pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTHWEST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0013820**
Facility Type	**Industrial**	APS ID	**935321**
Major / Minor	**Major**	Authorization ID	**1172874**

NPDES PERMIT FACT SHEET ADDENDUM

Applicant and Facility Information

Applicant Name	**ATI Flat Rolled Products Holdings, LLC**	Facility Name	**ATI Brackenridge Facility**
Applicant Address	100 River Road	Facility Address	100 River Road
	Brackenridge, PA 15014-1537		Brackenridge, PA 15014-1537
Applicant Contact	Deborah Calderazzo	Facility Contact	Deborah Calderazzo
Applicant Phone	(724) 226-5947	Facility Phone	(724) 226-5947
Client ID	332685	Site ID	245334
SIC Code	3312	Municipality	Harrison Township
SIC Description	Manufacturing - Blast Furnaces and Steel Mills	County	Allegheny
Date Published in PA Bulletin	October 24, 2020	EPA Waived?	No
Comment Period End Date	November 23, 2020	If No, Reason	Major Facility
Purpose of Application	Renewal of NPDES permit for the discharge of industrial wastewater from the specialty metals manufacturing facility.		

Internal Review and Recommendations

On October 24, 2020, public notice of the draft permit was published in the Pennsylvania Bulletin. The 30-day public comment period ended on November 23, 2020. Final permit issuance was delayed pending Cooling Water Intake Structure permit language. A 316(b), hybrid condition to address facilities that have submitted incomplete cooling water intake structure data was finalized on April 16, 2021. The permit has been re-drafted from the October 13, 2020 draft permit in response to comments received to the draft permit and to revise effluent limitations and introduce significant permit conditions.

Section 1

On November 23, 2020, the Environmental Affairs Department at ATI Brackenridge (ATI) submitted comments regarding the draft NPDES Permit PA0013820, issued on October 13, 2020. On July 14, 2020, ATI submitted an additional comment regarding operational changes at the facility over e-mail. Following is a summary of those comments and the Department's response for each comment.

ATI Brackenridge Comment 1

ATI objects to the proposed daily monitoring for measured flow, pH, and temperature at Outfall 002 and requests that the Department change the proposed monitoring requirements for flow, pH, and temperature back to the current permit's monitoring requirement of twice per month and eliminate the requirement to measure flow at Outfall 002 for the following reasons:

Approve	Return	Deny	Signatures	Date
X			Lauren Nolfi, E.I.T. / Environmental Engineering Specialist	October 22, 2021
X			Michael E. Fifth, P.E. / Environmental Engineer Manager	October 22, 2021

Internal Review and Recommendations

A. ATI has not exceeded pH or temperature limitations in at least the last ten years or more.

B. There is no discharge of non-contact cooling water at Outfall 002. All flow that discharges through Outfall 002 is from Internal Monitoring Point (IMP) 102, which is treated wastewater. While the permit application includes non-contact cooling water from the facility's Soaking Pits, the Soaking Pits were idled on February 11, 2016 and have not operated since that time and are not expected to be operated in the future. ATI stated that they would like to maintain the option to restart the Soaking Pits until a determination for permanent shut down is made.

C. 100% of the wastewater discharged at Outfall 002 is from IMP 102 and flow is measured on a daily basis at IMP 102.

D. Daily monitoring and analysis of effluent from Outfall 002 is economically and administratively burdensome with no corresponding benefit.

Response 1

The Department has considered ATI's comments regarding daily monitoring requirements for measured flow, pH, and temperature at Outfall 002 and determined to implement a Schedule of Compliance for Outfall 002. This determination is on the basis that all wastewater, with the exception of non-contact cooling water (NCCW) from the soaking pits, discharged at Outfall 002 is monitored at IMP 102 daily for flow, pH, and temperature. NCCW discharges from the potential operation of the soaking pits are not monitored at IMP 102; nor has ATI provided a viable internal monitoring point for the soaking pit discharges. Accordingly, soaking pit discharges must be monitored at Outfall 002. The Department maintains that daily monitoring of NCCW is necessary based on guidance provided in Chapter 6 of the DEP Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permit (October 1997) Guidance Document.

For the first year following the Permit Effective Date (PED), flow, pH, and temperature monitoring requirements are maintained at the previous permit's monitoring frequency of twice per month and the requirement to measure flow is removed. Within one year following the PED, ATI shall install equipment for measuring flow, pH, and temperature daily and/ or locate a representative sampling location upstream of Outfall 002. Final effluent limitations, including daily monitoring requirements for flow, pH and temperature are imposed one year following the PED.

Regarding the idled Soaking Pits, should ATI choose to startup the Soaking Pits and any associated discharge of NCCW to Outfall 002, ATI shall provide notice to DEP as soon possible but no later 30 days prior to the startup or 30 days following the shutdown of the Soaking Pits and any discharge of NCCW to Outfall 002.

When the Soaking Pits are in production, ATI shall conduct daily sampling for flow, pH, and temperature at Outfall 002. When the Soaking Pits are not in production, ATI shall sample for flow, pH, and temperature at a minimum of twice per month at Outfall 002.

Flow, pH, and temperature monitoring requirements will remain in the permit for Outfall 002 for the duration of the time ATI wishes to maintain the option to restart the Soaking Pits. If ATI decides to permanently shut down the Soaking Pits, the permit may be amended to remove the NCCW discharge monitoring requirements from Outfall 002.

ATI Brackenridge Comment 2

ATI objects to the proposed daily monitoring for measured flow, pH, and temperature at Outfall 004 and requests that the Department change the proposed monitoring requirements for flow, pH, and temperature back to the current permit's monitoring requirement of twice per month and allow the estimation of flow at Outfall 004 for the following reasons:

A. ATI has not exceeded pH or temperature limitations in at least the last ten years or more.

B. The NCCW contribution to Outfall 004 is approximately 96,000 which is less than 100,000 GPD. According to Table 6-2 of the Technical Guidance for the Development and Specification of Effluent Limitations document, since the NCCW flow rate is between 20,000 and 100,000 GPD, the recommended monitoring frequency would be once per week, not once per day.

Internal Review and Recommendations

C. 80% of the total flow through Outfall 004 is treated process water from IMP 104 that is continuously monitored for flow and monitored weekly for temperature and pH, additional monitoring at Outfall 004 on a weekly basis is redundant and serves no additional environmental benefit.

D. For at least the last ten years, there have been no pH or temperature exceedances at Outfall 004 and IMP 104.

E. Daily monitoring and analysis of effluent from Outfall 004 is economically and administratively burdensome with no corresponding benefit. Additionally, any flow meter at the outfall could be subject to damage since it would not be located on ATI's property and within ATI's control.

Response 2

The Department has considered ATI's comments regarding daily monitoring requirements for measured flow, pH and temperature at Outfall 004 and determined to amend the proposed monitoring requirements and implement a Schedule of Compliance for Outfall 004 and IMP 104, as discussed below in Response 12. The purpose of the Schedule of Compliance at Outfall 004 and IMP 104 is to provide ATI with adequate time to install flow, pH, and temperature monitoring equipment.

Given the average NCCW contribution to Outfall 004 of approximately 96,000 GPD, final effluent limitations including weekly monitoring requirements for flow, pH, and temperature are imposed one year following the PED at Outfall 004.

Given the average treated contact wastewater contribution through IMP 104 of approximately 517,000 GPD, final effluent limitations including daily monitoring requirements for flow, pH and temperature are imposed one year following the PED at IMP 104.

The Department maintains that weekly monitoring of NCCW and daily monitoring of contact wastewater is necessary based on guidance provided in Chapter 6 of the DEP Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permit (October 1997) Guidance Document.

ATI Brackenridge Comment 3

ATI objects to the proposed daily monitoring for measured flow, pH and temperature at Outfall 005 and requests that the Department change the proposed monitoring requirements for flow, pH and temperature back to the current permit's monitoring requirement of twice per month and eliminate the requirement to measure flow at Outfall 005 for the following reasons:

A. ATI has not exceeded pH or temperature limitations in at least the last ten years or more.

B. All wastewater discharged through Outfall 005 is temperature controlled through a cooling tower, making daily monitoring of temperature unnecessary.

C. A flow meter at Outfall 005 would not be located on ATI's property and would be subject to damage.

D. Daily monitoring and analysis of effluent from Outfall 005 is economically and administratively burdensome with no corresponding environmental benefit since there have been no permit exceedances in at least the last ten years.

Response 3

The Department has considered ATI's comments regarding daily monitoring requirements for measured flow, pH and temperature at Outfall 005 and determined to implement a Schedule of Compliance for Outfall 005. The Department maintains that daily monitoring of NCCW at Outfall 005 is necessary based on guidance provided in Chapter 6 of the DEP Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permit (October 1997) Guidance Document. Outfall 005 discharges at a reported rate of 720,700 GPD which greatly exceeds the minimum flow of 100,000 GPD at which daily monitoring for NCCW is recommended. The Department imposes daily monitoring requirements for measured flow, pH and temperature for discharges of large-volume cooling water so that sufficient data is generated to reliably compare sampling data with effluent limitations.

Internal Review and Recommendations

The interim monitoring requirements for flow, pH and temperature will be changed back to the current permit's monitoring frequency of twice per month and the requirement to measure flow at Outfall 005 will be removed for the interim monitoring period. ATI will have a period of one year following the PED to locate a representative outfall location upstream of Outfall 005 where the new flow, pH, and temperature monitoring equipment can be installed. Within one year following the PED, the permittee shall achieve compliance with the final effluent limitations for Outfall 005.

ATI Brackenridge Comment 4

In accordance with Page 29 of the Fact Sheet, ATI conducted additional monitoring at IMP 102 during September – November of 2020. ATI collected 12 additional samples at IMP 102 and analyzed them for total thallium using a quantification limit (QL) of 0.3 µg/L. The QL used was less than the Department's target QL of 2 µg/L. All 12 samples were reported as non-detect using the QL of 0.3 µg/L. ATI requests that the Department remove thallium monitoring requirements and permit limitations from Part A.1.H. of the permit for IMP 102.

Response 4

The Department has reviewed the submitted sample analyses at IMP 102. Since total thallium was not detected in any of the 12 samples analyzed using the QL of 0.3 µg/L, total thallium is no longer considered a pollutant of concern at IMP 102. The Department removed the effluent limits and monitoring requirements for total thallium at IMP 102 from Part A.1.H. of the permit.

ATI Brackenridge Comment 5

In accordance with Page 40 of the Fact Sheet, ATI conducted additional monitoring at IMP 104 during September – November of 2020. ATI collected 12 additional samples at IMP 104 and analyzed them for total thallium using a quantification limit (QL) of 0.3 µg/L. The QL used was less than the Department's target QL of 2 µg/L. All 12 samples were reported as non-detect using the QL of 0.3 µg/L. ATI requests that the Department remove thallium monitoring requirements and permit limitations from Part A.1.H. of the permit for IMP 104.

Response 5

The Department has reviewed the submitted sample analyses at IMP 104. Since total thallium was not detected in any of the 12 samples analyzed using the QL of 0.3 µg/L, total thallium is no longer considered a pollutant of concern at IMP 104. The Department removed the effluent limits and monitoring requirements for total thallium at IMP 104 from Part A.1.H. of the permit.

ATI Brackenridge Comment 6

ATI objects to the use of the term "integrated steel mill" on page 1 in the Fact Sheet's Summary of Review section. ATI states that the Brackenridge Facility is not an integrated steel mill since it does not have all of the functions and operations for primary steel production. ATI requests that the Fact Sheet be corrected to describe the Brackenridge Facility as a "specialty metals manufacturing facility."

Response 6

The Department has reviewed ATI's request and will correct all "integrated steel mill" language to "specialty metals manufacturing facility." Since this term was not used in the permit, there are no corrections to be made to the final permit in this respect.

ATI Brackenridge Comment 7

ATI objects to the proposed daily monitoring for pH at IMP 102 and requests that the Department change the proposed monitoring requirement for pH back to the current permit's monitoring requirement of weekly for the following reasons:

Internal Review and Recommendations

A. Wastewater generated at the HRPF is from cooling associated with Hot Forming operations. River water is the source water that is used as cooling water at various stages of hot rolling. As such there is no impact on pH throughout the process.

B. Daily monitoring and analysis of effluent from IMP 102 is economically and administratively burdensome with no corresponding environmental benefit since there have been no permit exceedances since the start-up of the HRPF in 2014.

Response 7

The Department has reviewed ATI's comments regarding daily monitoring requirements for pH at IMP 102 and determined to implement a Schedule of Compliance for IMP 102. For the first year following the Permit Effective Date (PED), flow and pH monitoring requirements are maintained at the current monitoring frequency of continuous and once per week. Temperature monitoring of twice per month is imposed for the interim period. Within one year following the PED, ATI shall install equipment for measuring pH and temperature daily and/ or locate a representative sampling location upstream of IMP 102. Final effluent limitations, including daily monitoring requirements for flow, pH, and temperature are imposed one year following the PED.

IMP 102 discharges at a design flow of 2.85 MGD and consists of sand carbon filtration and Plant and Frame Filter Press for contact wastewater from the Hot Rolling Processing Facility. The Department maintains that daily monitoring of contact wastewater is necessary based on guidance provided in Chapter 6 of the DEP Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permit (October 1997) Guidance Document. Additionally, per Response 1, monitoring requirements for pH are reduced to twice per month at Outfall 002 on the basis that all wastewater discharged at Outfall 002 is monitored at IMP 102 daily for pH and continuously for flow.

ATI Brackenridge Comment 8

ATI objects to the proposed concentration limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 for the following reasons:

A. There is no pH adjustment/ lime and settle/ precipitation treatment technologies associated with ATI's process and the treatment system is a ferrous system. ATI does not employ the treatment technologies required for the production of non-ferrous metals, because those pollutants in the non-ferrous subcategory are not present in the wastewater. ATI stated that the Non-Ferrous Metals Forming Subcategory does not apply to ATI.

B. ATI does not produce or make titanium sponge or non-ferrous products at the Brackenridge facility. ATI Hot Rolls or processes non-ferrous products in a ferrous, Iron and Steel environment. ATI stated that the Effluent Limitation Guidelines (ELGs) and Standards for the Nonferrous Metals Forming and Metal Powders are not applicable to the Brackenridge Facility.

Response 8

The Department has reviewed ATI's comments regarding the proposed concentration limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 and determined to maintain the monitoring requirements as drafted. DEP maintains that the Non-Ferrous Metals Forming Subcategory does apply to ATI based on the Development Document for Effluent Limitations Guidelines and Standards for the Nonferrous Metals Forming and Metal Powders, Volume III.

As shown in pages 1601 and 1784 of the ELG Development Document, Best Available Technology (BAT) for the Titanium Forming wastewaters is lime and settle (chemical precipitation followed by sedimentation) with preliminary treatment technologies used prior to lime and settle for specific wastewaters as needed. Potential preliminary treatments for titanium forming wastewaters are listed in Table IX-6 (p. 1633) of the Development Document. A facility set up to treat Iron and Steel wastewaters should generally be able to treat Titanium Forming wastewaters based on the use of lime and settle technology, depending on the need for waste-stream-specific preliminary treatment.

Additionally, per Response 11, the Department has removed the proposed mass-based effluent limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 from the NPDES permit, which further necessitates the imposition of concentration limitations to reflect the ELG Development Document titanium forming subcategory.

Internal Review and Recommendations

There have been no changes made to the NPDES permit in response to this comment.

ATI Brackenridge Comment 9

ATI objects to the proposed concentration limitations for titanium and iron at IMP 102 for the following reasons:

A. The HRPF WWTP does not employ pH adjustment/ lime and settle/ precipitation treatment technologies. Furthermore, titanium and iron were specifically excluded as parameters of concern in the Iron and Steel and Non-Ferrous Metals Development Documents.

B. On page 29 of the Fact Sheet, iron and titanium were not selected for analysis by PENTOXSD, and therefore are not pollutants of concern. Imposition of concentration limitations for titanium and iron are therefore not warranted and there is no justification to impose permit limitations for titanium and iron at IMP 102.

Response 9

The Department has reviewed ATI's comments regarding the proposed concentration limitations for titanium and iron at IMP 102 and determined to maintain the monitoring requirements as drafted. As stated above, DEP maintains that the Non-Ferrous Metals Forming Subcategory does apply to ATI based on the Development Document for Effluent Limitations Guidelines and Standards for the Nonferrous Metals Forming and Metal Powders, Volume III. BAT for the Titanium Forming wastewaters is lime and settle with preliminary treatment technologies used prior to lime and settle for specific wastewaters as needed. A facility set up to treat Iron and steel wastewaters should generally be able to treat Titanium Forming wastewaters based on the use of lime and settle technology, depending on the need for waste-stream-specific preliminary treatment.

Additionally, per Response 11, the Department has removed the proposed mass-based effluent limitations for iron and titanium at IMP 102 from the NPDES permit, which further necessitates the imposition of concentration limitations to reflect the ELG Development Document titanium forming subcategory.

There have been no changes made to the NPDES permit in response to this comment.

ATI Brackenridge Comment 10

ATI indicated that the proposed average monthly permit limitation for lead at IMP 102 of 0.65 lbs./day is likely to be a transcription error. ATI reasoned that the proposed daily maximum value is 0.19 lbs./day, which is lower than the proposed monthly average 0.65 lbs./day limitation.

Response 10

The Department has reviewed the average monthly permit limitation calculation for lead at IMP 102 and determined that Table 8D on Page 26 of the Fact Sheet contains a calculation error. Separately, the proposed mass-based effluent limitations for lead at IMP 102 have been removed from the NPDES permit per Comment 11.

ATI Brackenridge Comment 11

ATI objects to the imposition of mass-based effluent limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 and states that it is not correct application of the Effluent Limitation Guidelines. ATI states that the Brackenridge Facility will be in immediate violation of the proposed Permit Limitations and cannot comply with some of the proposed mass-based effluent limitations because the concentrations in their wastewater are below detectable limitations and/or treatable concentrations. Should the permit be issued as drafted, ATI states that they will appeal the NPDES Permit and seek a stay of its effective date.

Internal Review and Recommendations

Response 11

The Department has reviewed ATI's comments regarding the proposed mass-based effluent limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 and determined that since only 5-10% of production is titanium, it is not feasible to impose mass-based effluent limitations for Titanium Forming wastewaters at IMP 102. Titanium wastewaters are comingled with ferrous wastewaters making it impossible to accurately regulate the titanium regulated pollutants on a mass-basis separate from the ferrous wastewater contributions. The proposed mass-based effluent limitations for lead, zinc, cyanide, ammonia, fluoride, iron, and titanium at IMP 102 have therefore been removed from the NPDES permit. In order to ensure compliance with the ELG however, the Department has preserved the concentration limits for titanium regulated pollutants. Concentration limits are more flexible when regulating variable flows and production rates and ensure adequate treatment is installed and operated. The mass-based limits reflect a specific flow rate and are equivalent to the concentration-based limits at various production rates and therefore, removing them does not reflect a significant change in the permit's effluent limits.

ATI Brackenridge Comment 12

On July 14, 2020, ATI submitted additional comments regarding the Draft NPDES Permit PA0013820 and operational changes at the facility via e-mail. Following is a summary of those comments and the Department's response.

ATI stated that they are not operating from and will likely never flow from the Pickling Department Wastewater Treatment Plant (WWTP) operating lines (IMP 104) or NCCW operating lines (Outfall 004) again. River water continues to flow through Outfall 004 and ATI pumps excess water that they do not use. The excess water flows back to the river through Outfall 004. Additionally, ATI requests the ability to restart the Pickling Department and Pickling Department WWTP operating lines.

On September 16, 2021, ATI retracted its previous comment by stating that the Pickling Department and Pickling Department WWTP operating lines would be restarted on September 20, 2021. The Pickling Department and Pickling Department WWTP operating lines are only expected to operate while ATI's Vandergrift facility is under construction. Construction is expected to be complete by the end of the first quarter of 2022.

Response 12

The Department has considered ATI's comments regarding operational changes and monitoring requirements at IMP 104 and Outfall 004 and determined to implement a Schedule of Compliance for IMP 104 and Outfall 004. For the first year following the Permit Effective Date (PED), flow, pH, and temperature monitoring requirements are maintained at the current monitoring frequency of twice per month at Outfall 004 and weekly at IMP 104. Within one year following the PED, ATI shall install equipment for measuring flow, pH, and temperature weekly at Outfall 004 and daily at IMP 104 and/ or locate representative sampling locations upstream of Outfall 004 and downstream of IMP 104 which accurately reflect each monitoring location's effluent discharges. Final effluent limitations, including weekly and daily monitoring requirements for flow, pH, and temperature are imposed one year following the PED.

Should ATI choose to startup or shutdown the Pickling Department operating lines and Pickling Department WWTP, ATI will provide notice to DEP as soon as possible but no later than 30 days prior to the startup and 30 days following shutdown of the Pickling Department operating lines and Pickling Department WWTP. When the Pickling Department operating lines and Pickling Department WWTP are in production, ATI shall sample weekly at Outfall 004 and daily at IMP 104. When the Pickling Department operating lines and Pickling Department WWTP are not in production, ATI shall measure flow on a monthly basis at Outfall 004 and IMP 104.

Flow, pH, and temperature monitoring requirements will remain in the permit for Outfall 004 and IMP 104 for the duration of time ATI wishes to maintain the option to restart the Pickling Department and Pickling Department WWTP. If ATI determines to permanently shut down the Pickling Department and Pickling Department WWTP, the permit may be amended to remove the treated wastewater and NCCW from Outfall 004.

Internal Review and Recommendations

Environmental Protection Agency Comments

On November 11, 2020, U.S. EPA Region 3 submitted comments regarding the NPDES draft permit PA0013820. Following is a summary of those comments and the Department's response.

EPA Comment 1

EPA reviewed the draft permit's approach toward CWA 316(b) requirements, resulting from insufficient information in the permit application to make a BTA determination for impingement and entrainment for the facility's cooling water intake structure. The draft permit includes an interim BTA requirement in the permit and gives the facility additional time to submit the information that was required to be submitted in the permit renewal application in accordance with 40 CFR 125.95(a)(2).

EPA stated that the approach taken in the draft permit with regard to CWA 316(b) requirements and Federal regulations at 40 CFR 125, Subpart J is not consistent with the regulations for the following reasons:

The preamble to the final rule (https://www.federalregister.gov/documents/2014/08/15/2014-12164/national-pollutant-discharge-elimination-system-final-regulations-to-establish-requirements-for) states that for any permit expiring prior to July 14, 2018, 40 CFR 125.95(a)(2) can be used by the facility to request that the Director waive the submission date of the permit application requirements of 122.21(r) based on a showing by the owner or operator of the facility that it could not develop the information by the time required for submission of the permit renewal application. The Director may allow a delay in the submittal of any of the information requirements of Part 122.21(r) and the schedule for submission would need to be as soon as practicable. We acknowledge that 125.95(a)(2) allows an alternate schedule that would need to be established by the Director; however, since the permit will be issued after July 14, 2018, the regulation at 40 CFR 125.98(b)(2) states that the permit must include conditions to implement and ensure compliance with the impingement and entrainment mortality standards. 40 CFR 125.98(b)(5) explains that after October 14, 2014, for any permit issued before July 14, 2018, for which an alternate schedule was granted, the Director could include permit conditions to ensure the required information was submitted and available for the subsequent permit. Based on these regulatory time frames and the fact that this permit will be issued after July 14, 2018, it doesn't appear that this permit can be used to afford additional time to collect and submit the application requirements of 122.21(r).

EPA Response 1

In response to this comment, the Department worked with EPA and DEP's Central Office to create a 316(b)-hybrid condition to address facilities that have submitted incomplete cooling water intake structure data that is consistent with the Federal regulations. The hybrid condition was finalized on April 16, 2021.

DEP replaced the draft permit's 316(b) interim BTA condition in Part C of the permit with this new 316(b)-hybrid condition.

Internal Review and Recommendations

Section 2

Revised sections of the NPDES Permit Fact Sheet are included and marked in red as follows:

Summary of Review

ATI Flat Rolled Products Holdings, LLC (ATI) operates as a specialty metals manufacturing facility incorporating various industrial processes including blooming/ roughing, hot rolling, finishing of specialty steel sheets and strips, laminar cooling and steam cleaning.

Outfall 002

The NCCW originates from the heating and soaking pits formerly associated with Outfall 001. The Soaking Pits were idled on February 11, 2016 and have not operated since that time and are not expected to be operated in the future. ATI stated that they would like to maintain the option to restart the Soaking Pits until a determination for permanent shut down is made.

Temperature Evaluation

Outfall 002 discharges heated, contact and non-contact cooling wastewaters. The NCCW originates from the heating and soaking pits formerly associated with Outfall 001. The Soaking Pits were idled on February 11, 2016 and have not operated since that time and are not expected to be operated in the future. ATI stated that they would like to maintain the option to restart the Soaking Pits until a determination for permanent shut down is made.

A proposed temperature limit of 110°F at Outfall 002 is included below in Table 7. The DEP Technical Guidance for the Development and Specification of Effluent Limitations (October 1997) recommends daily monitoring of flow, pH and temperature for non-contact discharges with flows exceeding 0.1 MGD. A one-year Schedule of Compliance is implemented to allow ATI time to install equipment for measuring flow, pH, and temperature daily. For the first year following the PED, flow, pH, and temperature monitoring requirements are maintained at the current monitoring frequency of twice per month. Final effluent limitations, including daily monitoring requirements for flow, pH, and temperature are imposed one year following the PED when Outfall 002 is discharging NCCW.

Proposed Effluent Limits at Outfall 002

The effluent limits and monitoring requirements proposed at Outfall 002 are summarized in Table 7. Outfall 002 is subject to semi-annual monitoring requirements in Appendix B of the PAG-03 General Stormwater Permit. Since concentrations of aluminum and bromide have been reported on DMRs at or above EPA recommended benchmark values, monitoring requirements remain in the permit. Twice monthly effluent limits for total suspended solids are proposed to ensure adequate maintenance of BMPs.

Table 7: Proposed Final Effluent Limits – Outfall 002

Parameter	Average Monthly (mg/L)	Maximum Daily (mg/L)	Monitoring Frequency	Sample Type
Flow (MGD)	Monitor & Report		Daily when discharging [1]	Measured
Temperature (°F)	-	110	Daily when discharging [1]	I-S
pH (S.U.)	Not less than 6.0 nor greater than 9.0		Daily when discharging [1]	Daily when discharging
Total Suspended Solids	30	60	2/month	Grab
Aluminum, total	-	Monitor & Report	1/6 months	Grab
Bromide	-	Monitor & Report	1/6 months	Grab
Copper, total	-	Monitor & Report	1/6 months	Grab
Iron, total	-	Monitor & Report	1/6 months	Grab
Lead, total	-	Monitor & Report	1/6 months	Grab
Zinc, total	-	Monitor & Report	1/6 months	Grab

[1] Whenever the Soaking Pits are in production, the permittee shall conduct daily sampling for flow, pH and temperature at Outfall 002. Whenever the Soaking pits are not in production, the permittee shall sample for flow, pH, and temperature at a minimum of 2/month at Outfall 002.

Internal Review and Recommendations

IMP 102

Iron and Steel Forming Operations – IMP 102

In this case, the NSPS for iron and steel forming is based upon lime, settle, and filter with in-process controls to reduce wastewater flows by up to 96%. Mass-based effluent limitations for iron and steel forming operations are shown in Tables 8A, 8B and 8C.

Table 8A: Mass Limit Calculations – IMP 102
Iron and Steel – Primary mills, carbon and specialty without scarfing*

Parameter	Effluent Limitation Guidelines (lbs./Klbs.)		Production Rate (tons/day)	Production Rate (Klbs./day)	Mass-Based Effluent Limits (lbs./day)	
	Average Monthly	Maximum Daily			Average Monthly	Maximum Daily
Total Suspended Solids	0.00563	0.0150	1,020	2,040	11.5	30.6
Oil and Grease	---	0.00373			---	7.61
pH	6.0 to 9.0 S.U.				Within the range of 6.0 to 9.0	

*** Hot Forming –** Blooming Operation – Primary Specialty Mill (reduces ingots to slabs)

NSPS – 40 CFR 420 Subpart: 74(a)(1) – 1,020 ^{tons}/day

Table 8B: Mass Limit Calculations – IMP 102
Iron and Steel – Section mills, specialty*

Parameter	Effluent Limitation Guidelines (lbs./Klbs.)		Production Rate (tons/day)	Production Rate (Klbs./day)	Mass-Based Effluent Limits (lbs./day)	
	Average Monthly	Maximum Daily			Average Monthly	Maximum Daily
Total Suspended Solids	0.0125	0.0334	4,031	8,062	101	269
Oil and Grease	---	0.00834			---	67.2
pH	6.0 to 9.0 S.U.				Within the range of 6.0 to 9.0	

*** Hot Forming –** Reversing Roughing Mill – Specialty Flat Mill (reduces slabs to plate, sheet or strip)

NSPS – 40 CFR 420 Subpart: 74(b)(2) – 4,031 ^{tons}/day

Table 8C: Mass Limit Calculations – IMP 102
Iron and Steel – Flat Mill*

Parameter	Effluent Limitation Guidelines (lbs. /Klbs.)		Production Rate (tons/day)	Production Rate (Klbs./day)	Mass-Based Effluent Limits (lbs./day)	
	Average Monthly	Maximum Daily			Average Monthly	Maximum Daily
Total Suspended Solids	0.0163	0.0435	4,847	9,694	158	422
Oil and Grease	---	0.0109			---	106
pH	6.0 to 9.0 S.U.				Within the range of 6.0 to 9.0	

*** Hot Forming –** 7-Stand Finishing Mill – Specialty Flat Mill (reduces slabs to plate, sheet or strip)

NSPS – 40 CFR 420 Subpart: 74(c)(1) – 4,847 $^{tons}/_{day}$

Titanium Forming Operations – IMP 102

The NSPS for titanium forming is based upon lime and settle only, with flow reduction achieved through wastewater recycling. Mass-based effluent limitations for titanium forming operations are shown in Table 8D and 8E.

Internal Review and Recommendations

Table 8D: Mass Limit Calculations – IMP 102 Titanium – Rolling Contact Water						
Parameter	Effluent Limitation Guidelines (lbs./Mlbs.)		Production Rate (tons/day)	Production Rate (Mlbs./day)	Mass-Based Effluent Limits (lbs./day)	
	Average Monthly	Maximum Daily			Average Monthly	Maximum Daily
Total Suspended Solids	9.52	20.0	316	0.63	6.02	12.6
Oil and Grease	5.86	9.76			3.70	6.15

*** Titanium Forming** – HRPF Titanium Rolling Contact Water

NSPS – 40 CFR 471 Subpart: 63(b) – 316 $^{tons}/_{day}$

Table 8E: Mass Limit Calculations – IMP 102 Titanium – Air Pollution Control Scrubber Blowdown						
Parameter	Effluent Limitation Guidelines (lbs./Mlbs.)		Production Rate (tons/day)	Production Rate (Mlbs./day)	Mass-Based Effluent Limits (lbs./day)	
	Average Monthly	Maximum Daily			Average Monthly	Maximum Daily
Total Suspended Solids	4.18	8.78	316	0.63	2.64	5.53
Oil and Grease	2.57	4.28			1.62	2.70

*** Titanium Forming** – Air Pollution Control Scrubber

NSPS – 40 CFR 471 Subpart: 63(o) – 316 $^{tons}/_{day}$

Comingled Process Wastewaters – IMP 102

The effluent limits for each process line are added together to calculate the final effluent limit. In this case, cyanide, lead, zinc, ammonia and fluoride are included in 40 CFR 471 for titanium forming but not included in 40 CFR 420 for iron and steel manufacturing. These five pollutants may however be present in the wastewater from iron and steel manufacturing operations. Site layout and operational practices prohibit the permittee from segregating wastewater flows for the purpose of sampling operation-specific wastewater. Since only 5-10% of production is titanium, it is not feasible to impose mass-based effluent limitations for Titanium Forming wastewaters. Under these circumstances, the Department must calculate and impose mass-based effluent limitations for those parameters included in both 40 CFR 471 for titanium forming and 40 CFR 420 for iron and steel manufacturing. Mass-based effluent limitations will be imposed only for the parameters total suspended solids and oil and grease.

Development of Concentration Limits – IMP 102

The proposed NPDES permit contains both mass and concentration effluent limitations for those parameters included in both 40 CFR 471 for titanium forming and 40 CFR 420 for iron and steel manufacturing. The NPDES permitting regulations at 40 CFR 122.21(g)(5) require the Department to use a reasonable measure of production (a production rate) to calculate the allowable mass loadings (mass effluent limitations). ATI has projected that the anticipated average annual production for the next five years will be much higher than that from the past five years. Since the company has never achieved this level of production and based on the highly variable rates of production in 2020, mass effluent limitations are based on a long-term average of the facility's past production. Should production increase significantly in the future, ATI may apply to amend the permit. EPA allows the imposition of concentration limits in addition to mass effluent limitations, as provided in 40 CFR 122.45(f)(2). In accordance with this regulation, the Department imposed both mass effluent limitations and concentration limits for the parameters total suspended solids and oil and grease to ensure adequate treatment under any production scenario. Since only 5-10% of production is titanium, only concentration effluent limitations are imposed for Titanium Forming wastewater pollutants.

Ammonia

Concentration limits for ammonia taken from the Non-Ferrous Metal development document, Vol. III are 58.6 mg/L for the average monthly limit and 133.3 mg/L for the maximum daily limit. These concentrations were determined using BPJ to be inappropriately high considering the wastewater quality discharging at IMP 102. Treatment facility influent sampling results

Internal Review and Recommendations

included in the NPDES permit application indicate a maximum concentration of ammonia of 0.4 mg/L. A review of effluent monitoring data from the past five years shows a maximum ammonia concentration of 6.3 mg/L, reported in March 2018. The maximum ammonia concentration reported in the past year is 0.18 mg/L, reported in March 2021. Considering that projected discharge concentrations of ammonia are insignificant when compared to the proposed effluent limits and ammonia discharges due to titanium processing cannot be accurately segregated from the ferrous wastewaters, concentration-based monitoring and reporting of ammonia is proposed.

Table 9: Technology Effluent Limits – IMP 102

Parameter	Mass Limits ($^{lbs.}/_{day}$)		Concentration Limits ($^{mg}/_{L}$)*	
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
Flow (MGD)	Monitor & Report		-	-
Total Suspended Solids	279	740	15	40
Oil & Grease	95	190	Monitor & Report	10
Cyanide	-	-	0.12	0.29
Lead	-	-	0.20	0.42
Zinc	-	-	0.61	1.46
Ammonia-N	-	-	Monitor & Report	
Fluoride	-	-	26.4	59.5
Titanium	-	-	0.41	0.94
Iron, Total	-	-	0.61	1.20
Total Residual Chlorine**	-	-	0.5	1.0
pH (S.U.)	-	-	Between 6.0 and 9.0	

*NOTE: All concentration limits taken from the Non-Ferrous Metal development document, Vol. III, Page 1414 & 1415 except for TSS and oil & grease which are from the Iron and Steel development document, Vol. IV, Page 6.
**TRC concentration limits taken from Pennsylvania Code Title 25, Chapter 92a.48 (b).

Proposed Final Effluent Limits at IMP 102

Effluent limits applicable at IMP 102 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements, as summarized in Table 13. The applicable limits and monitoring requirements provided below are based on those in Tables 9-12 of this Fact Sheet.

Table 13: Proposed Final Effluent Limits – IMP 102

Parameter	Mass Limits ($^{lbs.}/_{day}$)		Concentration Limits ($^{mg}/_{L}$)			Monitoring Frequency
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instantaneous Maximum	
Flow (MGD)	Monitor & Report		-	-	-	1/day
Temperature (°F)	-	-	-	-	110	1/day
Total Suspended Solids	279	740	15	40	50 (4)	1/week
Oil & Grease	95	190	Monitor & Report	10	-	1/week
Cyanide, total	-	-	0.12	0.29	0.36 (4)	1/week
Lead	-	-	0.20	0.42	0.53 (4)	1/week
Zinc	-	-	0.61	1.46	1.83 (4)	1/week
Ammonia	-	-	Monitor & Report		-	1/week
Fluoride	-	-	26.4	59.5	74.4 (4)	1/week
Titanium	-	-	0.41	0.94	1.18 (4)	1/week
Iron, Total	-	-	0.61	1.20	1.5 (4)	1/week
Bromide (µg/L)	-	-	Monitor & Report		-	1/week
Total Residual Chlorine	-	-	0.5	1.0	1.25	1/week
pH (S.U.)	-	-	Between 6.0 and 9.0		-	1/day

(4) Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee is not required to monitor for the instantaneous maximum limitations. However, if grab samples are collected by the permittee, the results must be reported.

Internal Review and Recommendations

Outfall 003

Wastewater Description: Stormwater runoff from 875,000 ft2 drainage area including manufacturing process areas, roofs and paved roadways from ATI, as well as surface runoff (constant flow) and stormwater from the municipality.

Outfall 004

The Pickling Department and Pickling Department WWTP operating lines were shut down in 2021 but restarted on September 20, 2021. The Pickling Department and Pickling Department WWTP operating lines are only expected to operate while the Vandergrift facility is under construction. Construction is expected to be complete by the end of the first quarter of 2022. ATI does not plan to restart the operating lines again once construction is complete but requests the ability to restart the Pickling Department and Pickling Department WWTP operating lines if needed. Upon shut down, river water will continue to flow through Outfall 004 as ATI pumps excess water they do not use.

Temperature Evaluation

Outfall 004 discharges heated, contact and non-contact cooling wastewaters. Contact cooling water and treated process wastewater are monitored and discharged through IMP 104. NCCW from heating furnaces; and miscellaneous equipment, cooling tower, and boiler blowdown discharge through Outfall 004.

A proposed temperature limitation of 110°F at Outfall 004 is included below in Table 19. Bimonthly temperature monitoring was previously imposed for Outfall 004. The DEP Technical Guidance for the Development and Specification of Effluent Limitations (October 1997) recommends weekly monitoring of flow, pH, and temperature for non-contact discharges with flows between 20,000-100,000 GPD. Given the average NCCW contribution to Outfall 004 of approximately 96,000 GPD, the outfall will be subject to weekly monitoring requirements as shown below in Table 19.

A one-year Schedule of Compliance is imposed to allow ATI time to install equipment for measuring flow, pH, and temperature weekly. For the first year following the PED, flow, pH, and temperature monitoring requirements are maintained at the current monitoring frequency of twice per month. Final effluent limitations, including weekly monitoring requirements for flow, pH, and temperature are imposed one year following the PED when Outfall 004 is discharging NCCW.

Proposed Effluent Limits at Outfall 004

The proposed effluent limits and monitoring requirements for Outfall 004 are listed in Table 19. Outfall 004 is subject to semi-annual monitoring requirements in Appendix B of the PAG-03 General Stormwater Permit. Since concentrations of aluminum have been reported on DMRs at or above EPA recommended benchmark values, monitoring requirements remain in the permit. Twice monthly effluent limits for total suspended solids are imposed to ensure adequate maintenance of BMPs. Silt Socks must also be maintained in each catch basin.

Table 19: Proposed Final Effluent Limits – Outfall 004**

Parameter	Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous Maximum	Monitoring Frequency	Sample Type
Flow (MGD)	Monitor & Report		-	Weekly when discharging [(2)]	Measured
Temperature (°F)*	-	-	110	Weekly when discharging [(2)]	I-S
Total Suspended Solids	30	60	-	2/month	Grab
Aluminum, total	-	Monitor & Report	-	1/6 months	Grab
Copper, total	-	Monitor & Report	-	1/6 months	Grab
Iron, total	-	Monitor & Report	-	1/6 months	Grab
Lead, total	-	Monitor & Report	-	1/6 months	Grab
Zinc, total	-	Monitor & Report	-	1/6 months	Grab
pH (S.U.)	Not less than 6.0 nor greater than 9.0			Weekly when discharging [(2)]	Grab

[(2)] Whenever the Pickling Department operating lines are in production and Pickling Department Wastewater Treatment Plant is in operation, the permittee shall conduct weekly effluent sampling at Outfall 004 and daily effluent sampling at IMP 104. Whenever the Pickling Department operating lines and Pickling Department Wastewater Treatment Plant are not in production, the permittee shall estimate flow on a quarterly basis at Outfall 004.

Internal Review and Recommendations

IMP 104

IMP 104 discharges wastewater from the Pickling Department Wastewater Treatment Plant (WWTP). The Pickling Department WWTP operating lines were shut down in 2021 but restarted on September 20, 2021. The Pickling Department WWTP operating lines are only expected to operate while the Vandergrift facility is under construction. Construction is expected to be complete by the end of the first quarter of 2022. ATI does not plan to restart the operating lines again once construction is complete but requests the ability to restart the Pickling Department WWTP operating lines. Upon shut down, there will be no discharge through IMP 104.

Temperature Evaluation

IMP 104 discharges heated, contact cooling water, and treated process wastewaters. Water discharged from these various processes is drawn from the Allegheny River, used in industrial processes, and then discharged back into the Allegheny River. Some of the water is used in contact processes which require treatment prior to discharge. Other processes are non-contact and do not require treatment. The Department used the Thermal Discharge Limit Calculation Spreadsheet to evaluate the thermal impact of this withdrawal and subsequent discharge on the Allegheny River. The spreadsheet is designed to calculate the appropriate thermal discharge limits for a facility discharging effluent above ambient temperature, assuming complete-mix between the discharge flow and the receiving stream flow. The design stream flow for temperature analysis is based on the $Q_{7\text{-}10}$ flow of the receiving stream, adjusted for each monthly or semimonthly time period.

Based upon maximum pump withdrawal rates, included in the previous Fact Sheet, ATI is capable of withdrawing up to 34.56 MGD of river water for use in its industrial processes. ATI reported, in the application's Module 5, the average intake flow rate to be 7.2 MGD. The Department disputes this value and finds that, based on discharge rates, the intake flow rates must be greater than 7.2 MGD. Precise intake flow rates are unknown at this time and should be provided by ATI with its 316(b) studies.

Under the most conservative scenario the total projected discharge volume from all site processes and outfalls (as provided in the NPDES permit application) is 7.2 MGD. Based upon average withdrawal and discharge estimates, the consumptive water use is calculated to be approximately 0 MGD. The Department did not find the claim of zero consumptive use to be credible. Nevertheless, effluent limitations more stringent than 110 °F are not warranted at the current discharge flow rate. The results of the thermal analysis are included in Attachment F of this report.

A proposed temperature limitation of 110°F at IMP 104 is included below in Table 25. Temperature monitoring was not previously imposed at IMP 104. The DEP Technical Guidance for the Development and Specification of Effluent Limitations (October 1997) recommends daily monitoring of flow, pH and temperature for contact water and process wastewater discharges. A one-year Schedule of Compliance is imposed to allow ATI time to install equipment for measuring flow, pH, and temperature weekly. For the first year following the PED, flow, pH, and temperature monitoring requirements are maintained at the current monitoring frequency of weekly when IMP 104 is discharging. Final effluent limitations, including daily monitoring requirements for flow, pH, and temperature are imposed one year following the PED when IMP 104 is discharging.

Proposed Final Effluent Limits for IMP 104

Effluent limits applicable at IMP 104 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements, as summarized in Table 25. The applicable limits and monitoring requirements provided below are based on those in Tables 20-24 of this Fact Sheet.

Table 25: Proposed Final Effluent Limits – IMP 104

Parameter	Mass Limits ($^{lbs.}/_{day}$)		Concentration Limits ($^{mg}/_{L}$)			Monitoring Frequency
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instantaneous Maximum*	
Flow (MGD)	Monitor & Report		-	-	-	Daily when discharging (3)
Temperature (°F)	-	-	-	-	110	Daily when discharging (3)
Total Suspended Solids	255	595	30.0	70.0	87.5 (4)	Weekly when discharging (3)
Oil & Grease	74.0	222	10.0	30.0	-	Weekly when discharging (3)
Chromium, total	3.40	8.50	0.4	1.0	1.25 (4)	Weekly when discharging (3)

Internal Review and Recommendations

Nickel	2.55	7.63	0.3	0.9	1.13 (4)	Weekly when discharging (3)
Iron, Total	-	-	7.3	14.6	18.3 (4)	Weekly when discharging (3)
Total Dissolved Solids	-	-	Monitor & Report		-	Weekly when discharging (3)
Chloride	-	-	Monitor & Report		-	Weekly when discharging (3)
Bromide	-	-	Monitor & Report		-	Weekly when discharging (3)
Sulfate	-	-	Monitor & Report		-	Weekly when discharging (3)
Total Thallium (µg/L)	-	-	4.07	6.35	-	Weekly when discharging (3)
Total Residual Chlorine	-	-	0.5	1.0	1.25	Weekly when discharging (3)
pH (S.U.)	-	-	Between 6.0 and 9.5		-	Daily when discharging (3)

(3) Whenever the Pickling Department operating lines are in production and Pickling Department Wastewater Treatment Plant is in operation, the permittee shall conduct weekly effluent sampling at Outfall 004 and daily effluent sampling at IMP 104. Whenever the Pickling Department operating lines and Pickling Department Wastewater Treatment Plant are not in production, the permittee shall estimate flow on a quarterly basis at Outfall 004.
(4) Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee is not required to monitor for the instantaneous maximum limitations. However, if grab samples are collected by the permittee, the results must be reported.

Outfall 005

Temperature Evaluation

A proposed temperature limit of 110°F at Outfall 005 is included below in Table 27. Bimonthly temperature monitoring was previously imposed for Outfall 005. The DEP Technical Guidance for the Development and Specification of Effluent Limitations (October 1997) recommends daily monitoring of flow, pH, and temperature for non-contact discharges with flows exceeding 0.1 MGD. Given Outfall 005's design flow of 6.0 MGD, the outfall will be subject to the daily monitoring requirements shown below in Table 27.

A one-year Schedule of Compliance is implemented to allow ATI time to install equipment for measuring flow, pH, and temperature daily. For the first year following the PED, flow, pH, and temperature monitoring requirements are maintained at the current monitoring frequency of twice per month. Final effluent limitations, including daily monitoring requirements for flow, pH, and temperature are imposed one year following the PED.

Proposed Final Effluent Limits at Outfall 005

The proposed effluent limitations and monitoring requirements applicable at Outfall 005 are summarized in Table 27. The outfall will be subjected to semi-annual monitoring requirements in Appendix B of the PAG-03 General Stormwater Permit. pH limits have also been imposed in accordance with Pennsylvania Code Title 25, Chapter 95, section 95.2(1).

Table 27: Proposed Final Effluent Limits – Outfall 005*

Parameter	Average Monthly (mg/L)	Maximum Daily (mg/L)	Monitoring Frequency	Sample Type
Flow (MGD)	Monitor & Report		1/day	Measured
Temperature (°F)	-	110	1/day	I-S
Total Suspended Solids	-	Monitor & Report	1/6 months	Grab
Aluminum, total	-	Monitor & Report	1/6 months	Grab
Copper, total	-	Monitor & Report	1/6 months	Grab
Iron, total	-	Monitor & Report	1/6 months	Grab
Lead, total	-	Monitor & Report	1/6 months	Grab
Zinc, total	-	Monitor & Report	1/6 months	Grab
pH (S.U.)	Not less than 6.0 nor greater than 9.0		1/day	Grab

* All sampling except for temperature should be conducted during wet weather conditions.

SCHEDULE OF COMPLIANCE – OUTFALLS 002, 004, 005, IMP 102, IMP 104

The Department has decided to allow a one-year Schedule of Compliance to allow for the installation of monitoring equipment at Outfall 002, Outfall 004, Outfall 005, IMP 102, and IMP 104. Final effluent limitations are imposed in accordance with the following schedule, included in Part C of the permit.

Internal Review and Recommendations

A. The permittee shall achieve compliance with final effluent limitations for Outfall 002 (Part A.I.C); Outfall 004 (Part A.I H.); Outfall 005 (Part A.I.K.); IMP 102 (Part A.I.E.) and IMP 104 (Part A.I.J.) in accordance with the following schedule:

1. Immediately following the Permit Effective Date ("PED"), the permittee shall comply with interim effluent limitations.

2. Within one year following the PED, the permittee shall install equipment for measuring flow, pH, and temperature on a daily basis and/ or locate a representative sampling location upstream of Outfall 002, Outfall 004, Outfall 005, IMP 102, and IMP 104.

3. Within one-year following the PED, the permittee shall achieve compliance with the final effluent limitations for Outfall 002, Outfall 004, Outfall 005, IMP 102, and IMP 104.

B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance.

2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.

3. A description of any factors which tend to explain or mitigate the non-compliance.

4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.

COOLING WATER INTAKE STRUCTURE(S) – Clean Water Act § 316(b)

A. Based upon information provided by the permittee, the Department has determined that the permittee operates Best Technology Available (BTA) to comply with the impingement and entrainment mortality standard based on the facility's operation or proposed operation of 0.5 Feet Per Second Through-Screen Design Velocity. This BTA determination may be revised upon submission of additional information by the permittee with the NPDES permit renewal application. Revisions to the BTA determination shall be effective only through amendment or renewal of the NPDES permit.

B. Nothing in this permit authorizes a take of endangered or threatened species under the Endangered Species Act.

C. Technology and operational measures currently employed at the cooling water intake structures must be operated in a way that minimizes impingement mortality and entrainment to the fullest extent possible.

D. The location, design, construction or capacity of the intake structure(s) may not be altered without prior approval of DEP.

E. Cooling water intake monitoring, including through-screen velocity (if applicable), and cooling water withdrawal rates shall be reported on the Cooling Water Intake Monitoring Supplemental Report (3800-FM-BCW0010).

F. In accordance with 40 CFR § 125.95(a)(2), an alternate schedule is provided for the permittee to submit the information required by 40 CFR § 122.21(r). The permittee shall submit the information specified below with its permit renewal application due 180 days prior to the permit expiration date of the permit.

1. Source water physical data.

2. Cooling water intake structure data.

3. Source water biological baseline characterization data.

Internal Review and Recommendations

4. Cooling water system data.

5. Chosen method(s) of compliance with impingement mortality standard from 40 CFR § 125.94(c).

6. Entrainment performance studies.

7. Operational status.

G. If the facility covered by this permit withdraws greater than 125 MGD on an Actual Intake Flow basis as defined in 40 CFR § 125.92, the permittee must submit the applicable information in 40 CFR §122.21(r)(9) – (r)(13) with the subsequent permit renewal application, as follows:

1. Entrainment Characterization Study.

2. Comprehensive Technical Feasibility and Cost Evaluation Study (including, but not limited to, evaluations of closed-cycle recirculating cooling, fine mesh screens with a mesh size of 2 mm or less, alternate sources of cooling water, water reuse, variable speed pumps, variable frequency drives, and seasonal flow reductions).

3. Benefits Valuation Study.

4. Non-Water Quality Environmental and Other Impacts Study.

5. Peer Review, completed by peer reviewer(s) approved by DEP.

H. If the facility covered by this permit withdraws less than or equal to 125 MGD on an Actual Intake Flow basis as defined in 40 CFR § 125.92, the permittee must submit an entrainment reduction technology evaluation with the subsequent permit renewal application, which must include at a minimum, an evaluation of the feasibility, cost estimates, and environmental impacts of reducing intake flow using alternate sources of cooling water, water re-use, closed-cycle recirculating cooling; and fine mesh screens.

I. If DEP requests additional information to make a BTA determination, the permittee shall submit information within 30 days unless a different time frame is approved by DEP.

J. If DEP determines the methods to meet impingement and entrainment BTA requirements are not sufficient, the permittee shall employ additional controls to reduce adverse impacts from impingement and entrainment.

K. The permittee shall, on an annual basis, submit a report describing any modifications to the operation of any unit at the facility that impacts cooling water withdrawals or operation of the cooling water intake structure(s) during a calendar year. If not applicable, the permittee shall submit a statement certifying that no modifications have occurred in lieu of a report. The annual report or statement is due by January 28 of each year.

L. The permittee shall retain data and other records for any information developed pursuant to Section 316(b) of the Clean Water Act for a minimum of ten years.

M. New Units - The permittee must submit applicable information in 40 CFR §122.21(r) at least 180 days prior to the planned commencement of cooling water withdrawals associated with the operation of a new unit (as defined in 40 CFR §125.92(u)).

ATTACHMENT A:

ATI's Comments to 10/13/20 Draft Permit

Environmental Affairs Department
100 River Road, Brackenridge, PA 15014-1597

November 23, 2020

Mr. Michael E. Fifth
Pennsylvania Department of Environmental Protection
Water Management
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Submitted via email
November 23, 2020

Dear Michael:

Subject: Draft NPDES Permit No. PA0013820
ATI Flat Rolled Products Holdings, LLC – Brackenridge Facility

The following are our comments regarding the subject draft National Pollutant Discharge Elimination System Permit (NPDES) No. PA0013820 for our Brackenridge Facility. The thirty (30) day comment period ends on November 23, 2020.

Comment 1.

Part A.1.B. - The Draft permit proposes daily monitoring for Measured Flow, pH and Temperature at Outfall 002, which consists of treated contact cooling water and stormwater. We respectfully request that the Department change the proposed daily monitoring requirements for flow, pH and temperature back to twice per month and eliminate the requirement to measure flow at Outfall 002. Please see requested changes below:

Parameter	Minimum Measurement Frequency	Required Sample Type
~~Flow (MGD)~~	~~1/day~~	~~Measured~~
pH (s.u.)	~~1/day~~ ***2/month***	Grab
Temperature (°F)	~~1/day~~ ***2/month***	I-S

Daily monitoring of non-contact cooling water is not required by law or regulation. We understand that the proposed daily monitoring requirements are based on the the October 1997 DEP Technical Guidance for the Development and Specification of Effluent Limitations. The purpose of the Guidance Document, which is not a regulation, is to help permit writers write a permit…**"The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements."** This statement is a direct quote from the Technical Guidance Document. Also explicitly written in the Guidance Document: "**This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant."** To that end, the Brackenridge Facility has not exceeded pH or temperature limitations in at least the last ten (10) years or more. The Department therefore lacks any reasonable justification to impose significantly more stringent and onerous monitoring

Comment 1. (continued)

requirements at Outfall 002. In fact, our compliance record gives the Department justification **to exercise its discretion** to leave the permit monitoring requirements at Outfall 002 at twice per month.

Table 6-2 of the Technical Guidance Document **recommends** daily monitoring for flow, pH and temperature for non-contact cooling water (NCCW) outfalls with a flow rate of >100,000 gallons per day (GPD). Please note that imposition of daily monitoring requirements at Outfall 002 is not applicable because there is no discharge of non-contact cooling water from Outfall 002. **ALL** flow (with the exception of stormwater) that discharges through Outfall 002 is from Internal Monitoring Point (IMP) 102, which is treated contact wastewater. Other than stormwater, 100% of the discharge through Outfall 002 flows through cooling towers and is treated at the wastewater treatment plant (WWTP). While the Permit Application includes non-contact cooling water from the Soaking Pits, please note that the Soaking Pits were idled on February 11, 2016 and have not operated since that time and are not expected to operate in the future. In order to maintain the flexibility for restart, we included the Soaking Pits in the Permit Application. At this time, there are no plans to restart the Soaking Pits, but we would like to maintain the option until a determination for permanent shut down is made. Therefore, Outfall 002 discharge is exclusively from IMP 102, which is a high rate recycle system with a blowdown that is **treated contact wastewater**. There is no noncontact cooling water discharged through Outfall 002. Also, as a matter of note, the average flow through Outfall 002 since January 2019 is 0.498 MGD, not 1.6 MGD as indicated on page 21 of the Fact Sheet. In addition, we are presently measuring flow on a daily basis at IMP 102. Since the flow meter at IMP 102 is capturing 100% of the flow (except stormwater) through Outfall 002, there is no justification or environmental benefit to install and maintain a flow meter for daily monitoring at Outfall 002. Additionally, any flow meter at the outfall could be subject to damage since it would not be located on ATI's property and within ATI's control.

Lastly, daily monitoring and analysis of effluent from Outfall 002 is economically and administratively burdensome. In order to comply with proposed daily monitoring requirements, ATI would need to add staff or pay overtime to current laboratory personnel to collect samples at Outfall 002 on a daily basis. It is economically and administratively burdensome with no corresponding benefit since there have been no permit exceedances in at least the past ten (10) years and there would be no environmental benefit to require monitoring 365 days a year.

For all the reasons stated above, we implore upon the Department **to exercise its administrative discretion to maintain our current monitoring requirements, which are twice per month monitoring of pH and temperature and eliminate the requirement to monitor flow at Outfall 002 since flow is being measured at IMP 102, which accounts for 100% of the flow through Outfall 002, with the exception of stormwater.**

Comment 2.

Part A.1.D. - The Draft permit proposes daily monitoring for Measured Flow, pH and Temperature at Outfall 004, consisting of non-contact cooling water (NCCW) and treated contact cooling water. We respectfully request that the Department change the proposed daily monitoring requirements for flow, pH and temperature back to twice per month and allow the estimation of flow, not require a flow meter to be installed at Outfall 004. Please see requested changes below:

Parameter	Minimum Measurement Frequency	Required Sample Type
Flow (MGD)	~~1/day~~ ***2/month***	~~Measured~~ **Estimated**
pH (s.u.)	~~1/day~~ ***2/month***	Grab
Temperature (°F)	~~1/day~~ ***2/month***	I-S

Daily monitoring of NCCW is not required by law or regulation. We understand that the proposed daily monitoring requirements are based on the October 1997 DEP Technical Guidance for the Development and Specification of Effluent Limitations. The purpose of the Guidance Document is to help permit writers write a permit. **"The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements."** This statement is a direct quote from the Technical Guidance Document. Also explicitly written in the Guidance Document: "**This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant."** To that end, the Brackenridge Facility has not exceeded pH or temperature limitations in at least the last ten (10) years or more. This fact does not provide the Department with justification to impose more stringent monitoring requirements at Outfall 004. In fact, our compliance record gives the Department justification **to exercise its discretion** to leave the permit monitoring requirements at Outfall 004 at twice per month.

Please note that the NCCW contribution to Outfall 004 is approximately 96,000 GPD, which is less than 100,000 GPD. Therefore, daily monitoring at Outfall 004 is not justified. Page 35 of the Fact Sheet indicates a flow of 700,000 GPD from Outfall 004. Please note that the average **treated contact wastewater contribution** through IMP 104 over the past year is approximately 517,000 GPD. The average TOTAL flow (treater contact and NCCS) through Outfall 004 over the past year is 613,000 GPD. Therefore, the NCCW flow through Outfall 004 is 96,000 GPD, as stated above. According to Table 6-2 of the Technical Guidance Document, since the NCCW flow rate is between 20,000 and 100,000 GPD, the recommended monitoring frequency would be once per week, not once per day. However, since more than 80% of the total flow through Outfall 004 is treated process water from IMP 104 and we continuously monitor flow and

Comment 2. (continued)

monitor temperature and pH on a weekly basis at IMP 104, additional monitoring at Outfall 004 on a weekly basis is redundant and serves no additional environmental benefit. For at least the last ten (10) years, in more than 700 samples, there have been no pH or temperature exceedances at Outfall 004 and IMP 104. Therefore, circumstances do not warrant increased monitoring and we respectfully request that the current permit monitoring requirements of twice per month remain in the permit.

Lastly, daily monitoring and analysis of effluent from Outfall 004 is economically and administratively burdensome. In order to comply with proposed daily monitoring requirements, ATI would need to add staff or pay overtime to current laboratory personnel to collect samples at Outfall 004 on a daily basis. It is economically and administratively burdensome with no corresponding benefit since there have been no permit exceedances in at least the past ten (10) years and there would be no environmental benefit to this overly stringent proposed monitoring requirement. Additionally, any flow meter at the outfall could be subject to damage since it would not be located on ATI's property and within ATI's control.

For all the reasons stated above, we implore upon the Department **to exercise its administrative discretion to maintain our current monitoring requirements, which are twice per month monitoring of pH and temperature and estimated flow at Outfall 004.**

Comment 3.

Part A.1.E. - The Draft permit proposes daily monitoring for Measured Flow, pH and Temperature at Outfall 005. We respectfully request that the Department change the proposed daily monitoring requirements for flow, pH and temperature back to twice per month and allow the estimation of flow, not require a flow meter to be installed at Outfall 005. Please see requested changes below:

Parameter	Minimum Measurement Frequency	Required Sample Type
Flow (MGD)	~~1/day~~ ***2/month***	~~Measured~~ **Estimated**
pH (s.u.)	~~1/day~~ ***2/month***	Grab
Temperature (ºF)	~~1/day~~ ***2/month***	I-S

Daily monitoring of NCCW is not required by law or regulation. We understand that the proposed daily monitoring requirements are based on the October 1997 DEP Technical Guidance for the Development and Specification of Effluent Limitations. The purpose of the Guidance

Comment 3. (continued)

Document is to help permit writers write a permit…**"The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements."** This statement is a direct quote from the Technical Guidance Document. Also explicitly written in the Guidance Document: "**This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant."** To that end, the Brackenridge Facility has not exceeded pH or temperature limitations in at least the last ten (10) years or more. This fact does not provide the Department with justification to impose more stringent monitoring requirements at Outfall 005. In fact, our compliance record gives the Department justification **to exercise its discretion** to leave the permit monitoring requirements at Outfall 005 at twice per month.

Daily monitoring of Outfall 005 for temperature, pH and flow is not necessary because, similar to Outfall 002, all wastewater discharged through Outfall 005 is temperature controlled through a cooling tower, further making daily monitoring of temperature unnecessary. In addition, there is no justification or environmental benefit to install and maintain a flow meter at Outfall 005 that could be subject to damage since it would not be located on ATI's property and within ATI's control.

Lastly, daily monitoring and analysis of effluent from Outfall 005 is economically and administratively burdensome. In order to comply with proposed daily monitoring requirements, ATI would need to add staff or pay overtime to current laboratory personnel to collect samples at Outfall 005 on a daily basis. It is economically and administratively burdensome with no corresponding environmental benefit since there have been no permit exceedances in at least the past ten (10) years and there would be no environmental benefit to this overly stringent proposed monitoring requirement.

For all the reasons stated above, we implore upon the Department **to exercise its administrative discretion to maintain our current monitoring requirements, which are twice per month monitoring of pH and temperature and estimated flow for Outfall 005.**

Comment 4.

Part A.1.H. - The Draft permit proposes weekly monitoring and permit limitations for Thallium at IMP 102. Page 29 of the Fact Sheet states that Thallium is proposed with permit limitations at IMP 102 because a value of "non detect" using a quantitation limit (QL) that exceeds the Department's Target QL (2.0 ug/l), was reported in the Permit Application. The Fact Sheet further states that ATI may collect "additional samples for the parameter of Total Thallium using the Target QLs. If the additional samples indicate that these parameters are not pollutants of concern, those effluent limits will be removed from the final permit." Please be advised that we

Comment 4. (continued)

have collected twelve (12) additional samples and had them analyzed for Thallium with a QL of 0.3 ug/l, significantly below the Target QL. Please see the table below:

Thallium Results of Additional Samples Collected at IMP 102

Date	Thallium (ug/l)	Quantitation Limit (ug/l)
09/03/20	<0.3	0.3
09/10/20	<0.3	0.3
09/16/20	<0.3	0.3
09/30/20	<0.3	0.3
10/07/20	<0.3	0.3
10/14/20	<0.3	0.3
10/21/20	<0.3	0.3
10/28/20	<0.3	0.3
10/29/20	<0.3	0.3
11/03/20	<0.3	0.3
11/04/20	<0.3	0.3
11/05/20	<0.3	0.3

All twelve (12) additional samples were reported as non-detect at a QL of 0.3 ug/l. These results at this QL clearly demonstrate that Thallium is not a parameter of concern. Therefore, as stated in the Fact Sheet, we respectfully request the Department remove Thallium monitoring requirements and permit limitations from Part A.1.H.

Comment 5.

Part A.1.I. - The Draft permit proposes weekly monitoring and permit limitations for Thallium at IMP 104. Page 40 of the Fact Sheet states that Thallium is proposed with permit limitations at IMP 104 because a value of "non detect" using a quantitation limit (QL) that exceeds the Department's Target QL (2.0 ug/l), was reported in the Permit Application. The Fact Sheet further states that ATI may collect "additional samples for the parameter of Total Thallium using the Target QLs. If the additional samples indicate that these parameters are not pollutants of concern, those effluent limits will be removed from the final permit." Please be advised that we have collected twelve (12) additional samples and had them analyzed for Thallium with a QL of 0.3 ug/l. Please see the table below:

Comment 5. (continued)

Thallium Results of Additional Samples Collected at IMP 104

Date	Thallium (ug/l)	Quantitation Limit (ug/l)
09/02/20	<0.3	0.3
09/09/20	<0.3	0.3
09/16/20	<0.3	0.3
09/23/20	<0.3	0.3
09/30/20	<0.3	0.3
10/07/20	<0.3	0.3
10/14/20	<0.3	0.3
10/21/20	<0.3	0.3
10/27/20	<0.3	0.3
10/28/20	<0.3	0.3
11/04/20	<0.3	0.3
11/05/20	<0.3	0.3

All twelve (12) additional samples were reported as non-detect at a QL of 0.3 ug/l. These results at this QL clearly demonstrate that Thallium is not a parameter of concern. Therefore, as stated in the Fact Sheet, we respectfully request the Department remove Thallium monitoring requirements and permit limitations from Part A.1.I.

Comment 6.

In the second paragraph on page 1 in the "Summary of Review" section of the Fact Sheet, the Brackenridge Facility is referred to as an integrated steel mill. Please be advised that the Brackenridge Facility is **NOT** an integrated steel mill. An integrated steel mill has all the functions for primary steel production which includes iron making (conversion of ore to liquid iron) and steelmaking (conversion of pig iron to liquid steel). The Brackenridge Facility does not have these operations and is therefore NOT an integrated steel mill. Please correct the Fact Sheet to describe the Brackenridge Facility as a "specialty metals manufacturing facility."

Comment 7.

Part A.1.H. - On Page 9, Internal Monitoring Point (IMP) 102, the Department has proposed to increase monitoring frequency for pH at IMP 102 from once per week to daily. As you know, the wastewater generated at the HRPF is from cooling associated with Hot Forming operations. River water is the source water that is used as cooling water at various stages of hot rolling. As such there is no impact on pH throughout the process. Increasing the monitoring frequency is not justifiable.

Comment 7. (continued)

Under the Draft Permit, laboratory personnel would need to sample and analyze effluent from IMP 102 on a daily basis, which is economically and administratively burdensome. In order to comply with proposed daily monitoring requirements, ATI would need to add staff or pay overtime to current laboratory personnel to collect samples at IMP 102 on a daily basis. It is economically and administratively burdensome with no corresponding benefit since there have been no permit exceedances since the start-up of the HRPF in 2014 and there would be no environmental benefit to this overly stringent proposed monitoring requirement.

Comment 8.

Part A.1.H. - On Pages 9 and 10, Internal Monitoring Point (IMP) 102, the Department has proposed concentration limitations for lead, zinc, cyanide, ammonia and fluoride. On page 26 of the Fact Sheet, the Department states that the proposed concentration limits for lead, zinc, cyanide, ammonia and fluoride have been imposed based upon the model system treatment effectiveness in the Non-Ferrous Metals Forming and Metal Powders Point Source Category. The Department further states on page 24 that the NSPS for titanium forming is based upon lime and settle technology only. **THIS IS NOT ACCURATE**. Please note that this wastewater treatment technology at IMP 102 is for the treatment of Total Suspended Solids (TSS) and Oils and Greases (O&G) in wastewaters generated from the Hot Forming of specialty metals and titanium. **There are no pH adjustment/lime and settle/precipitation treatment technologies associated with our process. Furthermore, our treatment system is a FERROUS system.** We do not employ the treatment technologies required for the production of nonferrous metals, because those pollutants in the non-ferrous subcategory are not present in our wastewater. We continue to believe that the Non-Ferrous Metals Forming Subcategory does not apply to ATI.

Non-Ferrous Metals Forming and Metal Powders Point Source Category. The Department further states on page 24 that the NSPS for titanium forming is based upon lime and settle technology only. **THIS IS NOT ACCURATE**. Please note that this wastewater treatment technology at IMP 102 is for the treatment of Total Suspended Solids (TSS) and Oils and Greases (O&G) in wastewaters generated from the Hot Forming of specialty metals and titanium. **There are no pH adjustment/lime and settle/precipitation treatment technologies associated with our process. Furthermore, our treatment system is a FERROUS system.** We do not employ the treatment technologies required for the production of nonferrous metals, because those pollutants in the non-ferrous subcategory are not present in our wastewater. We continue to believe that the Non-Ferrous Metals Forming Subcategory does not apply to ATI.

The Development Document for the Non-Ferrous Metals Forming industry describes the use of Lime and Settle Technologies in all three (3) treatment technology options. Specifically, Best

Comment 8. (continued)

Available Technology for the Non-Ferrous Metals Forming industry includes, Chemical Precipitation and Sedimentation (lime and settle), Chemical Emulsion Breaking, Ammonia

Steam Stripping, Chromium Reduction and Cyanide Oxidation or Precipitation. The Non-Ferrous Metals Forming Effluent Limitation Guidelines were developed exclusively based on wastewater treatment technologies required for treatment of wastewaters generated from the processes that are employed for the **production** of NonFerrous Metals. The Non-Ferrous Development Document chose the pollutants of concern at facilities that make titanium sponge. The Brackenridge Facility does not make titanium sponge, we produce specialty alloys at the Brackenridge Facility. The processes employed at a titanium producing facility include surface treatment with ammonia solutions, cyanide baths, hydrochloric acid, phosphoric acid, ammonium bifluoride, chromic acid mixtures, and sodium or potassium hydroxide solutions. These processes are not and will not be performed at the Brackenridge Facility. Therefore, the Non-Ferrous Metals Forming treatment technologies are not employed at the Brackenridge Facility. **ATI does not produce or make titanium sponge or non-ferrous products at the Brackenridge Facility**. We simply Hot Roll or process non-ferrous products in a ferrous, Iron and Steel environment. We are an Iron and Steel Industry..NOT a non-ferrous metals industry. We continue to believe that effluent limitations for cyanide, ammonia, lead, zinc, fluoride and titanium are not appropriate or required and that the Effluent Limitations Guidelines (ELGs) and Standards for the Comment 8. (continued)

Nonferrous Metals Forming and Metal Powders are not applicable to the Brackenridge Facility. We continue to employ only specialty metals (Iron and Steel) processes and Best Available Treatment technologies at the Brackenridge Facility. Consequently, since we are not **producing** titanium or non-ferrous products, but simply hot rolling a limited quantity of non-ferrous metals, along with specialty metals, which remain the predominant material on the HRPF, there will be no non-ferrous treatment technologies employed for the treatment of lead, zinc, cyanide, ammonia, titanium or fluoride. Since imposition of mass loading limits are to demonstrate compliance with required treatment technologies, and non-ferrous pollutants of concern are not present in our wastewater, imposition of permit limitations for non-ferrous parameters are not applicable. The treatment plant for the Hot Rolling Processing Facility (HRPF) is designed for the treatment of oils, greases and solids and **exceeds** Best Available Technology for the treatment of hot rolling wastewaters.

Comment 9.

Part A.1.H. – On pages 9 and 10, Internal Monitoring Point (IMP) 102, the Department has proposed concentration limitations for titanium and iron at IMP 102. On page 27 of the Fact Sheet, the Department states that titanium and iron concentration limits are evaluated from the iron and steel forming and titanium forming development documents and are representative of

Comment 9. (continued)

the treatment effectiveness of lime and settle treatment technology. As stated above, the HRPF WWTP does not employ pH adjustment/lime and settle/precipitation treatment technologies. Furthermore, titanium and iron were specifically excluded as parameters of concern in the Iron and Steel and Non-Ferrous Metals Development Documents. In addition, on page 29 of the Fact Sheet, iron and titanium were not selected for analysis by PENTOXSD, therefore, are not pollutants of concern. Therefore, imposition of concentration limitations for titanium and iron are not warranted and there is no justification to impose permit limitations for titanium and iron at IMP 102. Consequently, we respectfully request that titanium and iron permit limitations for IMP 102 are removed from the subject Permit.

Comment 10.

Part A.1.H. – On page 9, Internal Monitoring Point (IMP) 102, the proposed average monthly permit limitation for lead is 0.65 pounds per day (lbs./day). However, we believe there is a transcription error and the correct proposed monthly average mass loading limitation is actually 0.065 lbs./day. Please note that the proposed daily maximum value is 0.19 lbs./day, which is lower than the proposed monthly average 0.65 lbs./day limitation.

Comment 11.

For the reasons stated in Comment 8 above, imposition of mass loading limitations for lead, zinc, cyanide, ammonia and fluoride at IMP 102 is not warranted and we believe is not correct application of the Effluent Limitations Guidelines**. Furthermore, upon issuance of the Draft Permit as Final, ATI will be in immediate violation of proposed Permit Limitations. It is IMPOSSIBLE to comply with some of the proposed mass loading permit limitations because the concentrations in our wastewater are below detectable limitations and/or treatable concentrations. Therefore, we will have no choice but to appeal the NPDES Permit and seek a stay of its effective date if this draft permit is issued as final.**

For example, the proposed average monthly permit limitation for cyanide is 0.39 pounds per day (lbs./day). However, we believe there is a transcription error and the correct proposed monthly average mass loading limitation is actually 0.039 lbs./day. Please note that the proposed daily maximum value is 0.13 lbs./day, which is lower than the proposed monthly average 0.39 lbs./day limitation.

Over the past thirty-three (33) months or 143 weekly samples, ATI would have exceeded the proposed monthly average permit limit of 0.039 lbs./day ***FOURTEEN (14)*** times and the daily maximum **FIVE (5)** times. Furthermore, over those 143 weeks, we **were below the QL of 0.01 mg/l 127 weeks**, nearly 90% of the time. Please note that at no time have we ever exceeded the

Comment 11. (continued)

monthly average concentration limits of our current permit. As such, the concentration of cyanide present (or NOT PRESENT) in our wastewater is below treatable levels. There is nothing ATI can do to meet the proposed mass loading limitations. The mass loading limitations are proposed BELOW DETECTABLE LIMITATIONS. Cyanide is present below or near detectable levels and our average discharge volume at IMP 102 is well below EPA's expectations with regard to water use. Therefore, we cannot reduce cyanide concentration or reduce water volume. Furthermore, Cyanide concentrations are not present or near detectable levels in the influent wastewater.

ATI implores upon the Department to remove concentration and mass loading permit limitations for cyanide from the permit. At the very least, as stated in Comment 8, mass loading limitations need to be removed from the permit. Please see below for proposed changes:

To further support the fact that non-ferrous metals pollutants are not pollutants of concern in the wastewaters generated at our HRPF, whether we are processing specialty alloys or titanium, please see the table below:

Parameter	No. of samples	No. of times at or below detection limits
Cyanide	143	127
Ammonia	143	131
Lead	143	142
Zinc	143	143
Titanium	143	143

In addition, Lead, Zinc, Titanium and Cyanide were not present in the samples collected from the influent wastewater to the HRPF WWTP.

On page 27 of the Fact Sheet, the Department states that a "review of effluent monitoring data from the past five years shows a maximum ammonia concentration of 6.3 mg/L, reported in March 2018. The maximum ammonia concentration reported in the past year is 0.35 mg/L, reported in January 2020." The Department determined at these low ammonia concentrations at IMP 102 that ammonia is "**not a significant pollutant of concern at IMP 102**." Accordingly, the Department justified removing ammonia concentration limitations from the draft permit.

The maximum cyanide concentration reported in the past five (5) years is 0.08 mg/L. The maximum cyanide concentration reported in the past year is 0.04 mg/L. Following the same thought process for ammonia, at these low cyanide concentrations at IMP 102, which are near the detection limitation value, cyanide is **not a significant pollutant of concern.** Therefore, concentration permit limitations for cyanide need to be removed from the permit.

Comment 11. (continued)

The maximum lead concentration reported in the past five (5) years is 0.04 mg/L in August 2020. However, we believe this value is an anomaly. Excluding this value, over the past five (5) years, all concentrations were at or below the detection limit except for five (5) instances, where the maximum concentration was 0.005 mg/l. Following the same thought process for ammonia, at these low lead concentrations at IMP 102, which are near the detection limitation value, lead is **not a significant pollutant of concern.** Therefore, concentration permit limitations for lead need to be removed from the permit.

The maximum zinc concentration reported in the past five (5) years is 0.05 mg/L in October 2016. However, we believe this value is an anomaly. Excluding this one (1) value, over the past five (5) years, all concentrations were at or below the detection limit. Following the same thought process for ammonia, at these low zinc concentrations at IMP 102, which are near the detection limitation value, zinc is **not a significant pollutant of concern.** Therefore, concentration permit limitations for zinc need to be removed from the permit.

It is also important to note that cyanide, lead and zinc concentrations were below detection limitations in the **influent** to the HRPF WWTP.

Fluoride is present in our wastewater as a result of processing specialty alloys. However, Fluoride is NOT a pollutant of concern in the Iron and Steel ELGs. Therefore, we do not get "credit" for processing specialty alloys when calculating mass loading limitations even though specialty alloy products account for more than 95% of the products hot rolled at the HRPF. Over the past thirty-three (33) months or 143 weekly samples, ATI would have exceeded the proposed monthly average permit limit of 11.7 lbs./day ***ELEVEN (11)*** times.

The Fact Sheet on page 27 states that the concentration limits "for lead, zinc, cyanide, ammonia and fluoride have been imposed based upon the model system treatment effectiveness listed in the Non-Ferrous Metals Forming and Metal Powders Point Source Category. The model system treatment effectiveness values are based upon lime and settle technology. Projected discharge concentrations included in the NPDES permit application indicate that the proposed concentration limits will be achieved through the employment of the selected technology. Utilization of filtration technologies (as is proposed for all discharges from IMP 102) should provide additional benefits to the effluent quality and ensure compliance with the NPDES permit." **This statement is not correct.** The wastewaters generated at the HRPF are from the
Comment 11. (continued)

hot rolling of products. As such, the appropriate treatment technology that ATI employs, which exceeds BAT for hot rolling process wastewater treatment, includes scale settling, oil skimming, clarification, sand filtration, carbon filtration, and cooling. **Lime and settle technology does not apply to this type of wastewater nor is it employed at the HRPF.**

Comment 11. (continued)

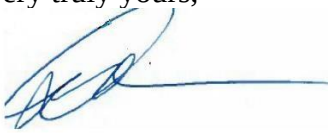
ATI is unable to meet the proposed mass loading limitations because the limits are below detection limitations. ATI is well below industry standard with regard to discharge volume. The concentrations present, or absent, in the wastewater are below detectable concentrations, therefore, below treatable levels. For all these reasons, ATI implores upon the Department to employ reasonableness and Best Professional Judgement (BPJ) and **remove lead, zinc cyanide, ammonia and fluoride** permit limitations from the permit. ATI understands that monitoring of these parameters will still be required. Therefore, we propose the following changes to the draft permit:

Parameter	Average Monthly (lbs./day)	Daily Maximum (lbs./day)	Average Monthly (mg/l)	Daily Maximum (mg/l)
Ammonia-Nitrogen	~~26.1~~ Report	~~59.0~~ Report	Report	Report
Cyanide	~~0.39~~ ~~0.039~~ Report	~~0.13~~ Report	~~0.12~~ Report	~~0.29~~ Report
Fluoride	~~11.7~~ Report	~~26.4~~ Report	~~26.4~~ Report	~~59.5~~ Report
Lead	~~0.65~~ ~~0.065~~ Report	~~0.19~~ Report	~~0.20~~ Report	~~0.42~~ Report
Zinc	~~0.27~~ Report	~~0.65~~ Report	~~0.61~~ Report	~~1.46~~ Report
Titanium	XXX	XXX	~~0.41~~ Report	~~0.94~~ Report
Iron	XXX	XXX	~~0.61~~ Report	~~1.20~~ Report

To reiterate, **if the Draft Permit is issued as final, ATI will have no choice but to appeal the Permit and request a Stay.**

We look forward to working with you to finalize this permit. Because of the complexity of this permit and our comment letter, we desire a meeting/discussion of our comments at the Department's convenience. We respectfully request the opportunity to review a re-draft of the NPDES Permit which incorporates any corrections and changes, prior to final permit issuance. If you have any questions, please do not hesitate to telephone me at (412) 226-5947.

Very truly yours,



Deborah L. Calderazzo
Director, EH