Pennsylvania
Department of
Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0096059**
Facility Type	**Industrial**	APS ID	**1135449**
Major / Minor	**Minor**	Authorization ID	**1523685**

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

Applicant and Facility Information

Applicant Name	**ATI Specialty Materials LLC**	Facility Name	**Oakdale Operations**
Applicant Address	1001 Robb Hill Road	Facility Address	1001 Robb Hill Road
	Oakdale, PA 15071-3200		Oakdale, PA 15071-3200
Applicant Contact	Victoria Baker	Facility Contact	Victoria Baker
Applicant Phone	(412) 997-0347	Facility Phone	(412) 997-0347
Client ID	277125	Site ID	249794
SIC Code	3399	Municipality	North Fayette Township
SIC Description	Manufacturing - Primary Metal Products, NEC	County	Allegheny
Date Application Received	April 2, 2025	EPA Waived?	Yes
Date Application Accepted	June 5, 2025	If No, Reason	

Purpose of Application: Renewal / Name Change of NPDES Permit PA0096059.

Summary of Review

On April 2, 2025, ATI Powder Metals, LLC submitted a renewal NPDES Permit application to discharge Industrial Wastewater from the Oakdale Operations facility. On April 16, 2025, an application for name change was submitted to change from ATI Powder Metals, LLC to ATI Specialty Materials, LLC (ATI). The facility is located in North Fayette, Allegheny County and operates under SIC Code 3399 – Primary Metals, Not Elsewhere Classified.

The Facility manufactures powdered metal products via vacuum induction melting and gas atomization. The discharges identified in this application are to existing, permitted outfalls and consist of non-process wastewaters (non-contact cooling water, cooling tower blowdown, and air compressor condensate), Acid Mine Drainage (AMD) groundwater originated from an adjoining property, and uncontaminated stormwater runoff.

As was communicated to the Pennsylvania Department of Environmental Protection (PADEP) via email on August 12, 2024, two (2) minor changes are occurring to equipment that generate non-process wastewater at the Facility in late 2024 and early 2025. These changes are not expected to significantly impact the flow volume or water quality of discharged non-process wastewater. The cooling towers previously in use at the autoclave and the atomizer (which discharge cooling tower blowdown to Outfalls 002 and 003, respectively) were functionally similar. The cooling tower in use at the atomizer was removed from the Facility and was replaced with the cooling tower previously in use at the autoclave. No significant changes to the cooling tower blowdown discharged from Internal Monitoring Point (IMP) 103 via Outfall 003 are anticipated.

Additionally, the cooling tower at the autoclave was replaced with a closed-loop glycol cooling system. The discharge of non-contact cooling water (NCCW) via IMP 102 is no longer expected to occur due to the closed-loop cooling system; NCCW is removed as a contributing discharge to IMP 102 in this permit application. Discharge of cooling tower

Approve	Deny	Signatures	Date
X		Curtis Holes, P.E. / Environmental Engineer	November 13, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 14, 2025

Summary of Review

blowdown from IMP 102 is anticipated to occur but is expected to primarily be limited to the summer or warmer months when the cooling system is more active. The installation of this system is mostly complete, but was not completed as of the timing of the preparation of this NPDES Permit application.

In addition to the equipment changes noted above, ATI anticipates that AMD groundwater, which originates from an adjoining property, is also discharged via Outfalls 003 and 005. Therefore, groundwater has been added as a contributing discharge flow to Outfalls 003 and 005; no process or non-process wastewaters are discharged from Outfall 005.

Outfall 002 (40° 25' 23.44", -80° 11' 31.76") has a drainage area of 218,000 ft^2 and is 23% impervious. The wastewaters consist of autoclave NCCW (200,000 gallons per month with 195,000 gallons per month loss to evaporation and recycle), cooling tower blowdown (5,000 gallons per month), along with AMD groundwater and stormwater runoff from the gravel parking areas. Outfall 002 is identified as the representative sampling location of Outfalls 003 and 005.

Internal monitoring point 102 (IMP 102) monitors the non-process wastewater from autoclave NCCW and cooling tower blowdown. The sampling location is at the effluent of the autoclave cooling tower prior to the addition of stormwater and AMD groundwater. IMP 102 is ultimately discharged to UNT North Branch Robinson Run via Outfall 002.

The AMD source originates above the facility property boundary, as stated in a Department's inspection of the facility dated April 8, 1997. In 2018, the County located a new abandoned mine entrance above the ATI Powder Metals facility, which is the source of the AMD. The AMD outcrops from the mine entrance and/or seeps from the hill, up-gradient of ATI Powder Metals facility, and becomes surface water. This surface water mix of stormwater and AMD then flows across ATI Powder Metals facility and is collected in the facility stormwater catch basins, which is then discharged via Outfall 002. During intense storm events, the up-gradient AMD seeps can be collected in the ATI Powder Metals stormwater catch basins at all three (3) outfalls. The facility does not introduce any additional pollutants to the AMD.

Outfall 003 (40° 25' 21.05", -80° 11' 31.80") has a drainage area of 27,000 ft^2 and is 100% impervious. The wastewaters consist of atomizer NCCW (86,000 gallons per month with 85,000 gallons per month loss to evaporation and recycle), cooling tower blowdown (1,000 gallons per month), air compressor condensate (300 gallons per month), and stormwater runoff from main parking lot french-drain, visitor lot, alloys bay roof and north side along with AMD groundwater.

Internal monitoring point 103 (IMP 103) monitors the non-process wastewaters (atomizer NCCW, cooling tower blowdown and air compressor condensate). The sampling location is at the effluent of the atomizer cooling tower blowdown prior to the addition of stormwater and groundwater. IMP 103 is ultimately discharged to UNT North Branch Robinson Run via Outfall 003.

Refer to Attachment B for the facility water flow diagram.

Outfall 005 (40° 25' 18.94", -80° 11' 32.03") has a drainage area of 150,000 ft^2 and is 10% impervious. The stormwater runoff is from paved loading area (behind the building), warehouse roof and south side (intermittent discharge) along with AMD groundwater. Outfall 005 discharges to Unnamed Tributary to North Branch of Robinson Run.

The client has no open violations.

Residual waste disposal must meet solid waste regulations.

Part C language in the draft permit provides controls on floating solids, chemical additives, residual solids, Stormwater Discharges.

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

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-

Summary of Review
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.	002	Design Flow (MGD)	0.0002
Latitude	40º 25' 20"	Longitude	-80º 11' 34"
Quad Name	Oakdale	Quad Code	1504
Wastewater Description:	Cooling tower blowdown, along with AMD groundwater and uncontaminated stormwater runoff.		
Receiving Waters	UNT North Branch Robinson Run	Stream Code	63295
NHD Com ID	99688200	RMI	1.02
Drainage Area	0.71 miles^2	Yield (cfs/mi^2)	0.01427*****
Q_{7-10} Flow (cfs)	0.01*	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1030	Slope (ft/ft)	
Watershed No.	20-F	Chapter 93 Class.	WWF
Assessed Use	**Aquatic Life**	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	N/A
Assessment Status	**Impaired**		
Cause(s) of Impairment	Metals, TSS, pH		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final April 9, 2008	Name	Chartiers Creek
Nearest Downstream Public Water Supply Intake	West View Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	4,730
PWS RMI	4.9	Distance from Outfall (mi)	24

Changes Since Last Permit Issuance: **None**

Other Comments: ***** StreamStats produced an error when modeled at the outfall location due to the drainage area size. The drainage area was smaller than recommended for accurate calculation of flow statistics. Accordingly, the Department selected a StreamStats modeling location downstream of the discharge point which provided an adequate drainage area size and eliminated the error. The error was removed at the UNT North Branch Robinson Run intersection point to the North Branch Robinson Run. The yield calculated at this location and the actual drainage area from the Outfall 002 location were used to calculate the adjusted Q_{7-10} flow (0.01 cfs) at the Outfall 002 discharge point.

Figure 1: Outfall 002 Drainage Basin

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	102	Design Flow (MGD)	0.0002
Latitude		Longitude	
Quad Name	Oakdale	Quad Code	1504
Wastewater Description:	Cooling tower blowdown.		
Receiving Waters	UNT North Branch Robinson Run via Outfall 002	Stream Code	63295

Changes Since Last Permit Issuance: The cooling tower at the autoclave was replaced with a closed-loop glycol cooling system. The discharge of non-contact cooling water (NCCW) via IMP 102 is no longer expected to occur due to the closed-loop cooling system; NCCW is removed as a contributing discharge to IMP 102 in this permit application.

Other Comments: None

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0.00005
Latitude	40º 25' 16"	Longitude	-80º 11' 34"
Quad Name	Oakdale	Quad Code	1504
Wastewater Description:	Atomizer NCCW, cooling tower blowdown, air compressor condensate and uncontaminated stormwater runoff.		
Receiving Waters	UNT North Branch Robinson Run	Stream Code	63295
NHD Com ID	99688200	RMI	1.0
Drainage Area	0.71 miles^2	Yield (cfs/mi^2)	0.01427*****
Q_{7-10} Flow (cfs)	0.01*	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1030	Slope (ft/ft)	
Watershed No.	20-F	Chapter 93 Class.	WWF
Assessed Use	**Aquatic Life**	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	N/A
Assessment Status	**Impaired**		
Cause(s) of Impairment	Metals, TSS, pH		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final April 9, 2008	Name	Chartiers Creek
Nearest Downstream Public Water Supply Intake	West View Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	4,730
PWS RMI	4.9	Distance from Outfall (mi)	24

Changes Since Last Permit Issuance: **None**

Other Comments: ***** StreamStats produced an error when modeled at the Outfall location due to the drainage area size. The drainage area was smaller than recommended for accurate calculation of flow statistics. Accordingly, the Department selected a StreamStats modeling location downstream of the discharge point which provided an adequate drainage area size and eliminated the error. The error was removed at the UNT North Branch Robinson Run intersection point to the North Branch Robinson Run. The yield calculated at this location and the actual drainage area from the Outfall 003 location were used to calculate the adjusted Q_{7-10} flow (0.01 cfs) for the Outfall 003 discharge point.

Figure 1: Outfall 003 Drainage Basin

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	103	Design Flow (MGD)	0.00005
Latitude		Longitude	
Quad Name	Oakdale	Quad Code	1504
Wastewater Description:	Atomizer NCCW, cooling tower blowdown and air compressor condensate.		
Receiving Waters	UNT North Branch Robinson Run via Outfall 003	Stream Code	63295

Changes Since Last Permit Issuance: None

Other Comments: None

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	005	Design Flow (MGD)	0.0
Latitude	40º 25' 14"	Longitude	-80º 11' 34"
Quad Name	Oakdale	Quad Code	1504
Wastewater Description:	Uncontaminated Stormwater		
Receiving Waters	UNT North Branch Robinson Run	Stream Code	63295
NHD Com ID	99688200	RMI	1.02
Watershed No.	20-F	Chapter 93 Class.	WWF
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, pH, TSS		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final April 9, 2008	Name	Chartiers Creek

Changes Since Last Permit Issuance: **None**

Other Comments: **None**

Compliance History	
Summary of DMRs:	
Summary of Inspections:	The last inspection conducted by the Department was on March 14, 2025 by Anthony Ascolillo with two (2) violations noted and resolved the same day. • Failure to submit monitoring report(s) or properly complete monitoring reports. • Violation of effluent limits in Part A of Permit.

Other Comments: **None**

Compliance History

DMR Data for Outfall 005 (from May 1, 2024 to April 30, 2025)

Parameter	Benchmark	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
TRC (mg/L) Daily Minimum	**Report**					0.07						0.060
TRC (mg/L) Daily Maximum	**Report**					0.07						0.060
TSS (mg/L) Daily Minimum	**100.0**					11.0						33
TSS (mg/L) Daily Maximum	**100.0**					11.0						33
Total Aluminum (mg/L) Daily Minimum	**Report**					2.32						10.8
Total Aluminum (mg/L) Daily Maximum	**Report**					2.32						10.8
Total Copper (mg/L) Daily Minimum	**Report**					< 1						0.022
Total Copper (mg/L) Daily Maximum	**Report**					< 1						0.022
Fluoride (mg/L) Daily Minimum	**Report**					0.37						0.682
Fluoride (mg/L) Daily Maximum	**Report**					0.37						0.682
Total Iron (mg/L) Daily Minimum	**Report**					0.5						5.40
Total Iron (mg/L) Daily Maximum	**Report**					0.5						5.40
Total Lead (mg/L) Daily Minimum	**Report**					< 1						< 0.005
Total Lead (mg/L) Daily Maximum	**Report**					< 1						< 0.005
Total Zinc (mg/L) Daily Minimum	**Report**					0.129						0.112
Total Zinc (mg/L) Daily Maximum	**Report**					0.129						0.112

DMR Data for Outfall 102 (from May 1, 2024 to April 30, 2025)

Parameter	Limit	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	**Report**	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050
Flow (MGD) Daily Maximum	**Report**	0.000050	0.000050	0.00005	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050
pH (S.U.) Instantaneous Minimum	**6.0**	7.8	7.8	7.8	7.8	7.8	7.82	7.84	7.9	7.89	7.88	7.09
pH (S.U.) Instantaneous Maximum	**9.0**	7.86	7.81	7.84	7.89	7.9	7.89	7.88	7.9	7.98	8.08	7.90
TRC (mg/L) Average Monthly	**0.5**	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200
TRC (mg/L) Daily Maximum	**1.0**	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200
Temperature (ºF) Instantaneous Maximum	**110.0**	75.38	83.66	73.22	71.42	80.24	74.12	74.12	75.92	75.02	75.20	76.46

DMR Data for Outfall 103 (from May 1, 2024 to April 30, 2025)

Parameter	Limit	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	**Report**	0.000050	0.000050	0.00005	0.00005	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050
Flow (MGD) Daily Maximum	**Report**	0.000050	0.000050	0.00005	0.00005	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050
pH (S.U.) Instantaneous Minimum	**6.0**	7.48	7.55	7.55	7.68	7.69	7.7	7.54	7.44	7.74	7.55	7.74
pH (S.U.) Instantaneous Maximum	**9.0**	7.67	7.6	7.63	7.74	7.77	7.7	7.64	7.7	7.87	7.84	7.81
TRC (mg/L) Average Monthly	**0.5**	< 0.20	< 0.20	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200
TRC (mg/L) Daily Maximum	**1.0**	< 0.20	< 0.20	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200
Temperature (ºF) Instantaneous Maximum	**110.0**	63.86	56.84	64.58	66.20	69.98	71.60	69.80	75.02	74.30	75.02	74.84

Development of Effluent Limitations

Outfall No. 102 **Design Flow (MGD)** 0.0002 (5,000 gal/month)
Latitude **Longitude**
Wastewater Description: Cooling tower blowdown.

Technology-Based Limitations

Internal monitoring point Outfall 102 discharge consists of cooling tower blowdown. NCCW has been removed from discharge with a closed-loop glycol cooling system. The average discharge is 0.0002 MGD. Effluent limits are imposed at the internal monitoring point after the last treatment process to ensure proper operation of the cooling system.

Outfall 102's discharge consists of NCCW which is not subject to Federal Effluent Limitation Guidelines (ELGs) as the SIC code is not listed under 40 CFR parts 405 through 471.

Regulatory Effluent Standards and Monitoring Requirements

In accordance with the recommendations given in Chapter 6, Table 6-4 of DEP's Permit Writer's Manual for NCCW discharges, self-monitoring requirements at Outfall 102 will include, at a minimum, the following parameters: flow, pH and temperature.

Per- and Polyfluoroalkyl Substances (PFAS)

In February 2024, DEP implemented a new monitoring initiative for PFAS consistent with an EPA memorandum that provides guidance to states for addressing PFAS discharges. PFAS are a family of thousands of synthetic organic chemicals that contain a chain of strong carbon-fluorine bonds. Many PFAS are highly stable, water- and oil-resistant, and exhibit other properties that make them useful in a variety of consumer products and industrial processes. PFAS are resistant to biodegradation, photooxidation, direct photolysis, and hydrolysis and do not readily degrade naturally; thus, many PFAS accumulate over time. According to the United States Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), the environmental persistence and mobility of some PFAS, combined with decades of widespread use, have resulted in their presence in surface water, groundwater, drinking water, rainwater, soil, sediment, ice caps, outdoor and indoor air, plants, animal tissue, and human blood serum across the globe. ATSDR also reported that exposure to certain PFAS can lead to adverse human health impacts Due to their durability, toxicity, persistence, and pervasiveness, PFAS have emerged as potentially significant pollutants of concern.

In accordance with Section II.I of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032] and under the authority of 25 Pa. Code § 92a.61(b), DEP has determined that monitoring for a subset of common/well-studied PFAS including Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), Perfluorobutanesulfonic acid (PFBS), and Hexafluoropropylene oxide dimer acid (HFPO-DA) is necessary to help understand the extent of environmental contamination by PFAS in the Commonwealth and the extent to which point source dischargers are contributors. SOP BCW-PMT-032 directs permit writers to consider special monitoring requirements for PFOA, PFOS, PFBS, and HFPO-DA in the following instances:

a. If sampling that is completed as part of the permit renewal application reveals a detection of PFOA, PFOS, HFPO-DA or PFBS (any of these compounds), the application manager will establish a quarterly monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds) in the permit.

b. If sampling that is completed as part of the permit renewal application demonstrates non-detect values at or below the Target QLs for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds in a minimum of 3 samples), the application manager will establish an annual monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS in the permit.

c. In all cases the application manager will include a condition in the permit that the permittee may cease monitoring for PFOA, PFOS, HFPO-DA and PFBS when the permittee reports non-detect values at or below the Target QL for four consecutive monitoring periods for each PFAS parameter that is analyzed. Use the following language: The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detects at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees should enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1).

Effluent standards for pH (see Table 6) are also imposed on industrial wastes by 25 Pa. Code § 95.2(1).

Total Dissolved Solids (TDS)

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

Water Quality-Based Limitations

Total Maximum Daily Load (TMDL)

Wastewater discharges from ATI Powder Metals are located within the Chartiers Creek Watershed for which the Department has developed a TMDL. The TMDL was finalized on April 9, 2003 and establishes waste load allocations for the discharge of aluminum, iron, manganese and pH within the Chartiers Creek Watershed. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency'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).

Oakdale (PA0096059) is not identified in the TMDL. The TMDL was finalized on April 9, 2003 to address metals from acid mine drainage (Aluminum, Iron and Manganese) and pH in the Chartiers Creek Watershed. The Industrial Waste discharge for the ATI Powder Metals, LLC facility consist of NCCW. Since the facility's low flow discharge (0.0002 MGD) do not contain parameters at concentrations that have the potential to cause or contribute to the impairment of the Chartiers Creek, the Chartiers Creek TMDL are not imposed at the ATI Powder Metals. The TMDL parameters of concern will still be analyzed through the Water Quality-Based Limitation evaluation to determine if these parameters are a concern for the facility discharges.

WQM 7.0 Model

In general, WQM 7.0 Model is run if the maximum BOD_5/$CBOD_5$ concentrations exceeds 30/25 mg/L in the permit application or the DMRs. The permit application reports BOD_5 concentrations of 7.8 mg/L, therefore, WQM 7.0 Model is not required to be run.

Thermal WQBELs for Heated Discharges (Non-Contact Cooling Water)

Thermal WQBELs are evaluated using the Department's "Thermal Discharge Limit Calculation Spreadsheet" created with Microsoft Excel for Windows. The program calculates temperature WLAs through the application of a heat transfer equation, which takes two forms in the program depending on the source of the facility's cooling water. In Case 1, intake water to a facility is from the receiving stream. In Case 2, intake water is from a source other than the receiving stream (e.g., municipal water supply). The determination of which case applies to a given discharge is determined by the input data which include the receiving stream flow rate ($Q_{7\text{-}10}$ or the minimum regulated flow for large rivers), the stream intake flow rate, external source intake flow rates, consumptive flow rates and site-specific ambient stream temperatures. Case 1 limits are generally expressed as heat rejection rates while Case 2 limits are usually expressed as temperatures.

Since the temperature criteria from 25 Pa. Code Chapter 93.7(a) are expressed on monthly and semi-monthly bases for three different aquatic life-uses—cold water fishes, warm water fishes and trout stocking—the program generates monthly and semi-monthly limits for each aquatic life-use. The Department selects the output that corresponds to the aquatic life-use of the receiving stream and consequently which limits apply to the discharge. Temperature WLAs are bounded by an upper limit of 110°F (as discussed in Technology-Based Limitations) for the safety of sampling personnel and anyone who

may come into contact with the heated discharge where it enters the receiving water. If no WLAs below 110°F are calculated, an instantaneous maximum limit of 110°F is recommended by the program.

The Department's *Implementation Guidance for Temperature Criteria* directs permit writers to assume instantaneous complete mixing of the discharge with the receiving stream when calculating thermal effluent limits unless adverse factors exist. One such factor listed in the guidance is that the "discharge is to a receiving water that is very wide, resulting in restricted dispersion of the plume, and horizontal stratification of the plume." Since wastewaters from Outfall 102 will be discharged to the UNT to North Branch Robinson Run, the dispersion of the discharge plume is assumed to be instantaneous.

Discharges from Outfall 102 are classified under Case 2 because the facility's water is obtained from the local municipal supply. The facility's combined heated discharge flows were used for modeling for a total flowrate of 0.00025 MGD (Outfall 102 having 0.0002 MGD and Outfall 103 having 0.00005 MGD), which is the monthly average flow of all the facility's heated effluent sources (NCCW) and 0.01 cfs, which is the calculated $Q_{7\text{-}10}$ from StreamStats. The results of the thermal analysis, included in Attachment C, indicate that WQBELs for temperature are not required at Outfalls 102 and 103. The summary of WQBELs for temperature are provided below in Table 1.

Table 1: Outfall 102 WQBELs for Temperature

Date	WWF Daily WLA (°F)
Jan 1-31	110.0
Feb 1-29	110.0
Mar 1-31	110.0
Apr 1-15	110.0
Apr 16-30	110.0
May 1-15	110.0
May 16-30	110.0
Jun 1-15	110.0
Jun 16-30	110.0
Jul 1-31	110.0
Aug 1-15	110.0
Aug 16-31	110.0
Sep 1-15	110.0
Sep 16-30	110.0
Oct 1-15	110.0
Oct 16-31	110.0
Nov 1-15	110.0
Nov 16-30	110.0
Dec 1-31	110.0

Total Residual Chlorine (TRC)

To determine if WQBELs are required for discharges containing total residual chlorine (TRC), a discharge evaluation is performed using a DEP program called TRC_CALC created with Microsoft Excel for Windows. TRC_CALC calculates TRC Waste Load Allocations (WLAs) through the application of a mass balance model which considers TRC losses due to stream and discharge chlorine demands and first-order chlorine decay. Input values for the program include flow rates (Outfall 102 having 0.0002 MGD and Outfall 103 having 0.00005 MGD), and discharge chlorine demands for the receiving stream, the number of samples taken per month, coefficients of TRC variability, partial mix factors, and an optional factor of safety. The mass balance model calculates WLAs for acute and chronic criteria that are then converted to long term averages using calculated multipliers. The multipliers are functions of the number of samples taken per month and the TRC variability coefficients (normally kept at default values unless site specific information is available). The most stringent limitation between the acute and chronic long-term averages is converted to an average monthly limit for comparison to the BAT average monthly limit of 0.5 mg/L from 25 Pa. Code § 92a.48(b)(2). The more stringent of these average monthly TRC limitations is then proposed. The results of the modeling are included in Attachment D, which identify that BAT is the most stringent criteria for TRC at an average monthly limit of 0.5 $^{mg}/_{L}$. The maximum daily limit is 2 times the average monthly limit resulting in a 1.0 $^{mg}/_{L}$ limit for maximum daily.

Anti-Backsliding

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

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

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

The current effluent limitations at Outfall 001 are summarized in Table 2.

Table 2: Current Effluent limits and Monitoring Requirements for Outfall 102

Parameter	Mass Loading ($^{lbs.}/_{day}$)		Concentration ($^{mg}/_{L}$)		
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum
Flow (MGD)	Report	Report	-	-	-
TRC	-	-	0.5	1.0	-
Temperature (°F)	-	-	-	-	110.0
pH (S.U.)	-	-	6.0 (Instant. Minimum)	-	9.0

Effluent Limitations and Monitoring Requirements for Outfall 102

Effluent limits applicable at Outfall 102 are the more stringent of TBELs, regulatory effluent standards, previously permitted effluent limits and the monitoring requirements are summarized in Table 3.

Table 3: Final Effluent limits and monitoring requirements for Outfall 102

Parameter	Mass (pounds)		Concentration (mg/L)				Basis
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	—	25 Pa. Code § 92a.61(d)(1)
TRC	—	—	—	0.5	1.0	—	25 Pa. Code § 92a.48(b)
Temperature (°F)	—	—	—	—	—	110.0	25 Pa. Code § 93.7
pH (S.U.)	—	—	6.0	—	—	9.0	25 Pa. Code § 95.2
PFOA (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
PFOS (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
PFBS (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
HFPO-DA (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)

Commented [MF1]: In the permit you use Instant. Minimum

Monitoring requirements for the interim and final effluent limits are based on the previous permits monitoring requirements for the facility are displayed in Table 4 below.

Table 4: Monitoring Requirements for Outfall 102

Parameter	Sample Type	Minimum Sample Frequency
Flow (MGD)	Measured	2/month
TRC	Grab	2/month
Temperature (°F)	Grab	2/month
pH (S.U.)	Grab	2/month
PFOA	Grab	1/year
PFOS	Grab	1/year
PFBS	Grab	1/year
HFPO-DA	Grab	1/year

Development of Effluent Limitations

Outfall No.	002	**Design Flow (MGD)**	0.0002
Latitude	40° 25' 23.4"	**Longitude**	-80° 11' 31.7"

Wastewater Description: Cooling tower blowdown, along with AMD groundwater and stormwater runoff.

Outfall 002 wastewaters consist of cooling tower blowdown, along with AMD groundwater and stormwater runoff from the gravel parking areas. Outfall 002 is the representative sampling location for stormwater Outfalls 003 and 005.

The process waters monitoring requirements are imposed at IMP 102.

The AMD source originates outside the facility property boundary, as stated in a Department inspection of the facility dated April 8, 1997. In 2018, the County located a new abandoned mine entrance above the ATI Powder Metals facility, which is the source of the AMD. The AMD outcrops from the mine entrance and/or seeps from the hill, up-gradient of ATI Powder Metals facility, and becomes surface water. This surface water mix of stormwater and AMD then flows across ATI Powder Metals facility and is collected in the facility stormwater catch basins, which is then discharged via Outfall 002. The facility does not introduce any additional pollutants to the AMD flows.

The Department's policy for stormwater discharges is to either (1) require that the stormwater is uncontaminated, (2) impose "Monitor and Report", to establish effluent goals and require the permittee to submit a Stormwater Pollution Prevention Plan (SWPPP), or (3) impose effluent limits. In all cases, a stormwater special condition is placed in the permit in Part C.

Stormwater effluent data reported in the application are compared to stream criteria, EPS's Multi-Sector General Permit "benchmark values", ELGs and other references while considering site specific conditions such as stream flow and location to determine if actual discharge concentrations of various pollutants in stormwater warrant further controls. If there is insufficient data available, or if pollutant levels are excessive, monitoring for specific pollutants and/or a SWPPP are required in the permit. Otherwise, the stormwater outfalls are simply listed as discharge points. In either case, a special condition is added to the permit to include some of the key components of the Department's General Permit (PAG-03) for Discharges of Stormwater Associated with Industrial Activities.

Review of the stormwater data contained in the renewal application are summarized below in Table 5.

Table 5: Stormwater Data Summary

Pollutant	Application Result ($^{mg}/_{L}$)	Benchmark Value ($^{mg}/_{L}$)
Oil and Grease	<5	30
BOD_5	<2.7	30
COD	<25.0	120
TSS	<4.0	100
TKN	<2.5	1.0
Nitrate plus Nitrite Nitrogen	**<1.0**	0.68
Total Phosphorus	0.036	2.0
pH	7.7	6-9
Fluoride	0.37	2.0
Zinc	**0.129**	0.117
Aluminum	**2.32**	0.75
Iron	0.5	1.0
Total Lead	<0.01	0.082
Manganese	0.612	1.0
Total Copper	<0.005	0.014
TRC	0.07	0.5

The typical monitoring results are below benchmark values. The monitoring requirements of the NPDES General Permit Appendix B will be imposed at Outfall 002. The previous permit also included Total Floride and TRC monitoring to the outfall. Review of the monitoring data and application data remove these two parameters (Total Floride and TRC) of pollutants of concern and will be removed from monitoring requirements.

Table 6: Effluent Limitations and Monitoring Requirements for Outfall 005

Parameter	Monitoring Requirements		Benchmark Value
	Minimum Frequency	Sample Type	
TSS ($^{mg}/_{L}$)	1/6 months	Grab	100.0
Total Aluminum ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Total Zinc ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Total Copper ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Total Iron ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Total Lead ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Total Nitrogen ($^{mg}/_{L}$)	1/6 months	Calculation	XXX
Total Phosphorus ($^{mg}/_{L}$)	1/6 months	Grab	XXX
Oil & Grease ($^{mg}/_{L}$)	1/6 months	Grab	30.0

The benchmark values listed above are not effluent limitations, and an exceedance does not a constitute a permit violation. However, if the permittee's sampling demonstrates an exceedance of any benchmark value for two (2) consecutive monitoring periods, the permittee shall submit a Corrective Action Plan within 90-days of the end of the monitoring period triggering the plan.

Development of Effluent Limitations

Outfall No. 103 **Design Flow (MGD)** 0.00005 (1,300 gal/month)
Latitude **Longitude**
Wastewater Description: Atomizer NCCW, cooling tower blowdown and air compressor condensate.

Technology-Based Limitations

Internal monitoring point Outfall 103 discharge consists of atomizer NCCW, cooling tower blowdown and air compressor condensate. The average discharge is 0.00005 MGD and public water supply is the source for the NCCW. Limits are set at the internal monitoring point after the last treatment process to ensure proper operation of the cooling system.

NCCW is generated by the atomizer process. This NCCW is then treated by the cooling tower. The majority of the atomizer NCCW is recycled back to the atomizer after treatment by the cooling tower.

Outfall 103's discharge consists of NCCW which is not subject to Federal Effluent Limitation Guidelines (ELGs) as the SIC code is not listed under 40 CFR parts 405 through 471.

Regulatory Effluent Standards and Monitoring Requirements

In accordance with the recommendations given in Chapter 6, Table 6-4 of DEP's Permit Writer's Manual for NCCW discharges, self-monitoring requirements at Outfall 103 will include, at a minimum, the following parameters: flow, pH and temperature.

Per- and Polyfluoroalkyl Substances (PFAS)

In February 2024, DEP implemented a new monitoring initiative for PFAS consistent with an EPA memorandum that provides guidance to states for addressing PFAS discharges. PFAS are a family of thousands of synthetic organic chemicals that contain a chain of strong carbon-fluorine bonds. Many PFAS are highly stable, water- and oil-resistant, and exhibit other properties that make them useful in a variety of consumer products and industrial processes. PFAS are resistant to biodegradation, photooxidation, direct photolysis, and hydrolysis and do not readily degrade naturally; thus, many PFAS accumulate over time. According to the United States Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), the environmental persistence and mobility of some PFAS, combined with decades of widespread use, have resulted in their presence in surface water, groundwater, drinking water, rainwater, soil, sediment, ice caps, outdoor and indoor air, plants, animal tissue, and human blood serum across the globe. ATSDR also reported that exposure to certain PFAS can lead to adverse human health impacts Due to their durability, toxicity, persistence, and pervasiveness, PFAS have emerged as potentially significant pollutants of concern.

In accordance with Section II.I of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032] and under the authority of 25 Pa. Code § 92a.61(b), DEP has determined that monitoring for a subset of common/well-studied PFAS including Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), Perfluorobutanesulfonic acid (PFBS), and Hexafluoropropylene oxide dimer acid (HFPO-DA) is necessary to help understand the extent of environmental contamination by PFAS in the Commonwealth and the extent to which point source dischargers are contributors. SOP BCW-PMT-032 directs permit writers to consider special monitoring requirements for PFOA, PFOS, PFBS, and HFPO-DA in the following instances:

a. If sampling that is completed as part of the permit renewal application reveals a detection of PFOA, PFOS, HFPO-DA or PFBS (any of these compounds), the application manager will establish a quarterly monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds) in the permit.

b. If sampling that is completed as part of the permit renewal application demonstrates non-detect values at or below the Target QLs for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds in a minimum of 3 samples), the application manager will establish an annual monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS in the permit.

c. In all cases the application manager will include a condition in the permit that the permittee may cease monitoring for PFOA, PFOS, HFPO-DA and PFBS when the permittee reports non-detect values at or below the Target QL for four consecutive monitoring periods for each PFAS parameter that is analyzed. Use the following language: The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detects at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for

HFPO-DA. When monitoring is discontinued, permittees should enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1).

Pursuant to 25 Pa. Code § 95.2(4) effluent standards for industrial wastes may not contain more than 7 mg/L of dissolved iron.

Effluent standards for pH (see Table 6) are also imposed on industrial wastes by 25 Pa. Code § 95.2(1).

Total Dissolved Solids (TDS)

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

Water Quality-Based Limitations

Total Maximum Daily Load (TMDL)

Wastewater discharges from ATI Powder Metals are located within the Chartiers Creek Watershed for which the Department has developed a TMDL. The TMDL was finalized on April 9, 2003 and establishes waste load allocations for the discharge of aluminum, iron, manganese and pH within the Chartiers Creek Watershed. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency'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).

ATI Powder Metals (PA0096059) is not identified in the TMDL. The TMDL was finalized on April 9, 2003 to address metals from acid mine drainage (Aluminum, Iron and Manganese) and pH in the Chartiers Creek Watershed. The Industrial Waste discharge for the ATI Powder Metals, LLC facility consist of NCCW. Since the facility's low flow discharge (0.00004 MGD) do not contain parameters at concentrations that have the potential to cause or contribute to the impairment of the Chartiers Creek, the Chartiers Creek TMDL are not imposed at the ATI Powder Metals. The TMDL parameters of concern will still be analyzed through the Water Quality-Based Limitation evaluation to determine if these parameters are a concern for the facility discharges.

WQM 7.0 Model

In general, WQM 7.0 Model is run if the maximum BOD_5/$CBOD_5$ concentrations exceeds 30/25 mg/L in the permit application or the DMRs. The permit application reports BOD_5 concentrations of <7 mg/L, therefore, WQM 7.0 Model is not required to be run.

Thermal WQBELs for Heated Discharges (Non-Contact Cooling Water)

Thermal WQBELs are evaluated using the Department's "Thermal Discharge Limit Calculation Spreadsheet" created with Microsoft Excel for Windows. The program calculates temperature WLAs through the application of a heat transfer equation, which takes two forms in the program depending on the source of the facility's cooling water. In Case 1, intake water to a facility is from the receiving stream. In Case 2, intake water is from a source other than the receiving stream (e.g., municipal water supply). The determination of which case applies to a given discharge is determined by the input data which include the receiving stream flow rate ($Q_{7\text{-}10}$ or the minimum regulated flow for large rivers), the stream intake flow rate, external source intake flow rates, consumptive flow rates and site-specific ambient stream temperatures. Case 1 limits are generally expressed as heat rejection rates while Case 2 limits are usually expressed as temperatures.

Since the temperature criteria from 25 Pa. Code Chapter 93.7(a) are expressed on monthly and semi-monthly bases for three different aquatic life-uses—cold water fishes, warm water fishes and trout stocking—the program generates monthly and semi-monthly limits for each aquatic life-use. The Department selects the output that corresponds to the aquatic life-use of the receiving stream and consequently which limits apply to the discharge. Temperature WLAs are bounded by an upper limit of 110°F (as discussed in Technology-Based Limitations) for the safety of sampling personnel and anyone who may come into contact with the heated discharge where it enters the receiving water. If no WLAs below 110°F are calculated, an instantaneous maximum limit of 110°F is recommended by the program.

The Department's *Implementation Guidance for Temperature Criteria* directs permit writers to assume instantaneous complete mixing of the discharge with the receiving stream when calculating thermal effluent limits unless adverse factors exist. One such factor listed in the guidance is that the "discharge is to a receiving water that is very wide, resulting in restricted dispersion of the plume, and horizontal stratification of the plume." Since wastewaters from Outfall 103 will be discharged to the UNT to North Branch Robinson Run, the dispersion of the discharge plume is assumed to be instantaneous.

Discharges from Outfall 103 are classified under Case 2 because the facility's water is obtained from the local municipal supply. The facility's combined heated discharge flows were used for modeling for a total flowrate of 0.00021 MGD (Outfall 102 having 0.00017 MGD and Outfall 103 having 0.00004 MGD), which is the monthly average flow of all the facility's heated effluent sources (NCCW) and 0.01 cfs, which is the calculated $Q_{7\text{-}10}$ from StreamStats. The results of the thermal analysis, included in Attachment C, indicate that WQBELs for temperature are not required at Outfalls 102 and 103. The summary of WQBELs for temperature are provided below in Table 7.

Table 7: Outfall 103 WQBELs for Temperature

Date	WWF Daily WLA (°F)
Jan 1-31	110.0
Feb 1-29	110.0
Mar 1-31	110.0
Apr 1-15	110.0
Apr 16-30	110.0
May 1-15	110.0
May 16-30	110.0
Jun 1-15	110.0
Jun 16-30	110.0
Jul 1-31	110.0
Aug 1-15	110.0
Aug 16-31	110.0
Sep 1-15	110.0
Sep 16-30	110.0
Oct 1-15	110.0
Oct 16-31	110.0
Nov 1-15	110.0
Nov 16-30	110.0
Dec 1-31	110.0

Total Residual Chlorine (TRC)

To determine if WQBELs are required for discharges containing total residual chlorine (TRC), a discharge evaluation is performed using a DEP program called TRC_CALC created with Microsoft Excel for Windows. TRC_CALC calculates TRC Waste Load Allocations (WLAs) through the application of a mass balance model which considers TRC losses due to stream and discharge chlorine demands and first-order chlorine decay. Input values for the program include flow rates (Outfall 102 having 0.00017 MGD and Outfall 103 having 0.00004 MGD), and discharge chlorine demands for the receiving stream, the number of samples taken per month, coefficients of TRC variability, partial mix factors, and an optional factor of safety. The mass balance model calculates WLAs for acute and chronic criteria that are then converted to long term averages using calculated multipliers. The multipliers are functions of the number of samples taken per month and the TRC variability coefficients (normally kept at default values unless site specific information is available). The most stringent limitation between the acute and chronic long-term averages is converted to an average monthly limit for comparison to the BAT average monthly limit of 0.5 mg/L from 25 Pa. Code § 92a.48(b)(2). The more stringent of these average monthly TRC limitations is then proposed. The results of the modeling are included in Attachment D, which identify that BAT is the most

stringent criteria for TRC at an average monthly limit of 0.5 $^{mg}/_{L}$. The maximum daily limit is 2 times the average monthly limit resulting in a 1.0 $^{mg}/_{L}$ limit for maximum daily.

Anti-Backsliding

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

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

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

Effluent Limitations and Monitoring Requirements for Outfall 103

Effluent limits applicable at Outfall 103 are the more stringent of TBELs, regulatory effluent standards, previously permitted effluent limits and the monitoring requirements are summarized in Table 8.

Table 8: Final Effluent limits and monitoring requirements for Outfall 103

Parameter	Mass (pounds)		Concentration (mg/L)				Basis
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	—	25 Pa. Code § 92a.61(d)(1)
TRC	—	—	—	0.5	1.0	—	25 Pa. Code § 92a.48(b)
Temperature (°F)	—	—	—	—	—	110.0	25 Pa. Code § 93.7
pH (S.U.)	—	—	6.0	—	—	9.0	25 Pa. Code § 95.2
PFOA (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
PFOS (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
PFBS (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)
HFPO-DA (ng/L)	—	—	—	—	Report	—	25 Pa. Code § 92.a.61(b)

Monitoring requirements for the interim and final effluent limits are based on the previous permits monitoring requirements for the facility are displayed in Table 9 below.

Table 9: Monitoring Requirements for Outfall 103

Parameter	Sample Type	Minimum Sample Frequency
Flow (MGD)	Measured	2/month
TRC	Grab	2/month
Temperature (°F)	Grab	2/month
pH (S.U.)	Grab	2/month
PFOA	Grab	1/year
PFOS	Grab	1/year
PFBS	Grab	1/year
HFPO-DA	Grab	1/year

Development of Effluent Limitations

Outfall No.	003	**Design Flow (MGD)**	0.00005
Latitude	40° 25' 21"	**Longitude**	-80° 11' 31.8"
Wastewater Description:	Atomizer NCCW, cooling tower blowdown, air compressor condensate and stormwater runoff.		

Outfall 003 wastewaters consist of atomizer NCCW (86,000 gallons per month with 85,000 gallons per month loss to evaporation and recycle), cooling tower blowdown (1,000 gallons per month), air compressor condensate (300 gallons per month) and stormwater runoff from main parking lot french-drain, visitor lot, alloys bay roof and north side.

The process waters monitoring requirements are imposed at IMP 103.

The facility's stormwater monitoring will be imposed at Outfall 002, which was identified as the representative stormwater outfall. No monitoring requirements are imposed at Outfall 003.

Development of Effluent Limitations

Outfall No.	005	**Design Flow (MGD)**	0.0 (varies)
Latitude	40° 25' 18.9"	**Longitude**	-80° 11' 32"

Wastewater Description: Groundwater and stormwater runoff.

The facility's stormwater monitoring will be imposed at Outfall 002, which was identified as the representative stormwater outfall. No monitoring requirements are imposed at Outfall 005.

Outfall 005 (40º 25' 14", -80º 11' 34"): The drainage area consists of the back paved loading area along with the warehouse and south side of the atomizer rooves. No industrial activities are conducted in this drainage area. The facility's scrap metal dumpster along with materials (in either drums or crates) are stored in this drainage area. Current BMPs to control pollutants in the stormwater are; housekeeping procedures, employee education and awareness.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment **E**)
☐	Temperature Model Spreadsheet (see Attachment **D**)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

Attachment A – Aerial Site Plan

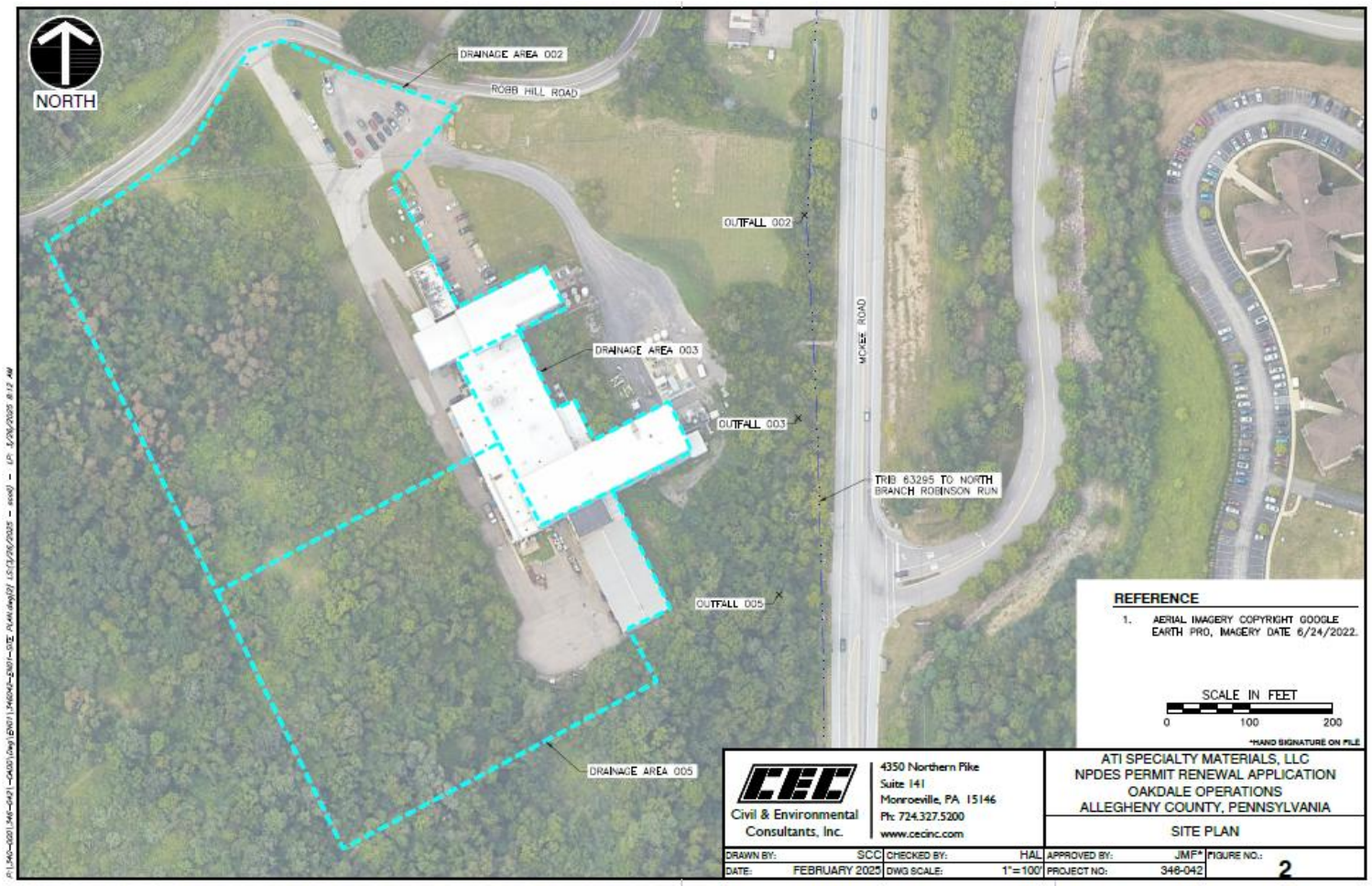
Attachment B – Water Flow Diagram

Attachment C – Thermal Discharge Limit Calculation Spreadsheet

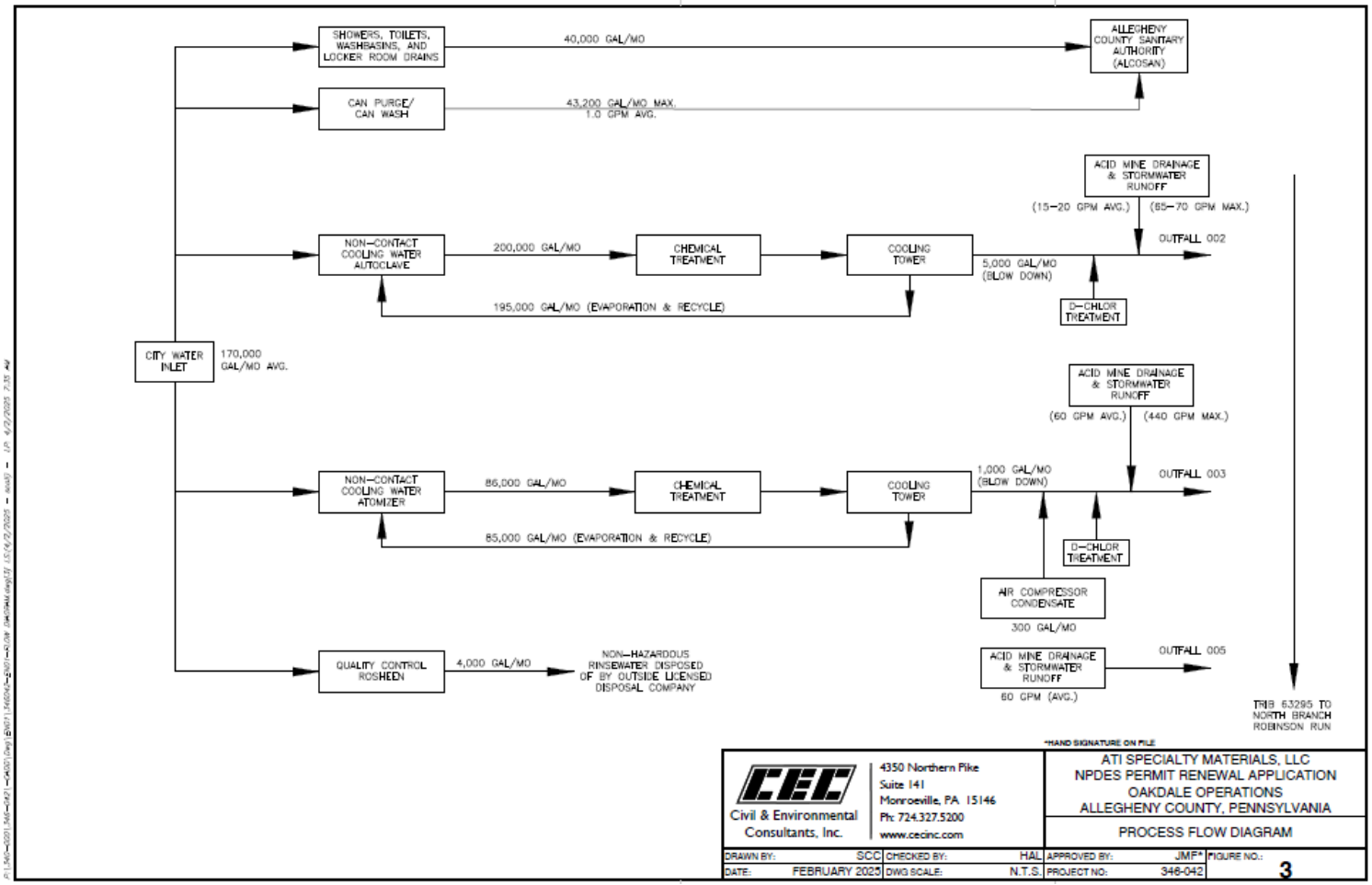
Attachment D – TRC_CALC Spreadsheet

Attachment E – StreamStats Data

Attachment A – Aerial Site Plan


NORTH
DRAINAGE AREA 002
ROBB HILL ROAD
OUTFALL 002
DRAINAGE AREA 003
OUTFALL 003
MCKEE ROAD
TRIB 63295 TO NORTH BRANCH ROBINSON RUN
OUTFALL 005
DRAINAGE AREA 005
REFERENCE
1. AERIAL IMAGERY COPYRIGHT GOOGLE EARTH PRO, IMAGERY DATE 6/24/2022.
SCALE IN FEET
0
100
200
*HARD SIGNATURE ON FILE
Civil & Environmental Consultants, Inc.
4350 Northern Pike
Suite 141
Monroeville, PA 15146
Ph: 724.327.5200
www.cecinc.com
ATI SPECIALTY MATERIALS, LLC
NPDES PERMIT RENEWAL APPLICATION
OAKDALE OPERATIONS
ALLEGHENY COUNTY, PENNSYLVANIA
SITE PLAN
DRAWN BY: SCC
CHECKED BY: HAL
APPROVED BY: JMF*
FIGURE NO.: 2
DATE: FEBRUARY 2025
DWG SCALE: 1"=100'
PROJECT NO: 346-042

Attachment B – Water Flow Diagram


SHOWERS, TOILETS, WASHBASINS, AND LOCKER ROOM DRAINS
40,000 GAL/MO
ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
CAN PURGE/ CAN WASH
43,200 GAL/MO MAX. 1.0 GPM AVG.
ACID MINE DRAINAGE & STORMWATER RUNOFF
(15-20 GPM AVG.)
(65-70 GPM MAX.)
NON-CONTACT COOLING WATER AUTOCLAVE
200,000 GAL/MO
CHEMICAL TREATMENT
COOLING TOWER
5,000 GAL/MO (BLOW DOWN)
OUTFALL 002
195,000 GAL/MO (EVAPORATION & RECYCLE)
D-CHLOR TREATMENT
CITY WATER INLET
170,000 GAL/MO AVG.
ACID MINE DRAINAGE & STORMWATER RUNOFF
(60 GPM AVG.)
(440 GPM MAX.)
NON-CONTACT COOLING WATER ATOMIZER
86,000 GAL/MO
CHEMICAL TREATMENT
COOLING TOWER
1,000 GAL/MO (BLOW DOWN)
OUTFALL 003
85,000 GAL/MO (EVAPORATION & RECYCLE)
D-CHLOR TREATMENT
AIR COMPRESSOR CONDENSATE
300 GAL/MO
QUALITY CONTROL ROSHEEN
4,000 GAL/MO
NON-HAZARDOUS RINSEWATER DISPOSED OF BY OUTSIDE LICENSED DISPOSAL COMPANY
ACID MINE DRAINAGE & STORMWATER RUNOFF
OUTFALL 005
60 GPM (AVG.)
TRIB 63295 TO NORTH BRANCH ROBINSON RUN
*HAND SIGNATURE ON FILE
Civil & Environmental Consultants, Inc.
4350 Northern Pike
Suite 141
Monroeville, PA 15146
Ph: 724.327.5200
www.cecinc.com
ATI SPECIALTY MATERIALS, LLC
NPDES PERMIT RENEWAL APPLICATION
OAKDALE OPERATIONS
ALLEGHENY COUNTY, PENNSYLVANIA
PROCESS FLOW DIAGRAM
DRAWN BY: SCC
CHECKED BY: HAL
APPROVED BY: JMF*
FIGURE NO.: 3
DATE: FEBRUARY 2025
DWG SCALE: N.T.S.
PROJECT NO: 346-042

Attachment C – Thermal Discharge Limit Calculation Spreadsheet

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Instructions | *Inputs*

Facility: **Oakdale Operatins**

Permit No.: **PA0096059**

Stream Name: **UNT North Branch Robinson Run**

Analyst/Engineer: **Curt Holes**

Stream Q7-10 (cfs)*: **0.0**

Outfall No.: **102**

Analysis Type*: **WWF**

Facility Flows

Semi-Monthly Increment	Intake (Stream) (MGD)*	Intake (External) (MGD)*	Consumptive Loss (MGD)*	Discharge Flow (MGD)
Jan 1-31		0.00025		0.00025
Feb 1-29		0.00025		0.00025
Mar 1-31		0.00025		0.00025
Apr 1-15		0.00025		0.00025
Apr 16-30		0.00025		0.00025
May 1-15		0.00025		0.00025
May 16-31		0.00025		0.00025
Jun 1-15		0.00025		0.00025
Jun 16-30		0.00025		0.00025
Jul 1-31		0.00025		0.00025
Aug 1-15		0.00025		0.00025
Aug 16-31		0.00025		0.00025
Sep 1-15		0.00025		0.00025
Sep 16-30		0.00025		0.00025
Oct 1-15		0.00025		0.00025
Oct 16-31		0.00025		0.00025
Nov 1-15		0.00025		0.00025
Nov 16-30		0.00025		0.00025
Dec 1-31		0.00025		0.00025

Stream Flows

Q7-10 Multipliers (Default Shown)	PMF	Seasonal Stream Flow (cfs)	Downstream Stream Flow (cfs)
3.2	1.00	0.03	0.03
3.5	1.00	0.04	0.04
7	1.00	0.07	0.07
9.3	1.00	0.09	0.09
9.3	1.00	0.09	0.09
5.1	1.00	0.05	0.05
5.1	1.00	0.05	0.05
3	1.00	0.03	0.03
3	1.00	0.03	0.03
1.7	1.00	0.02	0.02
1.4	1.00	0.01	0.01
1.4	1.00	0.01	0.01
1.1	1.00	0.01	0.01
1.1	1.00	0.01	0.01
1.2	1.00	0.01	0.01
1.2	1.00	0.01	0.01
1.6	1.00	0.02	0.02
1.6	1.00	0.02	0.02
2.4	1.00	0.02	0.02

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Thermal Limits Spreadsheet
Version 1.0, April 2024

Instructions | *WWF Results*

Recommended Limits for Case 1 or Case 2

Semi-Monthly Increment	**WWF** Target Maximum Stream Temp. (°F)	**Case 1** Daily WLA (Million BTUs/day)	**Case 2** Daily WLA (°F)
Jan 1-31	40	N/A -- Case 2	110.0
Feb 1-29	40	N/A -- Case 2	110.0
Mar 1-31	46	N/A -- Case 2	110.0
Apr 1-15	52	N/A -- Case 2	110.0
Apr 16-30	58	N/A -- Case 2	110.0
May 1-15	64	N/A -- Case 2	110.0
May 16-31	72	N/A -- Case 2	110.0
Jun 1-15	80	N/A -- Case 2	110.0
Jun 16-30	84	N/A -- Case 2	110.0
Jul 1-31	87	N/A -- Case 2	110.0
Aug 1-15	87	N/A -- Case 2	110.0
Aug 16-31	87	N/A -- Case 2	110.0
Sep 1-15	84	N/A -- Case 2	110.0
Sep 16-30	78	N/A -- Case 2	110.0
Oct 1-15	72	N/A -- Case 2	110.0
Oct 16-31	66	N/A -- Case 2	110.0
Nov 1-15	58	N/A -- Case 2	110.0
Nov 16-30	50	N/A -- Case 2	110.0
Dec 1-31	42	N/A -- Case 2	110.0

Attachment D – TRC_CALC Spreadsheet

TRC EVALUATION ATI Powder Metals Outfalls 002 and 003

0.01	= Q stream (cfs)	0.5	= CV Daily
0.00021	= Q discharge (MGD)	0.5	= CV Hourly
4	= no. samples	0.705	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations		Reference	CFC Calculations	
TRC	**1.3.2.iii**	WLA afc =	6.942	**1.3.2.iii**	WLA cfc =	9.584
PENTOXSD TRG	**5.1a**	LTAMULT afc =	0.373	**5.1c**	LTAMULT cfc =	0.581
PENTOXSD TRG	**5.1b**	LTA_afc=	2.587	**5.1d**	LTA_cfc =	5.572

Source		Effluent Limit Calculations		
PENTOXSD TRG	5.1f	AML MULT =	1.720	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) =	0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) =	1.170	

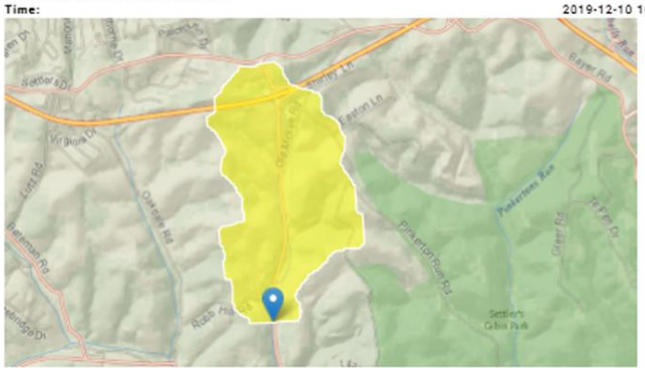
WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...**
	...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...**
	...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**

Attachment E – StreamStats Data

ATI Powder Metals – StreamStats First Run

StreamStats Report ATI Powder Metals, LLC

Region ID:	PA
Workspace ID:	PA20191210152836649000
Clicked Point (Latitude, Longitude):	40.42184, -80.19204
Time:	2019-12-10 10:28:54 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.71	square miles
ELEV	Mean Basin Elevation	1136.9	feet
PRECIP	Mean Annual Precipitation	37	inches
FOREST	Percentage of area covered by forest	33	percent
URBAN	Percentage of basin with urban development	17	percent
CARBON	Percentage of area of carbonate rock	0	percent
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent

Low-Flow Statistics Parameters[Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.71	square miles	2.26	1400
ELEV	Mean Basin Elevation	1136.9	feet	1050	2580

Low-Flow Statistics Disclaimers[Low Flow Region 4]

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

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

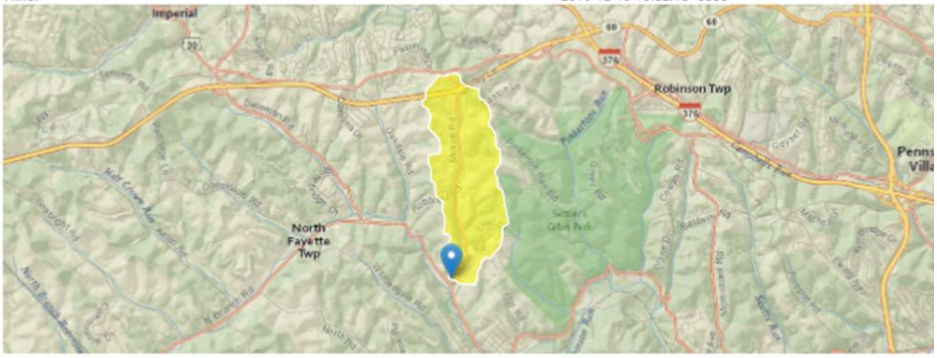
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0182	ft^3/s
30 Day 2 Year Low Flow	0.0355	ft^3/s
7 Day 10 Year Low Flow	0.00522	ft^3/s
30 Day 10 Year Low Flow	0.0114	ft^3/s
90 Day 10 Year Low Flow	0.0235	ft^3/s

Low-Flow Statistics Citations

ATI Powder Metals – StreamStats Second Run

StreamStats Report - Powder Metal version 2

Region ID:	PA
Workspace ID:	PA20191210155202548000
Clicked Point (Latitude, Longitude):	40.41056, -80.19286
Time:	2019-12-10 10:52:18 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.22	square miles
ELEV	Mean Basin Elevation	1110.2	feet
PRECIP	Mean Annual Precipitation	37	inches
FOREST	Percentage of area covered by forest	44	percent
URBAN	Percentage of basin with urban development	11	percent
CARBON	Percentage of area of carbonate rock	0	percent
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent

Low-Flow Statistics Parameters[Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.22	square miles	2.26	1400
ELEV	Mean Basin Elevation	1110.2	feet	1050	2580

Low-Flow Statistics Disclaimers[Low Flow Region 4]

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

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

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.033	ft^3/s
30 Day 2 Year Low Flow	0.0628	ft^3/s
7 Day 10 Year Low Flow	0.01	ft^3/s
30 Day 10 Year Low Flow	0.0211	ft^3/s
90 Day 10 Year Low Flow	0.0419	ft^3/s

Low-Flow Statistics Citations

ATI Powder Metals – StreamStats Final Run

StreamStats Report - Powder Metals version 3

Region ID:	PA
Workspace ID:	PA20191210155416661000
Clicked Point (Latitude, Longitude):	40.40902, -80.19294
Time:	2019-12-10 10:54:33 -0500

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	12.4	square miles
ELEV	Mean Basin Elevation	1125	feet
PRECIP	Mean Annual Precipitation	37	inches
FOREST	Percentage of area covered by forest	48	percent
URBAN	Percentage of basin with urban development	10	percent
CARBON	Percentage of area of carbonate rock	0	percent
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent

Low-Flow Statistics Parameters[Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	12.4	square miles	2.26	1400
ELEV	Mean Basin Elevation	1125	feet	1050	2580

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

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	0.469	ft^3/s	43	43
30 Day 2 Year Low Flow	0.8	ft^3/s	38	38
7 Day 10 Year Low Flow	0.177	ft^3/s	66	66
30 Day 10 Year Low Flow	0.311	ft^3/s	54	54
90 Day 10 Year Low Flow	0.555	ft^3/s	41	41

Low-Flow Statistics Citations

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