pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0042579**
Wastewater Type	**IW/Sewage**	APS ID	**968533**
Facility Type	**MIIW1**	Authorization ID	**1229744**

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

Applicant, Facility and Project Information

Applicant Name	**Atlas Metal Conversion**	Facility Name	**Atlas Metal Conversion**
Applicant Address	780 Route 519	Facility Address	PO Box 126, 780 Route 519
	Eighty-Four, PA 15330		Eighty-Four, PA 15330-0126
Applicant Contact	Donald Barrett	Facility Contact	Donald Barrett
Applicant Phone	(724) 222-3000	Facility Phone	(724) 222-3000
Client ID	37494	Site ID	4416
SIC Code	3541, 3499	Municipality	Somerset Township
SIC Description	Machine Tools, Metal Cutting Types, Fabricated Metal Products	County	Washington
Date Application Received	May 18, 2018	EPA Waived?	Y
Date Application Accepted		If No, Reason	

Project Description: Renewal and amendment of NPDES permit

Summary of Review

The Department received an NPDES renewal application on May 18, 2018 from Atlas Metal Conversion (Atlas) for their machine shop at 780 State Route (SR) 519 in Eighty Four, Somerset Township, Washington County. Although thought to be administratively complete, their submittal was later found to be missing discharge sampling analyses. Upon Department request, sampling discharge monitoring reports were submitted for a recent 24-month period during November 2022.

Atlas is a processor and conditioner of high-grade alloy steels and titanium products used in aerospace, defense, power generation, and structural applications. Atlas, previously known as Smith Machine, Inc., has been in the metal processing business for decades at this location. Atlas' facility is recorded as having received its original Water Quality Management (WQM) permit (**6376405**) on April 12, 1976. This permit incorporated effluent limitations for the discharge of the site's privately owned sewage treatment package plant (STP). These effluent limitations were later adapted and incorporated into an NPDES permit (**PA0042579**) which was issued to Smith Machine on January 12, 1994 and became effective on February 1, 1994. This NPDES permit was renewed on May 4, 2004 and again on July 20, 2009. This last renewal expired on July 31, 2014. This facility has operated under control of the same organization over the entire period. However, on November 11, 2011 the Department received notification that the facility's name was changed to Atlas. Although the five-year term of their current permit has since expired, it has been considered administratively extended.

At this facility, Atlas provides conditioning and cold working services for the specialty steel and titanium manufacturing industry. They provide milling, grinding, sawing and non-destructive testing services. Their facility was originally operated by 60 employees, working in shifts, around-the-clock. The permittee's renewal application estimated that 20 employees are now working at the site. The SIC code on file was changed to 3541, Machine Tools, Metal Cutting Types as this better

Approve	Deny	Signatures	Date
X		John L Duryea, Jr., P.E. / Environmental Engineer	November 9, 2023
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 20, 2023

Summary of Review

reflects Atlas' activities onsite. Arguably a secondary SIC code could be assigned of 3499, Fabricated Metal Products, not elsewhere classified.

The facility's STP is located toward its south, near the intersection of SR 519 and St. Cloud Road. An excerpt from the permittee's renewal application submittal is included as Figure 1 below:

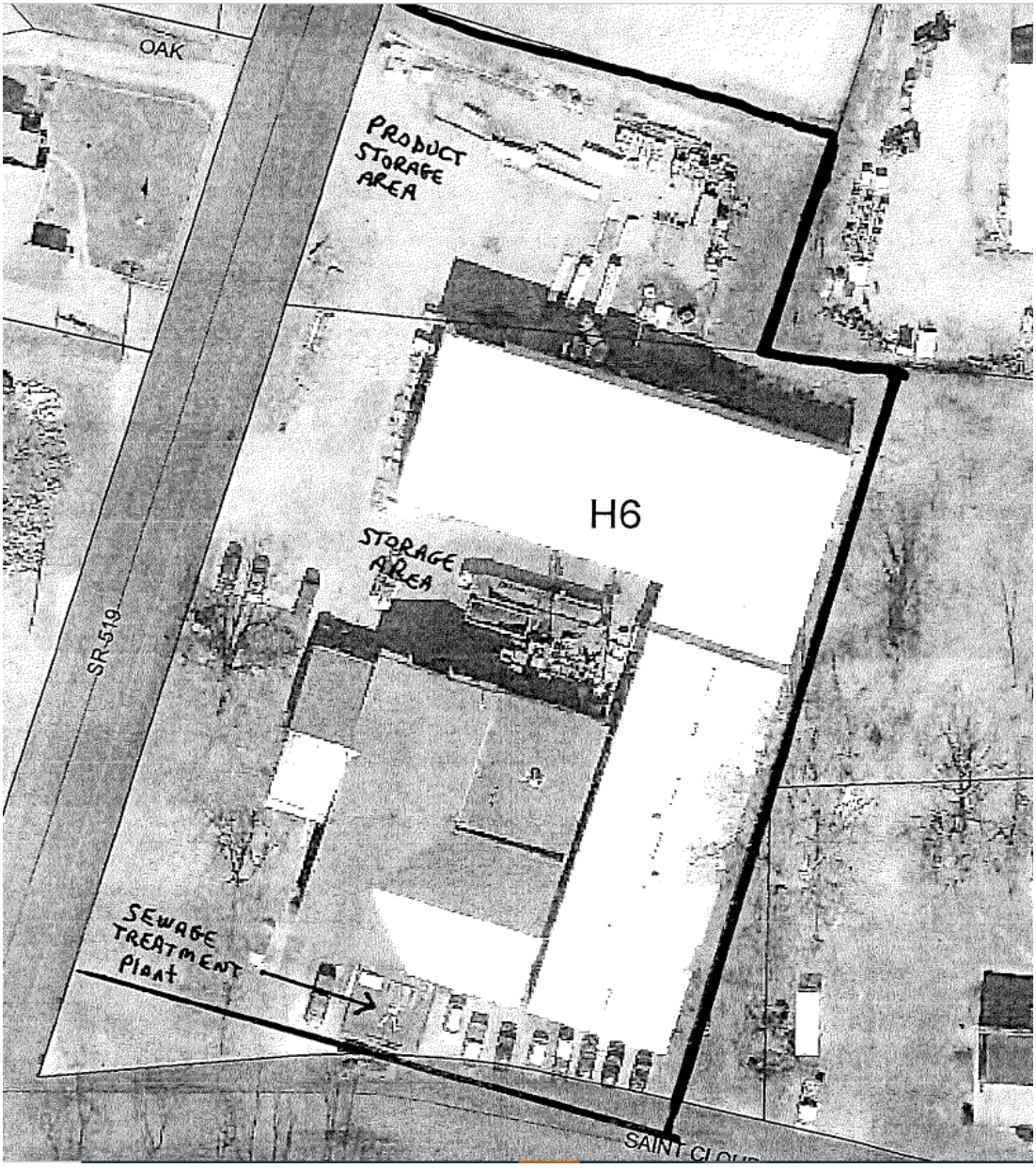

Figure 1: Satellite Image from Atlas' Renewal Submittal for their Facility

The STP discharge is believed to enter the stormwater sewer along SR 519 from where it is conveyed south toward an unnamed tributary (UNT) (37010) to Little Chartiers Creek which runs just to the south of St. Cloud Road. Little Chartiers Creek and this tributary were designated in 25 PA Code Chapter 93 as High Quality (HQ), warm water fisheries (WWF) on October 8, 1979. The reason for this change in designation was to protect the emergency intake water supply downstream. However, since the permitted discharge of this facility predates this designation change, and the STP discharge is neither new nor increasing, it is considered to be grandfathered to the prior WWF use designation.

Summary of Review

Incorporated into this renewal is an amendment request to also permit the discharge of stormwater associated with industrial activities. The prior discharge from the STP had been designated as Outfall 001. The added discharge is of stormwater also believed to be carried into the storm sewer infrastructure along SR 519, but will be assigned the designation Outfall 002 to allow a separate development of effluent limitations. As the receiving stream is designated HQ-WWF, on February 14, 2023, the Department met with the permittee onsite to review possible approaches. Of the possibilities, the client chose to pursue establishing the site as having no exposure to their industrial processes. Toward this end they moved material under roof or applied covers and cleaned or painted exposed surfaces. A sequence of site modification and stormwater sampling ensued to confirm that stormwater is not exposed to pollutants on this site. This effort culminated in samples taken on September 7, 2023, which were analyzed and reported to the Department on October 9, 2023. Therefore, there are no industrial process discharges from this facility at their new outfall. In addition, the site drainage was confirmed which enters the road inlets of SR 519 and is conveyed south by that infrastructure. No IW process discharge will be permitted.

The permittee has complied with Act 14 notifications.

It is recommended to publish a draft NPDES renewal / amended permit for public comment of this renewal and amendment.

Public Participation

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

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.004
Latitude	40º 10' 34.87"	Longitude	-80º 8' 1.36"
Quad Name	Washington East	Quad Code	1704
Wastewater Description:	Treated Sewage Effluent		
Receiving Waters	Unnamed Tributary of Chartiers Creek (HQ-WWF)	Stream Code	37010
NHD Com ID	99694474	RMI	0.06 miles
Drainage Area	0.23 Sq. Miles	Yield (cfs/mi^2)	0.01387
Q_{7-10} Flow (cfs)	0.0032	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1003	Slope (ft/ft)	
Watershed No.	20-F	Chapter 93 Class.	HQ-WWF
Existing Use	**Aquatic Life**	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s) Aquatic Life		
Cause(s) of Impairment	**None**		
Source(s) of Impairment	**None**		
TMDL Status	Final, Final	Name	Chartiers Creek, Chartiers Creek Watershed
Nearest Downstream Public Water Supply Intake	West View Water Authority, J.A Berkley WTP		
PWS Waters	Ohio River	Flow at Intake (cfs)	4730/2 = 2365
PWS RMI	976 (35.5 miles from Ohio)	Distance from Outfall (mi)	41.2

Changes Since Last Permit Issuance: There have been no changes documented from the permittee for this outfall.

Other Comments: Figure 2 below illustrates the drainage area of the receiving surface waters of Atlas' discharges.

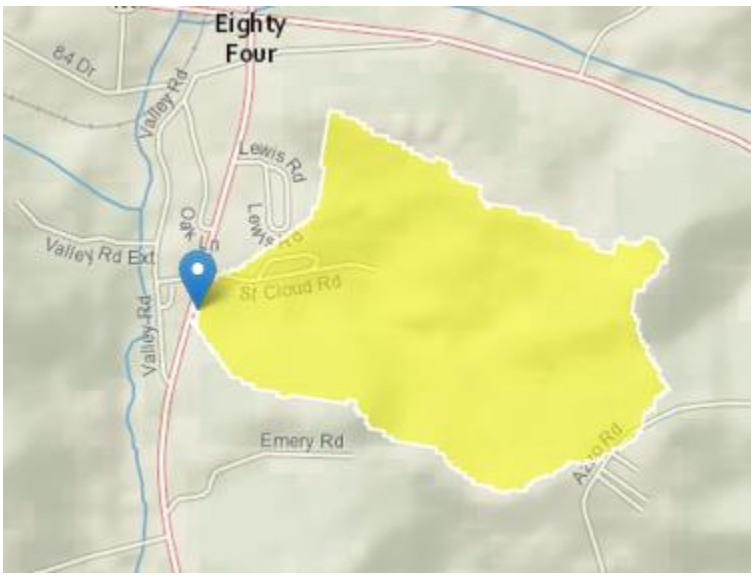

Figure 2: Drainage Area of the Unnamed Tributary of Chartiers Creek Receiving Atlas' Discharges

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.0 (precipitation-based)
Latitude	40º 10' 34.87"	Longitude	-80º 08' 01.36"
Quad Name	Washington East	Quad Code	1704
Wastewater Description:	Stormwater, potentially exposed to IW		
Receiving Waters	Unnamed Tributary of Chartiers Creek (HQ-WWF)	Stream Code	37010
NHD Com ID	99694474	RMI	0.06 miles
Drainage Area	0.23 Sq. Miles	Yield (cfs/mi^2)	0.01387
Q_{7-10} Flow (cfs)	0.0032	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1003	Slope (ft/ft)	
Watershed No.	20-F	Chapter 93 Class.	HQ-WWF
Existing Use	**Aquatic Life**	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s) Aquatic Life		
Cause(s) of Impairment	**None**		
Source(s) of Impairment	**None**		
TMDL Status	Final, Final	Name	Chartiers Creek, Chartiers Creek Watershed
Nearest Downstream Public Water Supply Intake	West View Water Authority, J.A Berkley WTP		
PWS Waters	Ohio River	Flow at Intake (cfs)	4730/2 = 2365
PWS RMI	976 (35.5 miles from Ohio)	Distance from Outfall (mi)	41.2

Changes Since Last Permit Issuance: This new outfall was added to cover stormwater runoff from this industrial site.

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: Atlas Metal Conversion Private STP				
WQM Permit No.	**Issuance Date**			
6376405	April 12, 1976			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Extended Aeration and Sand Filtration	Chlorination	0.0008
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0015		Not Overloaded		

Changes Since Last Permit Issuance: System maintenance to maintain/restore compliance

Other Comments: The treatment process consists of comminution, aeration, aluminum sulfate (‘Alum”) feed, settling, sand filtration, disinfection and sludge holding. The process equipment includes:

- One (1) screening device
- One (1) comminutor
- One (1) aeration treatment tank
- One (1) settling tank
- Two (2) sand filters
- One (1) chlorine contact tank
- One (1) sludge holding tank
- One (1) chemical feeder
- One (1) dosing tank

There were originally four pumps including one (1) submersible froth spray pump for use in the aeration tank, two (2) submersible dosing pumps and one (1) chemical feed pump.

The Department approved the submitted Project Evaluation Form on January 13, 1976.

Compliance History	
Summary of DMRs:	**The permittee's representative supplied a set of 24 DMR documents spanning from September 2020 through August 2022. The data had been analyzed by the H&H Water Controls, Inc. laboratory throughout this period. The results generally demonstrated compliance with the permittee's administratively extended permit effluent limitations for Outfall 001, with a few exceptions. These exceptions included exceedances for CBOD-5 Day results for July and August 2022. An email inquiry was sent to the permittee, asking for an explanation on December 1, 2022. In addition, not all of the parameters required were recorded in the DMRs for April, May and June 2022. Missing parameters were Dissolved Oxygen (DO), pH and Total Residual Chlorine (TRC) for these three, monthly reports.** **The DMRs document consistent discharge flows recorded as 0.0008 MGD. Since this exceeds the lower level of flow (0.0005 MGD or less) in Part A of their extended NPDES permit, monthly monitoring was required, as opposed to semi-annually. Their submitted DMRs demonstrated compliance with this requirement.** **The DMRs indicate that sludge removal has not occurred during the course of the 24-month period documented.**
Summary of Inspections:	**There have been four onsite inspections at this facility since the last permit issuance in 2009. Two of these resulted in violations being documented, in 2013 and March of this year. In addition, a Notice of Violation was issued in 2015 for failure to submit a timely renewal application. Operations provided a compliance report in December 2022 which documented that all of these prior issues have now been resolved**

Other Comments: None

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0015
Latitude 40º 10' 34.87" **Longitude** -80º 08' 01.36"
Wastewater Description: Treated Sewage Effluent

Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all renewed small flow treatment facility (SFTF) permits based on the requirements of DEP's "Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

Table 1: TBEL Requirements for Renewed SFTF Discharges

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs
Flow (GPD)	Report	XXX	Measured (SFTFs)	1/month
BOD5 (mg/L)	10	20	Grab	1/month
TSS (mg/L)	10	20	Grab	1/month
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month

***** Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

Total Residual Chlorine

In accordance with Table 1 above, an AML for TRC of 0.02 mg/L will be established in all new and renewed permits (Section IV.F.3, SOP for Clean Water Program, New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications, Final November 9, 2012, Revised May 17, 2019, Version 1.8). DMR data confirms that the new TRC AML of 0.02 mg/L cannot currently be achieved. The applicant will be given 1 year to comply with the revised TRC limit. It is recommended that the WQM Permit be amended to install a tablet dechlorinator, or UV disinfection system to bring the facility into compliance. Part C language for TRC limits below method detection limits has been added to the permit.

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 Best Professional Judgement (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.

Table 2: Proposed Effluent Monitoring Requirements for Outfall 001

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Instant. Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	0.0015	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/month	Grab
TRC	XXX	XXX	XXX	0.02	XXX	0.02	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
TSS	XXX	XXX	XXX	25.0	XXX	50.0	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	1/month	Grab

Compliance Sampling Location: Prior to discharge at Outfall 001.

Other Comments: Note that the monitoring frequency option from the prior permit when postulated average discharge flows are less than 0.0005 MGD has been discontinued in this renewal since submitted DMRs consistently were 0.0008 MGD.

Development of Effluent Limitations

Outfall No.	002	**Design Flow (MGD)**	0
Latitude	40º 10' 34.87"	**Longitude**	-80º 08' 01.36"

Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits

Outfall 002 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls receive stormwater. One of the applicable SIC codes for the site is 3499 and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix U. The reporting requirements applicable to stormwater discharges are shown in Table 3 below. Along with the monitoring requirements, sector specific BMPs that are included in Appendix U of the PAG-03 will also be included in Part C of the Draft Permit.

Table 3: PAG-03 Appendix (U) Monitoring Requirements

Parameter	Max Daily Concentration	Measurement Frequency	Sample Type
pH	Monitor and Report	1/6 Months	Grab
Total Suspended Solids (TSS)	Monitor and Report	1/6 Months	Grab
Nitrate + Nitrite -Nitrogen	Monitor and Report	1/6 Months	Grab
Total Aluminum	Monitor and Report	1/6 Months	Grab
Total Iron	Monitor and Report	1/6 Months	Grab
Total Zinc	Monitor and Report	1/6 Months	Grab
Total Nitrogen (1)	Monitor and Report	1/6 Months	Calculation
Total Phosphorus	Monitor and Report	1/6 Months	Grab
Oil and Grease	Monitor and Report	1/6 Months	Grab

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfall 002 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Degradation

Antidegradation regulations under Chapter 93.4c(a)(l)(i) require discharges 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.

In this case, to be protective of the downstream HQ-WWF waterway, rather than imposing non-degradation effluent limitations, in cooperation with the permittee, the site has committed itself to maintain this site and its stormwater as having “No Exposure” to the site’s industrial processes.

This commitment involved a process. Based on the sample results submitted to the Department with the renewal application from 2018, multiple parameters were shown to be above the no exposure benchmarks, including for Oil & Grease, Total Nitrogen, Chemical Oxygen Demand (COD), and Total Phosphorus. In the most recent sampling, taken on September 7, 2023, the results were as shown in Table 4 below:

Table 4: Applicant Sample Results for Outfall 002 and Benchmarks

Parameter	Sample Concentration (mg/L)	No Exposure Thresholds (mg/L)
Oil and Grease	< 5.0	≤ 5.0
Biochemical Oxygen Demand (5-day)	< 4.0	≤ 10.0
Chemical Oxygen Demand	< 10.0	≤ 30.0
Total Suspended Solids	< 5.0	≤ 30.0
Total Nitrogen	1.27	≤ 2.0 (Tot. N)
Total Iron	0.541	≤ 7.0
Total Phosphorus	0.2	≤ 1.0
pH (s.u.)	7.9	6.0 – 9.0 s.u.

Based on the sample results above, the permittee appears to have successfully modified the site to prevent stormwater exposure to their onsite industrial processes. As noted above, this is a change in the site conditions which was initiated by new management onsite following a Department site visit which occurred on February 14, 2023. At this meeting, the permittee committed to taking a set of actions to eliminate stormwater exposure to onsite industrial processes and products. Outside storage was curtailed and any products remaining outside were placed in containers and these were covered to prevent stormwater exposure. Finally; the client refined their measures after collecting a series of new stormwater sample to check on their progress. This culminated in the sample analysis results from September 7, 2023, shown in Table 4 above, in which all "No Exposure" benchmarks were met.

Given the history, monitoring for Oil & Grease, Total Nitrogen, Chemical Oxygen Demand (COD), and Total Phosphorus will be included in the monitoring imposed. To ensure that the discharge does not degrade the stream, the no exposure benchmark values may be imposed in the future as effluent limitations. However, for this permit term these will be monitored as the benchmark values for TSS, Oil & Grease, and COD in the permit, among others. 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 High Quality of the receiving waters. In order to closely monitor these benchmarks, a corrective action plan (CAP) will be required for any single benchmark exceedance.

Total Maximum Daily Loads (TMDL)

Wastewater discharges from the Atlas site are located within the Chartiers Creek Watershed for which the Department has developed a TMDL in cooperation with the U.S. Environmental Protection Agency (EPA) and their contractor TetraTech. The TMDL was finalized on April 9, 2003 and establishes waste load allocations for the discharge of metals, aluminum, iron and manganese within the Chartiers Creek Watershed. Section 303(d) of the Clean Water Act and U.S. EPA's Water Quality Planning and Management Regulations (codified at Title 40 of the *Code of Federal Regulations* Part 130) require states to develop a TMDL for impaired water bodies.

A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding the water quality criteria for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA 1991a). Stream reaches within the Kiskiminetas-Conemaugh River Watersheds are included in the state's Section 303(d) list because of various impairments, including metals, aluminum, iron and manganese. The TMDL includes consideration for each river segment and tributary within the target watershed and its impairment sources. Stream data is then used to calculate minimum pollutant reductions that are necessary to attain water quality criteria levels. Target concentrations published in the TMDL were based on established water quality criteria of 0.750 $^{mg}/_{L}$ total recoverable aluminum, 1.5 $^{mg}/_{L}$ total recoverable iron based on a 30-day average and 1.0 $^{mg}/_{L}$ total recoverable manganese. The reduction needed to meet the minimum water quality standards is then allocated among each known point and non-point pollutant source in the form of a watershed allocation using a stream's assimilative capacity. TMDLs prescribe allocations that minimally achieve water quality criteria (i.e., 100 percent use of a stream's assimilative capacity).

Aluminum: The specific water quality criterion for aluminum is expressed as an acute risk with a maximum daily limit in 25 Pa. Code Chapter 93. Discharges of aluminum may only be authorized to the extent that they will not cause or contribute to any violation of the water quality standards. Therefore, the water quality criterion for aluminum (0.75 mg/L) is imposed as a maximum daily effluent limit (MDL). Whenever the most stringent criterion is selected for the MDL, the Department should also impose an average monthly limit (AML) and instantaneous maximum limit (IMAX) if applicable. The imposition of an AML that is more stringent than the MDL is typically not appropriate because the water quality concerns have already been fully addressed by setting the MDL equal to the most stringent applicable criterion. Therefore, where the MDL is set at the value of the most stringent applicable criterion, the AML should be set equal to the MDL. Accordingly, TMDL aluminum limits are proposed for this outfall.

Iron: The specific water quality criterion for iron is expressed as a 30-day average of 1.5 mg/L in 25 Pa. Code § 93.7(a). The criterion is based on the protection of aquatic life and is associated with chronic exposure. There are no other criteria for total iron. Since the duration of the total iron criterion coincides with the 30-day duration of the AML, the 30-day average criterion for total iron is set equal to the AML. In addition, because the total iron criterion is associated with chronic exposure, the MDL (representing acute exposure) and the IMAX may be made less stringent according to established procedures described in Section III.C.3.h on Page 13 of the Water Quality Toxics Management Strategy (Doc. # 361-0100-003). These procedures state that a MDL and IMAX may be set at 2 times and 2.5 times the AML, respectively, or there is the option to use multipliers from EPA's Technical Support Document for Water Quality-based Toxics Control, if data are available to support the use of alternative multipliers. Accordingly, TMDL iron limits are proposed for this outfall.

Manganese: The specific water quality criterion for manganese is expressed as an acute or maximum daily of 1.0 mg/L in 25 Pa. Code § 93.7(a). The criterion is based on the protection of human health and is associated with chronic exposure associated with a potable water supply (PWS). Since no duration is given in Chapter 93 for the manganese criterion, a duration of 30 days is used based on the water quality criteria duration for Threshold Human Health (THH) criteria given in Section III.C.3.a., Table 3 on Page 9 of DEP's Water Quality Toxics Management Strategy. The 30-day duration for THH criteria coincides with the 30-day duration of an AML, which is why the manganese criterion is set equal to the AML for a "permitting at criteria" scenario. Because the manganese criterion is interpreted as having chronic exposure, the manganese MDL and IMAX may be made less stringent according to procedures established in Section III.C.2.h. of the Water Quality Toxics Management Strategy (AML multipliers of 2.0 and 2.5 for the MDL and IMAX respectively). Accordingly, TMDL manganese limits are proposed for this outfall.

All new or revised NPDES permits discharging into the Chartiers Creek Watershed have to be consistent with the TMDL Waste Load Allocation based on 40 CFR 122.44(d)(1)(vii)(B). The Department reviewed the TMDL and this facility has no explicit WLA. Therefore, no reductions below the TMDL endpoints will be imposed. The concentration values may be used as Effluent Limitations in the Atlas permit. However, since the permittee is committed to maintaining a "No Exposure" condition, a monitoring and benchmark approach will be used instead. Refer to Table 5 below, for a summary of the TMDL effluent concentration limitations which will be applied for this facility.

Table 5: Summary of the TMDL Criteria and Applicable Effluent Limitations

Parameter	Monthly Average ($^{mg}/_{L}$)	Daily Maximum ($^{mg}/_{L}$)
Aluminum	0.75	0.75
Iron	1.5	3.0
Manganese	1.0	2.0

Anti-Backsliding

As this outfall is being newly established, the provisions of EPA's anti-backsliding regulation, 40 CFR 122.44(l) are not applicable.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 002 are displayed in Table 6 below, these include the most stringent values from the above effluent limitation development. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan (CAP) when there is any exceedance of the benchmark values, which are also included in the Part C condition. The benchmark values are also displayed below in Table 6. These values are not effluent

limitations, an exceedance of the benchmark value is not a violation. As describe above, if there is an exceedance of the benchmark values, a CAP must be created 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 provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater. To ensure that the discharge is not degrading the high-quality waters, the no exposure benchmark values will be used as the benchmark values in the permit.

Table 6: Proposed Effluent Monitoring Requirements for Outfall 002

Parameter	Max Daily Concentration	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
pH (S.U.)	Monitor and Report	Between 6.0–9.0	1/6 Months	Grab
Total Suspended Solids (TSS)	Monitor and Report	30.0	1/6 Months	Grab
Nitrate + Nitrite -Nitrogen	Monitor and Report	3.0	1/6 Months	Grab
Total Aluminum	Monitor and Report	0.75	1/6 Months	Grab
Total Iron	Monitor and Report	3.0	1/6 Months	Grab
Total Manganese	Monitor and Report	2.0	1/6 Months	Grab
Total Zinc	Monitor and Report	XXX	1/6 Months	Grab
Oil & Grease	Monitor and Report	5.0	1/6 Months	Grab
Total Nitrogen[1]	Monitor and Report	2.0	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Monitor and Report	30.0	1/6 Months	Grab
Total Phosphorus	Monitor and Report	1.0	1/6 Months	Grab

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model
☐	Toxics Management Spreadsheet
☐	TRC Model Spreadsheet
☐	Temperature Model Spreadsheet
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
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