pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0009725**
Facility Type	**Industrial**	APS ID	**1045100**
Major / Minor	**Minor**	Authorization ID	**1364629**

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

Applicant and Facility Information

Applicant Name	**Jersey Shore Steel Co.**	Facility Name	**Jersey Shore Steel Plant**
Applicant Address	PO Box 5055	Facility Address	70 Maryland Avenue
	Jersey Shore, PA 17740-5055		Jersey Shore, PA 17740-7113
Applicant Contact	David Schultz	Facility Contact	David Schultz
Applicant Phone	(570) 753-3000	Facility Phone	(570) 753-3000
Client ID	83228	Site ID	249629
SIC Code	3312	Municipality	Pine Creek Township
SIC Description	Manufacturing - Blast Furnaces And Steel Mills	County	Clinton
Date Published in PA Bulletin	August 6, 2022	EPA Waived?	No
Comment Period End Date	September 5, 2022	If No, Reason	TMDL Discharger

Purpose of Application: Application for a renewal of an NPDES permit for discharge of industrial wastewater

Summary of Review

The subject permit was drafted on July 19, 2022.

Comments were received from the permittee by a September 2, 2022 email from David Schultz. The comments are repeated below followed by the Department's response:

- Comment: It is our understanding Jersey Shore Steel's reduction was based on flow estimates during a period that included 2019 and 2020 data. This is during the COVID-19 pandemic when our business was severely impacted by layoffs, low manning and low production. The data does not accurately reflect the return to more normal conditions, manning and production levels. We would ask that you revise this determination up to 70,000 per day including the accompanying total mass for each of the pre-pandemic pollutant parameters.

  - Department Response: The Department believes the 0.04 MGD flow used is consistent with Department policy and representative of typical operation based on the past five years, including the pre-pandemic years. The Department notes that a higher flowrate such as 70,000 gpd would generally result in more stringent concentration limitations for toxic parameters and temperature.

- Comment: We would also ask, if additional pollutant parameters in the draft permit test below the concentrations identified in our permit, we would like to opt out of testing for the recently added pollutants.

  - Department Response: The Department has reevaluated the toxics limits based on all available data. The Fact Sheet Addendum includes an updated Toxics Screening Analysis and summary. The updated analysis has resulted

Approve	Deny	Signatures	Date
✓		*Keith C. Allison* Keith C. Allison / Project Manager	February 23, 2023
✓		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	February 24, 2023

Summary of Review

in the removal of monitoring for Total Cadmium, Total Copper, and Total Mercury. The Department recommends that Jersey Shore Steel Company conduct an additional sampling event for those parameters which have been non-detectable but have not met the Department's Target Quantitation Limits (QLs). The relevant parameters are Total Antimony, Free Cyanide, Total Lead, Total Selenium, Total Silver, and Total Thallium with Target QLs as listed in the Fact Sheet Addendum. We recommend that you verify with the analytical laboratory whether the Target QLs can be met for these parameters and if necessary, contact others labs to determine whether they can meet the Target QLs.

In addition, comments were also received from EPA Region III by an August 18, 2022 email from Jennifer Fulton which included four numerated comments as listed below.

1. Comment: Where the current permit for Jersey Shore Steel Co. has a monitoring frequency requirement of 1x/week for Iron, the draft permit is proposing the monitoring frequency to decrease to a monitoring event 2 times a month. PADEP mentioned in an email conversation on 8/16/2022 that this may have been an oversight and that the monitoring frequency may change back to weekly. Please clarify what monitoring frequency PADEP intends to impose in the proposed final draft.

    - Department Response: This reduction in frequency was an oversight. Due to the more stringent new Final limitation for Total Iron the existing monitoring frequency of 1/week has been reintroduced into the enclosed draft permit.

2. Comment: The following comments are in regard to the permit's proposed compliance schedule:

    2a.)On page 2 of the draft NPDES permit, there is a compliance schedule for several pollutants from the permit effective date to the start of the final period. The compliance schedule described on page 12 of the factsheet shows that PADEP has given three years to the permittee before they need to start construction and nearly a year after construction has been completed to comply with the new effluent limits. These timeframes seem a bit extended, as new effluent limits should be complied with as soon as possible, per 40 CFR §122.47(a)(1). You addressed the length of the compliance schedule milestones in our email conversation on 8/16/2022, stating that Jersey Shore Steel Co. will require major changes at the facility, possibly including diverting their Industrial wastewater to the Pine Creek Municipal Authority. Please include a detailed explanation or rationale regarding the basis for the duration of the compliance schedule in the draft permit fact sheet.

    - Department Response: The Department agrees that compliance schedules should require compliance as soon as possible consistent with 40 CFR §122.47(a)(1) and provides the following additional details to justify the duration of the proposed schedule. As noted, there is the potential for needed coordination between Jersey Shore Steel Company and the Pine Creek Municipal Authority which is also expected to receive much more stringent requirements due to the change in the stream's Point of First Use. Jersey Shore Steel has limited capability to meet limits through process control changes due to the nature of cooling water discharges. Therefore, ultimate changes to achieve compliance with the final limits will likely require structural changes which will require both NPDES and WQM permitting, potentially for both permittees. It is noted that the PCMA renewal application has been received by the Department but has not been drafted yet.

    2b.) When a compliance schedule is proposed in a permit, the state must document that the facility cannot meet the new limits immediately upon the permit effective date. One such rationale has been included in the draft factsheet for the new proposed limits and compliance schedule for temperature. For pollutants where the need for a compliance schedule to meet a new limit is not already evident from the data provided in the fact sheet, (i.e. Mercury, Selenium, and Thallium), the Department should document that the permittee needs time to comply. You partially addressed this concern in an 8/16/2022 email conversation, stating that the Department would assess whether the limits could indeed be met right after the permit becomes effective and that the next draft of the permit

Summary of Review

should have permit limits reflective of this assessment. Based on your evaluation, the fact sheet will need to include justification for any proposed schedule of compliance.

- Department Response: The Department agrees that no schedule should be included for Total Antimony, Free Cyanide, Total Lead, Total Selenium, Total Silver, and Total Thallium, which are all included primarily due to uncertainty from a failure to meet Target Quantitation Limits (QLs), unless additional information can be provided by the permittee to justify the need for a schedule for these parameters. It is noted that if the permittee can provide additional data for these specific parameters showing they are not detectable in the effluent at Quantitation Limits meeting the Target QLs, the Department will consider removing them from the Final Permit.

3. Comment: In an 8/16/2022 email conversation, you indicated that the cooling water intake structure comes from a well and therefore 316b requirements do not apply to the Jersey Shore Steel Co. permit. Please include a detailed 316b discussion with this information on the next draft of the permit fact sheet to provide clarification on the need for 316b requirements (or lack thereof).

   - Department Response: The Department provides the following 316(b) analysis to supplement the initial fact sheet.

316(b) Cooling Water Intake Structures
40 CFR 125.91 requires 316(b) analyses for cooling water intake structure from waters of the US (surface waters) when (1) there is a point source discharge, (2) a cumulative intake flow greater than 2 MGD, and (3) when 25% of the intake is for cooling. Due to the facility receiving its water from a groundwater well (which does not meet the definition of waters of the United States per 40 CFR 230.3(s) and the intake rate from the well being 250 gpm (0.36 MGD) no 316(b) analysis is required for Jersey Shore Steel.

4. Comment: Page 13 of the factsheet states that "Because adequate nutrient monitoring has been collected over the past permit term no additional monitoring is required at this time for these parameters consistent with the Phase III WIP." This proposal to eliminate monitoring for nutrients and nutrient species is reflected on the factsheet on pages 14-17 and on the draft permit on pages 2-5. The phase 3 WIP Wastewater supplement indicates that monitoring is not required for facilities that have no potential to introduce an increased load of TN or TP within the intake water source. Otherwise, there is an annual monitoring frequency requirement for nutrients at IW facilities with cooling water intakes. Does the cooling water intake have chemical additives which contain N or P? There is currently no rationale provided concerning the reason behind the decision not to include monitoring requirements for TN, nutrient species, and TP on the factsheet. Please include a substantive description of how the Jersey Shore Steel Co is complying with the expectations laid out on the phase 3 WIP supplement for non-significant IW facilities.

   - Department Response: Consistent with the Phase III Wastewater Supplement and because the discharge has had detectable levels of TN and TP the Department agrees that the annual nutrient monitoring should continue and therefore, the 1/year monitoring for Total Nitrogen and Total Phosphorus have be included in the enclosed draft permit.

No comments were received from the public.
Internal review of the draft permit resulted in an update to the stormwater monitoring requirements. The Department has reissued the PAG03 General Permit For Discharges of Stormwater Associated with Industrial Activity. Appendix B of the updated PAG03 to which the facility would be subject now includes semiannual monitoring for Total Nitrogen, Total Phosphorus, and Oil & Grease in addition to other parameters already included in the previous draft of this permit. These three additional parameters will now be included in the proposed draft permit for Jersey Shore Steel with updated Appendix C language.

Summary of Review

Updated Toxics Management Analysis

Pollutant	Sample Results (µg/L)	Monthly Ave. WQBEL (µg/L)	Target Quantitation Limit (µg/L)	Updated TMS Recommendation
Total Antimony	< 6	8.38	2	Limit
Total Arsenic	6.7	15.0	N/A	Report
Total Cadmium	< 0.19	0.40	0.2	No Limitation or Monitoring
Hexavalent Chromium	7.3	15.6	N/A	Report
Total Copper	< 2.8	13.6	4	No Limitation or Monitoring
Free Cyanide	< 1.8	5.99	1	Report
Total Iron	1,900	2,245	N/A	Limit
Total Lead	< 2.5	4.58	1	Limit
Total Mercury	< 0.16	0.075	0.2	No Limitation or Monitoring
Total Selenium	< 7.6	7.47	5	Limit
Total Silver	< 2	3.59	0.4	Limit
Total Thallium	< 2.6	0.36	2	Limit

The Department has verified that U qualifiers in the original data indicate that a compound was analyzed for, but not detected. The J qualifier specifically for Total Arsenic indicates an estimated concentration. Based on the above updated analysis, reporting or limits are no longer necessary for Total Cadmium, Total Copper, or Total Mercury due to Target QLs having been met for these non-detect parameters. Limitations or monitoring included for Total Antimony, Free Cyanide, Total Lead, Total Selenium, Total Silver, and Total Thallium are included primarily due to uncertainty from Target QLs not being met. Adequate data has been accumulated over the past permit term to justify that no compliance schedule is necessary for the new Total Iron limit. Over the past five years (January 2018-December 2022) the Monthly Averages for Total Iron have averaged 0.53 mg/L. Only once in the past five years has the Total Iron Monthly Average level exceeded 2,245 ug/L (August 2021 – monthly average of 2.9 mg/L and Daily Maximum of 6.0 mg/L).

The updated Toxics Management Spreadsheet is attached.

It is recommended that NPDES Permit No. PA0009725 be redrafted with the changes noted above regarding amendment to the Toxics Limitations and monitoring and the compliance schedule. Specifically, Total Iron monitoring has increased from 2/month to 1/week; removal of Total Cadmium, Total Copper, and Total Mercury Limits and monitoring; the compliance schedule no longer applies to Total Antimony, Free Cyanide, Total Lead, Total Mercury, Total Selenium, Total Silver, and Total Thallium; and annual nutrient monitoring in reintroduced.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Start of Final Period.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Temperature (ºF)	XXX	XXX	XXX	Report	Report Daily Max	XXX	1/day	I-S

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Start of Final Period through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Temperature (ºF) Apr 16 - 30	XXX	XXX	XXX	XXX	100.0 Daily Max	XXX	1/day	I-S
Temperature (ºF) Jan 1 - 31	XXX	XXX	XXX	XXX	76.8 Daily Max	XXX	1/day	I-S
Temperature (ºF) Apr 1 - 15	XXX	XXX	XXX	XXX	72.0 Daily Max	XXX	1/day	I-S
Temperature (ºF) May 16 - 31	XXX	XXX	XXX	XXX	83.5 Daily Max	XXX	1/day	I-S
Temperature (ºF) May 1 - 15	XXX	XXX	XXX	XXX	79.9 Daily Max	XXX	1/day	I-S

Outfall 001, Continued (from Start of Final Period through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Temperature (ºF) Feb 1 - 28	XXX	XXX	XXX	XXX	73.4 Daily Max	XXX	1/day	I-S
Temperature (ºF) Jun 1 - 15	XXX	XXX	XXX	XXX	85.5 Daily Max	XXX	1/day	I-S
Temperature (ºF) Mar 1 - 31	XXX	XXX	XXX	XXX	70.2 Daily Max	XXX	1/day	I-S
Temperature (ºF) Jun 16 - 30	XXX	XXX	XXX	XXX	95.2 Daily Max	XXX	1/day	I-S
Temperature (ºF) Aug 16 - 31	XXX	XXX	XXX	XXX	92.8 Daily Max	XXX	1/day	I-S
Temperature (ºF) Jul 1 - 31	XXX	XXX	XXX	XXX	102.0 Daily Max	XXX	1/day	I-S
Temperature (ºF) Aug 1 - 15	XXX	XXX	XXX	XXX	92.9 Daily Max	XXX	1/day	I-S
Temperature (ºF) Sep 16 - 30	XXX	XXX	XXX	XXX	92.5 Daily Max	XXX	1/day	I-S
Temperature (ºF) Dec 1 - 31	XXX	XXX	XXX	XXX	81.1 Daily Max	XXX	1/day	I-S
Temperature (ºF) Sep 1 - 15	XXX	XXX	XXX	XXX	93.6 Daily Max	XXX	1/day	I-S
Temperature (ºF) Oct 1 - 15	XXX	XXX	XXX	XXX	89.9 Daily Max	XXX	1/day	I-S
Temperature (ºF) Oct 16 - 31	XXX	XXX	XXX	XXX	88.5 Daily Max	XXX	1/day	I-S
Temperature (ºF) Nov 1 - 15	XXX	XXX	XXX	XXX	86.6 Daily Max	XXX	1/day	I-S
Temperature (ºF) Nov 16 - 30	XXX	XXX	XXX	XXX	84.1 Daily Max	XXX	1/day	I-S

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/week	Grab
TSS	16.6	33.3	XXX	50.0	100.0	100	1/week	8-Hr Composite
Oil and Grease	5.0	10.0	XXX	15.0	30.0	30	1/week	Grab
Total Nitrogen	XXX	Report	XXX	XXX	Report	XXX	1/year	24-Hr Composite
Total Phosphorus	XXX	Report	XXX	XXX	Report	XXX	1/year	24-Hr Composite
Total Antimony	0.003	0.004	XXX	0.00838	0.0131	0.021	2/month	24-Hr Composite
Total Arsenic	Report	Report	XXX	Report	Report	XXX	1/month	24-Hr Composite
Hexavalent Chromium	Report	Report	XXX	Report	Report	XXX	1/month	24-Hr Composite
Free Cyanide	Report	Report	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Iron	0.75	1.17	XXX	2.245	3.503	5.613	1/week	24-Hr Composite
Total Lead	0.002	0.002	XXX	0.0045	0.0071	0.0115	2/month	24-Hr Composite
Total Selenium	0.002	0.004	XXX	0.0074	0.0117	0.0187	2/month	24-Hr Composite
Total Silver	0.001	0.002	XXX	0.0035	0.0053	0.00538	2/month	24-Hr Composite
Total Thallium (ug/L)	0.0001	0.0002	XXX	0.36	0.56	0.9	2/month	24-Hr Composite

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 002