitoring of manganese and dissolved iron will be removed in the renewed permit.

This is a relatively small drainage area TSS is occasionally elevated greater than 100 mg/L but is best addressed as a TBEL. Thorn Run is impaired for acid mine drainage metals but does not list siltation or other sediment-based reasons. The facility has been in operations since at least 1954.

*Stormwater WQBELs*

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not during Q7-10 conditions. Since the discharges from Outfalls 001 and 002 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed on the basis that there is no potential to exceed Chapter 93 criterion during low flow conditions.

*Anti-Degradation*

Antidegradation regulations under Chapter 93.4c(a)(l)(i) require dischargers to protect the existing use of receiving waters. Chapter 93.4c(b) requires dischargers to consider non-discharge alternatives, public participation and social/economic justification when proposing new, additional or increased discharges to high quality or exceptional value streams. Existing use protection required under Chapter 93.4c(a)(l)(i) is ensured for discharges to high quality streams imposing the most stringent of technology-based, water quality based and non-degrading effluent limitations. To ensure that the discharge does not degrade the stream, the no exposure benchmark values will be used as the benchmark values in the permit. The goal for the permittee is to be consistently below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan when there is an exceedance of the benchmark values. The benchmark values are also displayed in the table below. These values are not effluent limitations; an exceedance of the benchmark value is not a violation. If there is an exceedance of the benchmark value, a Corrective Action Plan must be developed to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark value provides permittees with an indication that the facility's BMPs may not be sufficiently controlling pollutants in stormwater. Based on the discharge data included in the permit application, the Delmont Terminal is not expected to consistently meet the benchmark value for Total Suspended Solids, but it is believed that proper BMP implementation and site-specific adjustments as needed will result in continuous concentrations below the benchmark. Oil and grease is expected to meet the benchmark value.

| **Benchmark Values** | **Concentration (mg/L)** |
|---|---|
| Total Suspended Solids (TSS) | 30.0 |
| Oil and Grease | 5.0 |

**Sampling Frequency**

The current permit imposes 2/6 months sampling for TBELs and 1/6 months sampling for WQBELs. The WQBEL based effluent limitations will be increased to 1/quarter as total iron and aluminum have occasionally been elevated. The TBEL sampling will be increased to 1/month as well to ensure BMPs and facility conditions are properly maintained to ensure protection of the high-quality receiving stream.

## Development of Effluent Limitations

***Analysis of Stormwater Discharges:***

**Outfall No.** 002 **Design Flow (MGD)** Intermittent and Variable
**Latitude** 40º 25' 46" **Longitude** -79º 34' 29"
**Wastewater Description:** Stormwater from diked storage tank containment area (and hydrostatic test water IMP 201)

**Outfall No.** 003 **Design Flow (MGD)** Intermittent and Variable
**Latitude** 40º 25' 39" **Longitude** -79º 34' 26"
**Wastewater Description:** Stormwater from diked storage tank containment area (and hydrostatic test water IMP 301)

Review of effluent limitations was conducted in accordance with SOP Establishing Effluent Limitations for Individual Industrial Permits (SOP No. BCW-PMT-032, Final October 1, 2020, Revised Version 1.6.

Section III of the SOP recommends that permit writers consider the following when evaluating the need for effluent limits and monitoring requirements for industrial storm water discharges:

A. Effluent limits and monitoring requirements for industrial stormwater discharges may be important for ensuring that Best Management Practices (BMPs) are adequately implemented.

B. Application managers will consider, where appropriate, applying treatment standards contained in Chapter 95.

C. The applicable appendix of the PAG-03 General Permit should be considered the minimum standards for limits, benchmarks and monitoring requirements for individual industrial stormwater permits. The application manager may include other limits, benchmarks and monitoring requirements as justified in the fact sheet.

D. In general, if actual stormwater concentrations exceed 100 times the most stringent Chapter 93 criterion (or a lesser amount for large industrial areas that drain to small streams), or exceed 100 mg/L for pollutants without criteria, the application manager should consider applying effluent limits for the applicable parameters and/or the implementation of BMPs with compliance schedules as necessary to achieve the limits or otherwise reduce stormwater concentrations.

Outfall 002 and 003 discharge stormwater from tank farm diked containment areas and are expected to have similar pollutants of concern due to the nearly identical activity in each drainage area. Therefore, development of effluent limitations for both outfalls will be done simultaneously.

The hydrostatic test water to be discharged through Outfalls 002 and 003 will not occur during a storm event. The effluent limits for hydrostatic test water will be imposed at internal monitoring points 201 and 301.

**Technology-Based Effluent Limitations (TBELs)**

*Current Effluent Limitations*

The 2016 NPDES permit imposed the following TBEL effluent limitations:

| Parameter (mg/L) | Instant. Minimum | Average | Daily Maximum | Instant. Maximum | Minimum Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| Flow (MGD) | | Report | Report | | 2/6 months | Estimate |
| pH (S.U.) | 6.0 | | | 9.0 | 2/6months | Grab |
| TSS | | Report | Report | | 2/6 months | Grab |
| Oil and Grease | | Report | Report | | 2/6 months | Grab |

*Chapter 95*

See Outfall 001 for a description of 25 Pa Code Chapter 95.2 requirements for pH, oil and petroleum marketing terminals and 25 Pa Code Chapter 95.10 requirements for TDS.

The permit has already established an instantaneous minimum and maximum of 6.0 and 9.0 S.U., respectively. The limitations will continue to apply per anti-backsliding.

The current permit did not impose effluent limitations for oil and grease and the associated fact sheet justified monitoring only because of the normally closed diked tank valves and requirement to observe for an oil sheen prior to discharge. The diked tank valves are being used as an alternative to the use of an oil/water separator, but the alternative must still meet the water quality standards. Therefore a monthly average 15 mg/L and IMAX of 30 mg/L oil and grease effluent limitation will be imposed in the renewed permit at both Outfall 002 and 003.

Outfall 001 has an A.P.I. listed oil/water separator, however Outfall 002 and 003 were constructed prior to the Clean Water Act and did not install oil/water separators at that time. The oil and grease concentrations at Outfall 002 and 003, collected 2/6 months, were all non-detected since the 2016 permit was issued. It is therefore expected that the permittee will have no issue in meeting the new effluent limitation. With demonstration of consistent non-detect oil and grease, it will be acceptable at this time not to install and operate an A.P.I. listed oil separator, however a change in the oil and grease detection, or a change in BMPs or visual inspection procedures may result in a reversal of this determination.

Monitoring of dissolved iron will no longer be required in the renewed permit.

*Applicable PAG-03 General Permit Appendix*

See Outfall 001 for a description of the SIC code, Appendix L, benchmark values and Corrective Action Plan.

A benchmark for oil and grease will be set at 5 mg/L and for TSS will be set at 30 mg/L.

The TSS was greater than 30 mg/L in 8 of the last 10 sampling periods at Outfall 002, and all 10 of the last 10 periods at Outfall 003. It is expected that the permittee will need to develop a Corrective Action Plan and improve BMPs at both outfalls. TSS in stormwater is managed at other petroleum marketing terminals via BMPs, and so it is believed that BMPs will be effective at this facility as well. In the event onsite BMPs cannot sufficiently reduced solids loading, the permit may develop and impose TSS effluent limits in the next permit renewal.

**Water Quality-Based Effluent Limitations (WQBELs)**

*Current Effluent Limitations*

The 2016 NPDES permit imposed the following monitoring requirements:

| Parameter (mg/L) | Instant. Minimum | Average | Daily Maximum | Instant. Maximum | Minimum Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| Aluminum, Total | | | Report | | 1/6 months | Grab |
| Iron, Dissolved | | | Report | | 1/6 months | Grab |
| Iron, Total | | | Report | | 1/6 months | Grab |
| Manganese, Total | | | Report | | 1/6 months | Grab |

*Total Maximum Daily Loads*

See the TMDL background in Outfall 001 above.

The facility's discharges from Outfall 002 and 003 are not listed in Appendix C of the Kiskiminetas-Conemaugh TMDL. The stormwater was in existence and accounted for in the TMDL development as the discharge was existing well before the TMDL studies began. The discharge from Outfall 002 and 003 discharge to the UNT of Beaver Run without flowing

through the Salem Township MS4 system. Stormwater is intermittent and of variable flow rates, and the total annual mass loading is not expected to have a measurable impact on the stream. Between the outfall and stream is a wooded and vegetated area where there is likely much filtering and infiltration.

Monitoring for the metals was imposed in the 2016 permit. Total iron and aluminum have occasionally been elevated at the outfalls and will continue to be monitored. Manganese and dissolved iron concentrations have been low and do not have a potential to exceed water quality standards. Monitoring of manganese and dissolved iron will be removed in the renewed permit.

See the corresponding section in Outfall 001.

This is a relatively small drainage area and none of the pollutants are greater than 100 times the most stringent Chapter 93 criterion except for TSS. This parameter is best addressed as a TBEL rather than WQBEL.

**Sampling Frequency**

The current permit imposes 2/6 months sampling for TBELs and 1/6 months sampling for WQBELs. The WQBEL based effluent limitations will be increased to 1/quarter as total iron and aluminum have occasionally been elevated. The TBEL sampling will be increased to 1/month as well to ensure BMPs and facility conditions are properly maintained to ensure protection of the high-quality receiving stream.

## Development of Effluent Limitations

***Analysis of Hydrostatic Test Water Discharges:***

| | | | |
|---|---|---|---|
| **Outfall No.** | 201 | **Design Flow (MGD)** | 0.37 (260 gpm) |
| **Latitude** | 40º 25' 46" | **Longitude** | -79º 34' 29" |
| **Wastewater Description:** | Hydrostatic Test Water | | |

| | | | |
|---|---|---|---|
| **Outfall No.** | 301 | **Design Flow (MGD)** | 2.3 (1600 gpm) |
| **Latitude** | 40º 25' 39" | **Longitude** | -79º 34' 26" |
| **Wastewater Description:** | Hydrostatic Test Water | | |

Review of effluent limitations was conducted in accordance with SOP Establishing Effluent Limitations for Individual Industrial Permits (SOP No. BCW-PMT-032, Final October 1, 2020, Revised Version 1.6. Hydrostatic test water will be evaluated as a batch discharge industrial wastewater.

Hydrostatic test water from the large diked storage tanks discharge through Outfall 002 or 003 only. As these outfalls will primarily discharge stormwater, the discharge of hydrostatic test water will be controlled under IMP 201 for Outfall 002 and IMP 301 for Outfall 003. Outfall 002 and 003 reporting will be for stormwater only. As both IMPs receive hydrostatic test water from petroleum terminal storage tanks, the pollutants of concern are expected be the same and at the same concentration. Therefore the same limits and monitoring will apply to both IMPs.

### Technology-Based Effluent Limitations (TBELs)

*Current Effluent Limitations*

The 2016 NPDES permit imposed the following TBEL effluent limitations:

| Parameter (mg/L) | Instant. Minimum | Average | Daily Maximum | Instant. Maximum | Minimum Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| Flow (MGD) | | | Report | | 1/discharge | Calculation |
| Duration of Discharge (hours) | | | Report | | 1/discharge | Recorded |
| pH (S.U.) | 6.0 | | | 9.0 | 1/discharge | Grab |
| Dissolved Oxygen | 5.0 | | | | 1/discharge | Grab |
| TRC | | | 0.02 | | 1/discharge | Grab |
| TSS | | | 60.0 | | 1/discharge | Grab |
| Oil and Grease | | | 30.0 | | 1/discharge | Grab |
| Iron, Dissolved | | | 7.0 | | 1/discharge | Grab |
| Benzene | | | 0.0025 | | 1/discharge | Grab |
| BTEX, Total | | | 0.25 | | 1/discharge | Grab |

Part A footnote (4): Total Residual Chlorine (TRC) should be sampled if the source of test water is chlorinated, such as a municipal water supply. Otherwise sampling of TRC can be excluded.

*Minimum Technology and Treatment Standards*

*ELG*

The facility is not subject to an Effluent Limitation Guideline (ELG) as described in 40 CFR Parts 405 through 471.

*25 Pa. Code Chapter 95*

Per the SOP, pH requirements of 6.0 (minimum) and 9.0 S.U. (maximum) for all industrial waste process and non-process discharges should be imposed, and it should be considered for industrial stormwater where control of effluent pH is desired. Effluent limitations of 6.0 to 9.0 S.U. currently exist and in accordance with anti-backsliding, will continue to apply.

*Treatment Standards*

Per the SOP, if there is a reasonable potential to exceed 50% of a treatment standard, the treatment standard should be applied as an effluent limit in the permit.

TRC and oil and grease are addressed by the General Permits.

The facility is not subject to Chapter 95.10 related to TDS and constituent parameters. Phosphorus and nitrogen quantities are expected to be low and do not require monitoring.

*General Permits*

The SOP states "Where a General Permit exists for the industrial sector, the effluent limits and monitoring requirements should generally be considered minimum standards for discharges from that industry, unless the application manager can document that the requirements of the General Permit are not applicable to a specific individual permit." PAG-03 Appendix L Hydrostatic Test Water BMPs and PAG-10 General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines BMPs will be included in Part C.

The more stringent of the PAG-03 and PAG-10 requirements and/or benchmarks will be imposed to protect the High-Quality stream.

The PAG-03 imposes discharge concentrations to be met prior to discharge via analysis:

| **Parameter** | **PAG-03 Discharge Concentration (mg/L)** |
|---|---|
| Benzene | 0.0025 |
| BTEX | 0.25 |
| Oil and Grease | 30 |
| TSS | 60 |
| Iron, Dissolved | 7.0 |
| Iron, Total | --- |
| TRC | 0.05 |
| pH (S.U.) | 6.0 – 9.0 |
| Dissolved Oxygen | 5.0 |

Requirements for hydrostatic testing in the PAG-03 Appendix L are 4.a, 4.b and 4.c. Requirement 4.b will be imposed as effluent limitations. 4.a and 4.c will be included as Part C conditions.

These PAG-03 effluent limitations are no more stringent than those effluent limitations in the current permit. Per anti-backsliding, the 0.02 mg/L TRC limit will continue to be imposed.

The PAG-10 effluent limitations and monitoring requirements for discharge from existing tanks and pipelines is as follows:

| **Parameter (mg/L)** | **Instant. Minimum** | **Average Monthly** | **Instant. Maximum** | **Minimum Measurement Frequency** | **Sample Type** |
|---|---|---|---|---|---|
| Flow (gpm) | | Report | | 1/discharge | Measured |
| Duration of Discharge (hours) | | Report | | 1/discharge | Measured |
| Total Volume Discharged (gallons) | | Report Total | | 1/month | Calculated |
| Dissolved Oxygen | 5.0 | | | 2/discharge | Grab |
| pH (S.U.) | 6.0 | | 9.0 | 2/discharge | Grab |
| TRC | | Report | 0.05 | 2/discharge | Grab |
| TSS | | 30 | 60 | 1/discharge | Grab |
| Oil and Grease | | 15 | 30 | 1/discharge | Grab |
| Iron, Dissolved | | | 7.0 | 1/discharge | Grab |

| | | | | | |
|---|---|---|---|---|---|
| Benzene | | | 0.0025 | 1/discharge | Grab |
| BTEX, Total* | | | 0.25 | 1/discharge | Grab |

It is not expected that discharge of hydrostatic test water will occur for more than one working day. The most recent hydrostatic test was a duration of 8 hours. Where there is 1/discharge, the limits will continue to be imposed as a daily maximum. Where the frequency is 2/discharge, the limit will be average monthly and IMAX as per the above table. The flow duration, and total volume discharged will be reported as a daily maximum.

These PAG-10 effluent limitations are no more stringent than those effluent limitations in the current permit. The average monthly TSS and oil and grease will not be applied since discharge is not expected to occur for longer than one working day. Per anti-backsliding, the 0.02 mg/L TRC limit will continue to be imposed.

The following PAG-10 footnotes will apply to Part A of the permit:

> (3) The permittee shall collect samples at the point of discharge (outfall) prior to the discharge entering the receiving waters. For measurement frequencies of 1/discharge, the permittee shall collect samples within the first 30 minutes of commencing a discharge. For measurement frequencies of 2/discharge, the permittee shall collect one sample at the start of a discharge and one sample at the end of a discharge.
>
> (5) The permittee shall comply with effluent limitations and monitoring requirements for Total Residual Chlorine (TRC) when a public water supply or other source of chlorinated water is used in hydrostatic testing.
>
> (7) The permittee shall calculate Total BTEX as the sum of concentrations for Benzene, Toluene, Ethylbenzene, and Total Xylenes determined through analysis of the same sample.

The PAG-10 Part C Special Conditions will apply, as applicable.

To keep track of the infrequent hydrostatic test discharges, the Part A.III.C.1 requirement for submittal of an Annual Report (to be included as a permit attachment) will be applied.

*Best Professional Judgement*

As noted above, there is no ELG developed for hydrostatic test water. In the absence of any ELGs, technology-based effluent limitations are developed based on Best Professional Judgement. Development of BPJ limits are authorized under sections 304(b)(2)(B) and 402(1)(1) of the Clean Water Act. The General Permit effluent limits described above are no more stringent than the existing effluent limitations and so under that evaluation no new or tighter limits were imposed. The hydrostatic test water is discharged to a High-Quality stream though, and some of these limits do not reflect the most current Best Management Practices (BMPs) that are available for use.

1. A discharge concentration of 30 mg/L oil and grease would result in a visible oil sheen and conflict with narrative standards that prohibit such a sheen on waters of the Commonwealth. The tanks will be cleaned prior to testing, and cleaning water is disposed offsite and not directly to a stream. The source of hydrostatic test water is public service water that is void of oil and grease. Oil and grease should not be detected in the hydrostatic test water if the cleaning process and disposal is performed properly. It is proposed that the oil and grease limit be reduced to the Department's Target Quantification Limit (QL) of 5.0 mg/L.

2. The current TSS limit of 60 mg/L will allow for a significant amount of suspended solids in the discharge. The public service water has a very low concentration of TSS, and so any measurable TSS in the discharge would be due to poor cleaning of the tanks. A more reasonable effluent limitation is 30 mg/L, which is equivalent to the stormwater No Exposure benchmark value. The No Exposure benchmark values were developed to reflect stormwater that has not been impacted by industrial activity or materials. If the tank is properly cleaned, there should be no impact from the previously stored material.

3. The current iron limit is 7.0 mg/L as dissolved iron. At near neutral pH, there will be very little dissolved iron present in relation to the total iron. It is much more appropriate to limit total iron than dissolved iron in the discharge. Like TSS and oil and grease, the public service water has a very little iron. The presence of iron in the discharge would be due to poor cleaning of the tanks prior to testing. A more appropriate iron limitation is 3.0 mg/L, which is equal to the Chapter 93 water quality criterion for Cold Water Fishes.

The iron concentration in the discharge should not exceed that of what may be naturally occurring. Dissolved iron is a fraction of total iron, and therefore the total iron concentration will always be equal to, or greater than, the dissolved iron concentration. Because the new total iron limit of 3.0 mg/L is more stringent than the dissolved iron limit of 7.0 mg/L, the dissolved iron limit will be removed in the renewed permit and does not violate anti-backsliding regulations.

In establishing effluent limitations on a case-by-case basis, the appropriate technology for the applicant is considered. When evaluating appropriate BPJ limits for a permittee, the Department considers six factors as required by 40 CFR § 125.3. The six factors are: (1) the age of the equipment and facility, (2) the process employed, (3) the engineering aspects of the application of various types of control technique, (4) process changes, (5) the cost of achieving such effluent reduction and, (6) non-water quality environmental impact (including energy requirements). Factors specific to each level of control technology include costs, pollutant reduction benefits and economic achievability. Each of these factors are discussed below as they relate to the Delmont Terminal.

1. Equipment and Facility Age – Hydrostatic test water pollutants are controlled through the implementation of Best Management Practices (BMPs). As such, equipment age is not an applicable consideration when evaluating costs associated with meeting proposed effluent limitations. Based on the DMR data available for the most recent hydrostatic test, the Department anticipates compliance with the NPDES permit through the continued implementation of BMPs and housekeeping procedures.

2. The Process Employed – As mentioned in the previous paragraph, the Department anticipates compliance with the proposed effluent limitations based on the most current sample results and through continued implementation of BMPs. The process to achieve these limits is proper tank cleaning which is currently utilized to meet the current effluent limitations.

3. Engineering Aspects of Control Techniques – Pollutants are currently controlled through BMPs and additional engineering solutions are not expected as the facility currently meets the proposed effluent limitations.

4. Process Changes – Operations at the site are not proposed to change. The facility is currently meeting the effluent limitations with the tank cleaning BMPs that are already in place.

5. Cost of Achieving - No additional expenses for increased or modified BMP implementation are expected.

6. Non-Water Quality Environmental Impacts (Including Energy Requirements) – There are no known non-water quality environmental impacts or energy requirements associated with the lower effluent limitations since no changes to the current process or BMPs is expected.

## Water Quality-Based Effluent Limitations (WQBELs)

*Water Quality Analysis*

Per 25 Pa Code Chapter 93.4(b)a, one of the qualifying conditions to be listed as a High Quality Water is long-term water quality that “support the propagation of fish, shell-fish and wildlife and recreation in and on the water by being better than the water quality criteria in §93.7, Table 3 (relating to specific water quality criteria) or otherwise authorized by §93.a(b) (relating to toxic substances), at least 99% of the time for the following parameters: dissolved oxygen, iron, dissolved copper, temperature, dissolved arsenic, dissolved lead, aluminum, dissolved nickel, dissolved cadmium, pH, ammonia nitrogen and dissolved zinc. It is therefore critical to protect the stream at the most stringent Chapter 93 criterion in Table 3. Hydrostatic test water discharges occur infrequently, and limited data is available from past sampling events. It is assumed that the concentration of pollutants other than those sampled for are negligible from a hydrostatic test water. The following is the DMR data reported for the most recent hydrostatic test discharge from IMP 201. It is expected that the IMP 301 discharge would be nearly identical:

| Parameter (mg/L) | Basis | Quantity or Concentration |
|---|---|---|
| Flow (gpm) | Daily Max | 240 |

| | | |
|---|---|---|
| Duration of Discharge (hours) | Daily Max | 4 |
| Dissolved Oxygen | Instant Min | 6.6 |
| pH (S.U.) | Instant Min/Max | 7.95 |
| TRC | Daily Max | 0.01 |
| TSS | Daily Max | 4.18 |
| Oil and Grease | Daily Max | <5.0 |
| Iron, Dissolved | Daily Max | <0.2 |
| Benzene | Daily Max | <0.0010 |
| BTEX, Total | Daily Max | <0.002 |

Many of the pollutants are below detection and so it is assumed they do not have a potential to exceed water quality standards. The Chapter 93 criteria for dissolved oxygen is a minimum 5.0 mg/L and a 7-day average of 6.0 mg/L. The current 5.0 mg/L limit is sufficient for this intermittent discharge. pH is within the currently limited 6.0 to 9.0 range required in Chapter 93 and Chapter 95. TRC is limited to a four-day average of 0.011mg/L and a 1-hour average of 0.019 mg/L. The low 0.01 mg/L is half the water quality criterion for 1-hour, which is nearly equal to the 0.02 mg/L TBEL. This current limit provides protection of the HQ stream. TSS is not specifically limited in Chapter 93, but Chapter 93.6(b) states "In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances that produce color, tastes, odors, turbidity or settle to form deposits." At a low concentration of 4.18 mg/L the discharge is not expected to cause turbidity or settleable solids in the receiving stream, so there isn't a need to lower the TBEL effluent limit. Similarly, between the dissolved iron concentration of <0.2 mg/L and the low TSS, total iron is expected to be less than the proposed TBEL limit of 3.0 mg/L.

Without an expectation to exceed the water quality standard, imposition of a WQBEL is not necessary, however it is important to note that discharge up to the TBEL limit is not necessarily protective of the receiving stream. The facility existed prior to the HQ designation and therefore is exempt from an anti-degradation analysis for the HQ requirements. Any further changes at the facility that alter land cover and therefore stormwater quality/quantity, or other process changes at the facility that may lead to a new outfall or a new contribution to an existing outfall will need to be evaluated for anti-degradation. If the DMR data for 201 or 301 shows an increase in concentration that would lead to a reasonable potential to exceed water quality standards, the WQBELs should be re-evaluated and may be amended at that time.

Iron is limited to 3.0 mg/L. There is no evidence of aluminum or manganese at detectable levels that would have an impact on the TMDL. Aluminum and manganese will not be monitored or limited.

A Part C condition will require discharge from IMP 201 and 301 be avoided during critical stream conditions such as low flow. A Part C condition will also prohibit discharge of hydrostatic test water during a precipitation event to eliminate commingling of the discharges and prevent further taxing the stream with an additional surge of water volume. The discharge from Outfall 002 and/or Outfall 003 will be entirely hydrostatic test water when there is flow through the IMPs.

## 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, 002 and 003, 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 | Daily Maximum | Instant. Minimum | Monthly Average | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | XXX | Report | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | XXX | 9.0 | 1/month | Grab |
| TSS | XXX | XXX | XXX | XXX | Report | XXX | 1/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15.0 | XXX | 30.0 | 1/month | Grab |
| Total Aluminum | XXX | XXX | XXX | XXX | Report | XXX | 1/quarter | Grab |
| Total Iron | XXX | XXX | XXX | XXX | Report | XXX | 1/quarter | Grab |

Compliance Sampling Location: end of pipe

Other Comments: None

## 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 201 and 301, 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 | Daily Maximum | Minimum | Average Monthly | Daily Maximum | Instant. Maximum | | |
| Flow (MGD)<br>Internal Monitoring Point | XXX | Report | XXX | XXX | XXX | XXX | 1/discharge | Calculation |
| Duration of Discharge (hours)<br>Internal Monitoring Point | XXX | Report | XXX | XXX | XXX | XXX | 1/discharge | Recorded |
| pH (S.U.)<br>Internal Monitoring Point | XXX | XXX | 6.0 | XXX | XXX | 9.0 | 2/discharge | Grab |
| Dissolved Oxygen<br>Internal Monitoring Point | XXX | XXX | 5.0 | XXX | Report | XXX | 2/discharge | Grab |
| Total Residual Chlorine<br>Internal Monitoring Point | XXX | XXX | Report | XXX | 0.02 | XXX | 2/discharge | Grab |
| TSS<br>Internal Monitoring Point | XXX | XXX | XXX | XXX | 30.0 | XXX | 1/discharge | Grab |
| Oil and Grease<br>Internal Monitoring Point | XXX | XXX | XXX | XXX | 5.0 | XXX | 1/discharge | Grab |
| Total Iron<br>Internal Monitoring Point | XXX | XXX | XXX | XXX | 3.0 | XXX | 1/discharge | Grab |
| Benzene<br>Internal Monitoring Point | XXX | XXX | XXX | XXX | 0.0025 | XXX | 1/discharge | Grab |
| Total BTEX<br>Internal Monitoring Point | XXX | XXX | XXX | XXX | 0.25 | XXX | 1/discharge | Grab |

Compliance Sampling Location: tank effluent

Other Comments: None.

| 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: Establishing Effluent Limitations for Individual Industrial Permits, Version 1.6, BCW-PMT-032, 10/1/2020 |
| ☒ | TMDLs for Streams Impaired by Acid Mine Drainage in the Kiskiminetas-Conemaugh River Watersheds, Pennsylvania, January 29, 2010 |