Ohio EPA Permit No.: 0ID00014*QD

Application No: OH0004260

Action Date: October 1, 2024 Effective Date: November 1, 2024 Expiration Date: October 31, 2029

> Ohio Environmental Protection Agency Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Cleveland-Cliffs Steel Corporation - Coshocton Works

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Cleveland-Cliffs Steel Corporation - Coshocton Works, located at 17400 State Route 16, Coshocton, Ohio, Coshocton County, and discharging to the Muskingum River and unnamed tributary to Muskingum River in accordance with the conditions specified in Parts I, II, III, IV, V and VI of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Anne M. Vogel

Director

Total Pages: 58

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting 36 months, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Initial

Effluent Characteristic		Discharge Limitations						Monitoring Requirements			
Parameter	Conce	entration S	pecified	Units	Lo	ading* k	g/day	Measuring		Monitoring	
rarameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Sampling Type	Months	
00010 - Water Temperature - C	-	-	-	_	-	-	-	1/Month	Grab	All	
00530 – Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All	
00550 - Oil and Grease, Total - mg/l	-	-	-	_	-	-	-	1/Month	Grab	All	
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All	
00951 - Fluoride, Total (F) - mg/l	-	-	-	_	-	-	-	1/Month	24hr Composite	All	
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All	
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All	
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	When Disch.	Grab	All	
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All	
34044- Oxidants, Total Residual - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.	
50050 - Flow Rate - MGD	-	-	_	_	_	_	-	1/Day	Calculated	All	
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual	

Effluent Characteristic			Dischar	ge Limitat	ions			Monitoring Requirements			
Parameter	Conce	entration S	pecified l	Units	Lo	ading* k	g/day	Measuring		Monitoring	
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Sampling Type	Months	
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	June	
61941 - pH, Maximum - S.U.	_	-	-	-	-	-	-	1/Day	Continuous	All	
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All	
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All	
82581 - pH Range Excursions, >60 Minutes - Number/Day	0	-	-	-	-	-	-	1/Day	Total	All	
82582 - pH Range Excursions, Monthly Total Duration - Minutes	446	-	-	-	-	1	-	1/Month	Total	All	

Notes for Station Number 0ID00014001:

- a. This outfall includes treated process wastewaters, treated sanitary wastewaters, non-contact cooling waters and excess well water. This outfall also contributes stormwater. Total Suspended Solids and Zinc monitoring is intended for stormwater sampling. See footnote h.
- b. Sampling shall be performed when discharging. If this station is monitored during a particular month and there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- c. Total Residual Oxidants See Part II, Items J and Compliance Schedule.
- d. Quarterly Alt. corresponds to the months of March June, September, and December.
- e. Mercury See Part II, Item O.
- f. Toxicity Testing See Part II, Item Q.
- g. Continuous pH monitoring See Part II, Item I. The acceptable pH range is 6.5-9.0.
- h. Total Suspended Solids and Zinc monitoring The benchmark concentrations listed below applies to this outfall. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark data are for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the control measures/best management practices in Part IV, Items A-C. See Part V.B.7 regarding benchmark monitoring.

Parameter Benchmark
Total Suspended Solids 100 mg/L
Total Recoverable Zinc 550 ug/L

The measuring frequency of "when discharged" means the sample shall be collected in accordance with the measuring frequencies detailed in Part V.B.2 of this permit. Benchmark samples for both parameters shall be collected concurrently.

- i. Flow Monitoring Flows for outfall 001 are calculated by adding together flows 601, 602, a value for cooling water and a value for stormwater.
- j. Analyses for Total Residual Oxidants are to be performed by Standard Method 4500-CL E (low level amperometric titration) or another equivalently sensitive TRO method approved in 40 CFR 136.

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning 36 months after the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic			Dischar	ge Limitat	ions		its			
Parameter	Conce	entration S	pecified 1	Units	Lo	ading* k	g/day	Measuring		Monitoring
1 at affecter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Sampling Type	Months
00010 - Water Temperature - C	-	-	-	_			1/Month	Grab	All	
00530 – Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
00550 - Oil and Grease, Total - mg/l	-	-	-	_	-	-	-	1/Month	Grab	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00951 - Fluoride, Total (F) - mg/l	-	-	-	_	-	-	-	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	When Disch.	Grab	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
34044- Oxidants, Total Residual - mg/l	0.0048	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
50050 - Flow Rate - MGD	_	-	-	_	_	-	-	1/Day	Calculated	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual

Effluent Characteristic		Discharge Limitations						N	Ionitoring Requiremen	ts
Parameter	Conce	entration Specified Units			Loading* kg/day			Measuring		Monitoring
1 at affecter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Sampling Type	Months
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61941 - pH, Maximum - S.U.	_	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	_	-	-	-	-	-	-	1/Day	Continuous	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
82581 - pH Range Excursions, >60 Minutes - Number/Day	0	-	-	-	-	-	-	1/Day	Total	All
82582 - pH Range Excursions, Monthly Total Duration - Minutes	446	-	-	-	-	-	-	1/Month	Total	All

Notes for Station Number 0ID00014001:

- a. This outfall includes treated process wastewaters, treated sanitary wastewaters, non-contact cooling waters and excess well water. This outfall also contributes stormwater. Total Suspended Solids and Zinc monitoring is intended for stormwater sampling. See footnote h.
- b. Sampling shall be performed when discharging. If this station is monitored during a particular month and there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- c. Total Residual Oxidants See Part II, Item J and Compliance Schedule.
- d. Quarterly Alt. corresponds to the months of March June, September, and December.
- e. Mercury See Part II, Item O.
- f. Toxicity Testing See Part II, Item Q.
- g. Continuous pH monitoring See Part II, Item I. The acceptable pH range is 6.5-9.0.
- h. Total Suspended Solids and Zinc monitoring The benchmark concentrations listed below applies to this outfall. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark data are for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the control measures/best management practices in Part IV, Items A-C. See Part V.B.7 regarding benchmark monitoring.

Parameter Benchmark
Total Suspended Solids 100 mg/L
Total Recoverable Zinc 550 ug/L

The measuring frequency of "when discharged" means the sample shall be collected in accordance with the measuring frequencies detailed in Part V.B.2 of this permit. Benchmark samples for both parameters shall be collected concurrently.

- i. Flow Monitoring Flows for outfall 001 are calculated by adding together flows 601, 602, a value for cooling water and a value for stormwater.
- j. Analyses for Total Residual Oxidants are to be performed by Standard Method 4500-CL E (low level amperometric titration) or another equivalently sensitive TRO method approved in 40 CFR 136.

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 002. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 002 - Final

Effluent Characteristic		Discharge Limitations					Monitoring Requirements			
Parameter	Concentration Specified Units				Loading* kg/day			Measuring	Sampling	Monitoring
rarameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
00530 – Total Suspended Solids - mg/l	-	-	_	-	-	-	-	When Disch.	Grab	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 0ID00014002:

a. Total Suspended Solids and Zinc monitoring - The benchmark concentrations listed below applies to this outfall. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark data are for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the control measures/best management practices in Part IV, Items A-C. See Part V.B.7 regarding benchmark monitoring.

Parameter Benchmark
Total Suspended Solids 100 mg/L
Total Recoverable Zinc 550 ug/L

The measuring frequency of "when discharged" means the sample shall be collected in accordance with the measuring frequencies detailed in Part V.B.7 of this permit. Benchmark samples for both parameters shall be collected concurrently.

PART I, A. INTERNAL LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 601. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 601 - Final

Effluent Characteristic		Discharge Limitations							Monitoring Requirements		
Parameter	Con	centration S	Specified U	Jnits	Lo	ading* kg/	day Measuring		Sampling	Monitoring	
r ar ameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months	
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Week	Grab	All	
00530 - Total Suspended Solids - mg/l	-	-	-	-	689	-	295	1/Week	24hr Composite	All	
00550 - Oil and Grease, Total - mg/l	-	-	-	-	232	-	77	1/Week	Grab	All	
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	8.75	-	2.92	1/Week	24hr Composite	All	
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	9.73	-	3.89	1/Week	24hr Composite	All	
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All	
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	0.22	-	-	1/Week	Grab	All	
50050 - Flow Rate - MGD	_	-	-	-	-	-	-	1/Day	24hr Total	All	

Notes for station 0ID00014601:

a. In addition to the parameters listed above, the BAT regulations for the Cold Forming Subcategory of the Iron and Steel Industry include limitations for naphthalene and tetrachloroethylene. While these limits apply to the discharge from outfall 0ID00014601, they are not present in Cleveland-Cliffs Steel Corporation – Coshocton Works' cold forming wastewaters in excess of background concentrations. Based on this information and available monitoring data, Ohio EPA has granted a monitoring waiver for naphthalene and tetrachloroethylene under 40 CFR 122.44(a)(2).

b. The applicable Iron and Steel limitations are:

	30-Day	Daily
Naphthalene kg/day		0.002
Tetrachloroethylene kg/day		0.003

- c. Monitoring and sampling shall be performed as required in the above table until startup of the new continuous Vertical Anneal Line.
- d. Report "No Discharge" for the months following the startup of the new Vertical Annealing Line.

PART I, A. INTERNAL LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 602. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 602 - Final

Effluent Characteristic		Discharge Limitations							Monitoring Requirements		
Parameter	Con	centration S	Jnits	Lo	ading* kg/	day	Measuring	Sampling	Monitoring		
1 at affecter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months	
00056 - Flow Rate - GPD	-	-	-	-	-	-	-	1/Week	Total Estimate	All	
00400 - pH - S.U.	_	-	-	-	-	-	-	1/Month	Grab	All	
00530 - Total Suspended Solids - mg/l	45	-	-	30	-	-	-	1/Month	24hr Composite	All	
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All	
31616 - Fecal Coliform - #/100 ml	2000	-	-	1000	-	-	-	1/Month	Grab	Summer	
80082 - CBOD 5 day - mg/l	40	-	-	25	-	-	-	1/Month	Grab	All	

Notes for station 0ID00014602:

- a. Sampling shall be performed when discharging.
- b. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR. If a discharge occurs, samples must be collected in accordance with the table above.

PART I, A. INTERNAL LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 603. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 603 - Final

Effluent Characteristic		Discharge Limitations						Monitoring Requirements		
Parameter	Con	centration S	Specified U	Jnits	Lo	ading* kg/	day	lay Measuring		Monitoring
r ar ameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
00400 - pH - S.U.	-	-	-	-	-	-	_	1/Week	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	597	-	256	1/Week	24hr Composite	All
00550 - Oil and Grease, Total - mg/l	-	-	-	-	232	-	77	1/Week	Grab	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	7.55	-	2.53	1/Week	24hr Composite	All
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	8.44	-	3.36	1/Week	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	0.22	-	-	1/Week	Grab	All
50050 - Flow Rate - MGD	_	-	-	-	-	-	-	1/Day	24hr Total	All

Notes for station 0ID00014603:

b. The applicable Iron and Steel limitations are:

a. In addition to the parameters listed above, the BAT regulations for the Cold Forming Subcategory of the Iron and Steel Industry include limitations for naphthalene and tetrachloroethylene. While these limits apply to the discharge from outfall 0ID00014603, they are not present in Cleveland-Cliffs Steel Corporation – Coshocton Works' cold forming wastewaters in excess of background concentrations. Based on this information and available monitoring data, Ohio EPA has granted a monitoring waiver for naphthalene and tetrachloroethylene under 40 CFR 122.44(a)(2).

	30-Day	Daily
Naphthalene kg/day		0.002
Tetrachloroethylene kg/day		0.003

- c. Monitoring and sampling shall be performed as required in the above table upon startup of the new continuous Vertical Anneal Line.
- d. Report "No Discharge" for the months prior the startup of the new Vertical Annealing Line.

PART I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

1. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the treatment works' final sludge at Station Number 588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 - Final

Effluent Characteristic		Discharge Limitations						Monitoring Requirements		
Parameter	Con	centration S	Specified U	Inits	Lo	ading* kg/	day	Measuring	Sampling	Monitoring
Farameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
70316 - Sludge Weight - Dry Tons	_	-	_	-	-	-	-	1/Year	Calculated	December
80991 - Sludge Volume, Gallons - Gals	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 0ID00014588

- a. Monitoring is required when sludge is removed from the permittee's facility for transfer to another NPDES permit holder. The total sludge weight or sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).
- b. If no sludge is removed from the permittee's facility for transfer to another NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- c. Sludge weight is a calculated total for the year. To convert from gallons of liquid sludge to dry tons of sludge: dry tons = gallons x = 8.34 (lbs/gallon) x = 0.0005 (tons/lb) x = 0.0005 decimal fraction total solids.
- d. See Part II, Items L, M, and N.

PART I, C. - SCHEDULE OF COMPLIANCE

Milestone Summary Report Event Code Section Due Date New Effluent Limit 12 months after the Submit First Annual Report 90199 Schedule permit effective date New Effluent Limit 24 months after the Submit Second Report 90299 Schedule permit effective date New Effluent Limit Final Compliance w/ Eff 36 months after the 5699 Schedule Limits permit effective date

New Effluent Limit Schedule

1. New Final Effluent Limits for Total Residual Oxidants

The permittee shall attain compliance with the new final effluent limits for *total residual oxidants* as soon as possible but not later than the dates in the following schedule.

- a. No later than 12 months after the effective date of this permit, the permittee shall submit to Ohio EPA Southeast District Office a report on the progress toward attaining compliance with the final effluent limits for total residual oxidants. At a minimum, the report shall include data from the previous twelve months and a summary of all activities completed to reduce total residual oxidants concentrations. (Event Code 90199)
- b. No later than 24 months after the effective date of this permit, the permittee shall submit to Ohio EPA Southeast District Office a report on the progress toward attaining compliance with the final effluent limits for total residual oxidants. At a minimum, the report shall include data from the previous twelve months and a summary of all activities completed to reduce total residual oxidants concentrations. (Event Code 90299)
- c. No later than 36 months after the effective date of this permit, the permittee shall attain compliance with the final effluent limits for total residual oxidants. The permittee shall notify Ohio EPA Southeast District Office within 14 days of attaining compliance. (Event Code 05699)

PART II - OTHER REQUIREMENTS

A. Operator Certification Requirements

1. Classification

a. In accordance with Ohio Administrative Code 3745-7-04, the sewage treatment facility shall be classified as a Class A treatment works. The permittee shall designate one or more professional operator of record to oversee the technical operation of the treatment works with a valid certification of a class equal to or greater than the classification of the treatment works.

2. Professional Operator of Record

a. Within three days of a change in a professional operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The notification can be submitted either electronically via the Ohio eBusiness Center website (https://ebiz.epa.ohio.gov/login.html) or hard copy. The appropriate form can be found at the following website:

https://epa.ohio.gov/static/Portals/28/documents/opcert/Operator%20of%20Record%20Notification%20Form.pdf?ver=2018-09-11-102530-423

- b. All applications for renewal of this NPDES permit shall include an updated Operator of Record Notification form along with other necessary forms and fees to be considered a complete application.
- c. If the designated professional operator of record is unable to meet the minimum staffing requirements at a class A or class I treatment works, then a professional operator with a certificate equal to or higher than that of the treatment works may serve as the professional operator of record until such time as the designated professional operator of record is available. The use of this provision does not require notification to the agency unless the use of the backup professional operator exceeds thirty consecutive days. In the event the use of a backup professional operator under this provision exceeds thirty consecutive days, the owner or professional operator shall provide notice in accordance with paragraph (A)(2) of rule 3745-7-02 of the Administrative Code.

3. Minimum Staffing Requirements

a. The permittee shall ensure that the treatment works professional operator of record is physically present at the facility in accordance with the minimum staffing requirements per paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code or the requirements from an approved 3745-7-04(C) minimum staffing hour reduction plan.

4. Additional Staffing Requirements

Visits to all treatment works shall be performed by the permittee, the permittee's representative, or agent five days a week and noted in the operational and maintenance records required by rule 3745-7-09 of the Administrative Code. Visits shall not be necessary when the treatment works is not in operation.

B. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
0ID00014001	Final effluent includes treated process wastewater, treated sanitary wastewater, cooling waters, excess well water and stormwater with discharge to the Muskingum River. Continuous pH sampling is performed at the manhole adjacent the main plant building which is a point upstream of the influence of 602. (Lat: 40N 12' 31"; Long: 81W 52' 49")
0ID00014002	Final effluent from new Stormwater retention basin prior to discharge to unnamed tributary to Muskingum River. (Lat: 40N 12' 13"; Long: 81W 52' 57")
0ID00014588	Sludge Monitoring Station for reporting sludge removed from sanitary treatment plant and hauled to another NPDES permitted facility.
0ID00014601	Treated process wastewaters prior the commencement of operations from the new continuous vertical anneal line. Sample collected prior to commingling with other waters routed to 001. (Lat: 40N 12' 31"; Long: 81W 52' 49")
0ID00014602	Treated sanitary wastewater. Sample collected prior to commingling with other waters routed to 001. (Lat: 40N 12' 28"; Long: 81W 52' 53")
0ID00014603	Treated process wastewaters upon commencement of operations from the new continuous anneal line. Sample collected prior to commingling with other waters routed to 001. (Lat: 40N 12' 31"; Long: 81W 52' 49")

- C. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.
- 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- D. Water quality based permit limitations in this permit may be revised based on updated wasteload allocations or use designation rules. This permit may be modified, or revoked and reissued, to include new water quality based effluent limits or other conditions that are necessary to comply with a revised wasteload allocation, or an approved total maximum daily loads (TMDL) report as required under Section 303 (d) of the Clean Water Act.
- E. Composite samples shall be comprised of a series of grab samples collected over a 24-hour period. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.
- F. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

G. Treatment Additives

Written permission must be obtained from the director of the Ohio EPA prior to the use of any treatment additives discharged to waters of the state, except for those exempt in rule. If additives are being used that have not previously been approved, an approval must be obtained for continued use. Discharges of these additives must meet Ohio Water Quality Standards and shall not be harmful or inimical to aquatic life. Request for approvals shall be filed in accordance with OAC 3745-33-03(G) and should be filed at least forty-five days prior to use or immediately if the additive is currently being used. Application forms are available for download on the DSW website:

https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permit-applications-industrial-and-municipal-discharges-

H. There shall be no detectable amount of any priority pollutant attributable to cooling tower maintenance chemicals in the cooling tower blowdown wastewater.

I. pH Excursion

At sampling stations where pH is monitored continuously, the permittee shall maintain the pH of such wastewater within the range specified in this permit (6.5-9.0). Any incident in which the pH exceeds the range specified in the permit shall be considered an "excursion". Excursions from the range are permitted subject to the following limitations and conditions:

- 1. The total duration of excursions (total time above or below the limit) shall not exceed 7 hours and 26 minutes in a calendar month.
- 2. No individual excursion from the range of pH values (consecutive time above or below a limit) shall exceed 60 minutes.
- 3. The permittee shall report each month for each monitoring station where pH is monitored continuously the following:
- a. the number of pH excursions exceeding 60 minutes per day;
- b. the daily maximum pH value;
- c. the daily minimum pH value;
- d. the total time of all excursions combined for the month.
- 4. For reporting purposes on eDMR, the permittee shall report as follows:
- a. For daily pH values, report both the highest and lowest pH value for that day.
- b. For the parameter "pH Range Excursions, Monthly Total Duration (minutes)" report the total duration of excursions for the entire calendar month on Day 1.
- c. For the parameter "pH Range Excursions > 60 Minutes (Number/Day)" report the number of excursions each day that exceeded 60 minutes in duration. If no such excursions occurred during the month, report "0" on Day 1.
- J. Total Residual Oxidants Quantification Level

The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels

(ML). Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit.

The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.

REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported. Analytical results are to be reported as follows:

- 1. Results above the QL: Report the analytical result for the parameter of concern.
- 2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.
- 3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

The following table of quantification levels will be used to determine compliance with NPDES permit limits:

Parameter	PQL	ML
Oxidants, total residual	0.050 mg/l	

This permit may be modified, or, alternatively, revoked and reissued, to include more stringent effluent limits or conditions if information generated as a result of the conditions of this permit indicate the presence of these pollutants in the discharge at levels above the water quality based effluent limit (WQBEL).

- K. Water quality based permit limitations in this permit may be revised based on updated wasteload allocations or use designation rules. This permit may be modified, or revoked and reissued, to include new water quality based effluent limits or other conditions that are necessary to comply with a revised wasteload allocation, or an approved total maximum daily loads (TMDL) report as required under Section 303 (d) of the Clean Water Act.
- L. All disposal, use, storage, or treatment of sewage sludge by the permittee shall comply with Chapter 6111. of the Ohio Revised Code, Chapter 3745-40 of the Ohio Administrative Code and any further requirements specified in this NPDES permit, and any other actions of the Director that pertain to the disposal, use, storage, or treatment of sewage sludge by the permittee.
- M. No later than March 1 of each calendar year, the permittee shall submit a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the permittee during the previous calendar year. The report shall be submitted through the Ohio EPA eBusiness Center/STREAMS, Division of Surface Water NPDES Permit Applications service.

N. Each day when sewage sludge is removed from the wastewater treatment plant for use or disposal, a representative sample of sewage sludge shall be collected and analyzed for percent total solids. This value of percent total solids shall be used to calculate the total Sewage Sludge Weight (Discharge Monitoring Report code 70316) and/or total Sewage Sludge Fee Weight (Discharge Monitoring Report code 51129) removed from the treatment plant on that day. The results of the daily monitoring and the weight calculations shall be maintained on site for a minimum of five years. The test methodology used shall be from Part 2540 G of Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, and Water Environment Federation, using the edition which is current on the issuance date of the permit. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

O. The permittee shall use either EPA Method 1631 or EPA Method 245.7 promulgated under 40 CFR 136 to comply with effluent mercury monitoring requirements of this permit.

P. Outfall Signage

The permittee shall maintain a permanent marker on the stream bank at outfall 001 that is regulated under this NPDES permit. The sign shall include, at a minimum, the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height. The sign shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible. If the outfall is normally submerged the sign shall indicate that. When an existing sign is replaced or reset, the new sign shall comply with the requirements of this section.

Q. Biomonitoring Program Requirements

The permittee shall continue to implement an effluent biomonitoring program to determine the toxicity of the effluent from outfall 0ID00014001.

General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with "Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency" (hereinafter, the "biomonitoring guidance"), Ohio EPA, July 1998 (or current revision). The Standard Operating Procedures (SOP) or verification of SOP submittal, as described in Section 1.B. of the biomonitoring guidance shall be submitted no later than three months after the effective date of this permit. If the laboratory performing the testing has modified its protocols, a new SOP is required.

Testing Requirements

1. Acute Bioassays

For the duration of the permit, the permittee shall conduct definitive acute toxicity tests, as specified in Part I,A, using water fleas (Ceriodaphnia dubia) on effluent samples from outfall 0ID00014001. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance.

2. Testing of Ambient Water

In conjunction with the acute toxicity tests, upstream control water shall be collected at a point outside the zone of effluent and receiving water interaction. Testing of ambient waters shall be done in accordance with Sections 2 and 3 of the biomonitoring guidance.

3. Data Review

a. Reporting

Following completion of each bioassay requirement, the permittee shall report results of the tests in accordance with Sections 2.H.1., 2.H.2.a., 3.H.1., and 3.H.2.a. of the biomonitoring guidance, including reporting the results on the monthly DMR and submitting a copy of the complete test report to Ohio EPA, Division of Surface Water. The test report may be submitted electronically using the acute NPDES Biomonitoring Report Form available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, the permittee may submit a hard copy of the report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049.

Based on Ohio EPA's evaluation of the results, this permit may be modified to require additional biomonitoring, require a toxicity reduction evaluation, and/or contain whole effluent toxicity limits.

b. Definitions

TUa = Acute Toxicity Units = 100/LC50

PART III - GENERAL CONDITIONS

1. DEFINITIONS

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Average weekly" discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. If the "daily discharge" on days 29, 30 or 31 exceeds the "average weekly" discharge limitation, Ohio EPA may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. Compliance with fecal coliform bacteria or *E.coli* bacteria limitations shall be determined using the geometric mean.

"Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net Load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specifically identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specifically identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

"Sewage sludge weight" means the weight of sewage sludge, in dry U.S. tons, including admixtures such as liming materials or bulking agents. Monitoring frequencies for sewage sludge parameters are based on the reported sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"Sewage sludge fee weight" means the weight of sewage sludge, in dry U.S. tons, excluding admixtures such as liming materials or bulking agents. Annual sewage sludge fees, as per section 3745.11(Y) of the Ohio Revised Code, are based on the reported sludge fee weight for the most recent calendar year.

2. GENERAL EFFLUENT LIMITATION

The effluent shall, at all times, be free of substances:

- A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;
- B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam, or sheen;
- C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance:
- D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;
- E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growth become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;
- F. In amounts that will impair designated instream or downstream water uses

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

- A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.
- B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
- C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application. e-DMR allows permitted facilities to enter, sign, and submit DMRs on the internet. e-DMR information is found on the following web page:

https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services

B. DMRs shall be signed by a facility's Responsible Official or a Delegated Responsible Official (i.e. a person delegated by the Responsible Official). The Responsible Official of a facility is defined as:

- 1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (b) The manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- 3. In the case of a municipal, state or other public facility, by either the principal executive officer, the ranking elected official or other duly authorized employee.

For e-DMR, the person signing and submitting the DMR will need to obtain an eBusiness Center account and Personal Identification Number (PIN). Additionally, Delegated Responsible Officials must be delegated by the Responsible Official, either on-line using the eBusiness Center's delegation function, or on a paper delegation form provided by Ohio EPA. For more information on the PIN and delegation processes, please view the following web page:

https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services-sub/edmr

- C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest.
- D. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.
- E. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported to the Ohio EPA, but records shall be retained as specified in Section 7. RECORDS RETENTION.

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

- B. The person(s) who performed the sampling or measurements;
- C. The date the analyses were performed on those samples;
- D. The person(s) who performed the analyses;
- E. The analytical techniques or methods used; and
- F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years except those records that pertain to sewage sludge disposal, use, storage, or treatment, which shall be kept for a minimum of five years, including:

- A. All sampling and analytical records (including internal sampling data not reported);
- B. All original recordings for any continuous monitoring instrumentation;
- C. All instrumentation, calibration and maintenance records;
- D. All plant operation and maintenance records;
- E. All reports required by this permit; and
- F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge, from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period, or five year period for sewage sludge, for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

- A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 11.B and 11.C.

B. Notice

- 1. Anticipated Bypass If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- 2. Unanticipated Bypass The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).
- C. Prohibition of Bypass
- 1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- c. The permittee submitted notices as required under paragraph 11.B.
- 2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

- A. Exceedance of a Daily Maximum Discharge Limit
- 1. The permittee shall report noncompliance that is the result of any violation of a daily maximum discharge limit for any of the pollutants listed by the Director in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.ohio.gov Southwest District Office: swdo24hournpdes@epa.ohio.gov Northwest District Office: nwdo24hournpdes@epa.ohio.gov Northeast District Office: nedo24hournpdes@epa.ohio.gov Central District Office: cdo24hournpdes@epa.ohio.gov

Central Office: co24hournpdes@epa.ohio.gov

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section:

https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permits

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330 Southwest District Office: (800) 686-8930 Northwest District Office: (800) 686-6930 Northeast District Office: (800) 686-6330 Central District Office: (800) 686-2330

Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

- a. The name of the permittee, and a contact name and telephone number;
- b. The limit(s) that has been exceeded;
- c. The extent of the exceedance(s);
- d. The cause of the exceedance(s);
- e. The period of the exceedance(s) including exact dates and times;
- f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,
- g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

B. Other Permit Violations

1. The permittee shall report noncompliance that is the result of any unanticipated bypass resulting in an exceedance of any effluent limit in the permit or any upset resulting in an exceedance of any effluent limit in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.ohio.gov Southwest District Office: swdo24hournpdes@epa.ohio.gov Northwest District Office: nwdo24hournpdes@epa.ohio.gov Northeast District Office: nedo24hournpdes@epa.ohio.gov Central District Office: cdo24hournpdes@epa.ohio.gov

Central Office: co24hournpdes@epa.ohio.gov

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section:

https://epa.ohio.gov/divisions- and- offices/surface-water/permitting/individual-wastewater-discharge-permits

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Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

- a. The name of the permittee, and a contact name and telephone number;
- b. The time(s) at which the discharge occurred, and was discovered;
- c. The approximate amount and the characteristics of the discharge;
- d. The stream(s) affected by the discharge;
- e. The circumstances which created the discharge;
- f. The name and telephone number of the person(s) who have knowledge of these circumstances;
- g. What remedial steps are being taken; and,
- h. The name and telephone number of the person(s) responsible for such remedial steps.
- 2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by email or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.
- C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.
- D. If the permittee is unable to meet any date for achieving an event, as specified in a schedule of compliance in their permit, the permittee shall submit a written report to the appropriate Ohio EPA district office within fourteen (14) days of becoming aware of such a situation. The report shall include the following:
- 1. The compliance event which has been or will be violated;
- 2. The cause of the violation;
- 3. The remedial action being taken;
- 4. The probable date by which compliance will occur; and,
- 5. The probability of complying with subsequent and final events as scheduled.

- E. The permittee shall report all other instances of permit noncompliance not reported under paragraphs A or B of this section on their monthly DMR submission. The DMR shall contain comments that include the information listed in paragraphs A or B as appropriate.
- F. If the permittee becomes aware that it failed to submit an application, or submitted incorrect information in an application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

- B. For publicly owned treatment works:
- 1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;
- 2. The addition of any new significant industrial discharge; and
- 3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.
- C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for

treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

- D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
- 1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).
- 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

- A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:
- 1. Violation of any terms or conditions of this permit;
- 2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- 3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At any time during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected grit and screenings, and other solids other than sewage sludge, shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state, and in accordance with all applicable laws and rules.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than \$25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Notwithstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

PART IV. STORMWATER CONTROL MEASURES AND POLLUTION PREVENTION PROGRAMS

In Part IV and in Part VI, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

A. Control Measures

You shall select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part IV.B, and meet the control measures/best management practices in Part IV.C and any applicable numeric effluent limits in Part I. The selection, design, installation, and implementation of these control measures shall be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part IV.J.3. If you find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you shall modify these control measures as expeditiously as practicable. Regulated stormwater discharges from your facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at your facility.

B. Control Measure Selection and Design Considerations

You shall consider the following when selecting and designing control measures:

- 1. Preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
- 2. Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your stormwater discharge;
- 3. Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- 4. Minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care shall be taken to avoid ground water contamination;
- 5. Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- 6. Conserving and/or restoring of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
- 7. Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
- C. Control Measures/Best Management Practices (BMPs)
- 1. <u>Minimize Exposure</u>. You shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling

operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:

- a. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- b. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- d. Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible:
- e. Use spill/overflow protection equipment;
- f. Drain fluids from equipment and vehicles prior to on-site storage or disposal;
- g. Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- h. Ensure that all washwater drains to a proper collection system (i.e., not the stormwater drainage system).

If the discharge of vehicle and equipment washwater is not authorized under Part I of this permit, these wastewaters must be discharged to sanitary sewer in accordance with applicable industrial pretreatment requirements or disposed of otherwise in accordance with applicable law.

Note: Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged to receiving waters or if discharges are authorized under Part I of this permit.

- 2. <u>Good Housekeeping.</u> You shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.
- 3. <u>Maintenance.</u> You shall regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters. You shall maintain all control measures that are used to achieve the control measures/best management practices (BMPs) required by this permit in effective operating condition. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you shall make the necessary repairs or modifications as expeditiously as practicable.
- 4. <u>Spill Prevention and Response Procedures.</u> You shall minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, you shall implement:

- a. Procedures for plainly labeling containers (e.g., "Used Oil", "Spent Solvents", "Fertilizers and Pesticides", etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team (Part IV.J.1); and
- d. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you shall notify the Ohio EPA in accordance with the requirements of Part III Item 12 of this permit as soon as you have knowledge of the discharge. Contact information shall be in locations that are readily accessible and available.
- 5. Erosion and Sediment Controls. You shall stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you shall take to meet this limit, you shall place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the current edition of Ohio's Rainwater and Land Development manual (https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development), U.S. EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific Industrial Storm Water Fact Sheet Series, (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-fact-sheets-and-guidance), National Menu of Storm Water BMPs (https://www.epa.gov/npdes/stormwater), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (https://www.epa.gov/nps/urban-runoff-national-management-measures).
- 6. <u>Management of Runoff.</u> You shall divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the current edition of Ohio's Rainwater and Land Development manual(https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development), U.S. EPA's internet-based resources relating to runoff management, including the sector-specific Industrial Storm Water Fact Sheet Series, (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-fact-sheets-and-guidance), National Menu of Storm Water BMPs (https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas(https://www.epa.gov/nps/urban-runoff-national-management-measures).
- 7. <u>Salt Storage Piles or Piles Containing Salt.</u> You shall enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.
- 8. Sector Specific Control Measures/Best Management Practices (BMPs). You shall achieve any

additional control measures/best management practices (BMPs) stipulated in the relevant sector-specific section(s) of Part IV.K. of this permit.

- 9. Employee Training. You shall train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training shall cover both the specific control measures used to achieve the conditions in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Ohio EPA requires that training be conducted at least annually (or more often if employee turnover is high).
- 10. <u>Non-Stormwater Discharges</u>. You shall eliminate non-stormwater discharges not authorized in Part I and Part II of this NPDES permit. The following are additional non-stormwater discharges authorized under this permit:
- a. Discharges from fire-fighting activities (not planned exercises);
- b. Fire hydrant flushings;
- c. Potable water, including water line flushings;
- d. Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- g. Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part IV.J.2), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
- h. Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.);
- i. Uncontaminated ground water or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials; and
- k. Incidental windblown mist from cooling towers that collect on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdowns or drains).
- 11. <u>Waste, Garbage and Floatable Debris.</u> You shall ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting

them before they are discharged.

12. <u>Dust Generation and Vehicle Tracking of Industrial Materials.</u> You shall minimize generation of dust and off-site tracking of raw, final, or waste materials.

D. Corrective Actions

- 1. <u>Conditions Requiring Review and Revision to Eliminate Problem.</u> If any of the following conditions occur, you shall review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:
- a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit) occurs at your facility;
- b. A discharge violates a numeric effluent limit;
- c. You become aware, or Ohio EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
- d. An inspection or evaluation of your facility by an Ohio EPA official or local MS4 operator determines that modifications to the control measures are necessary to meet the control measures/best management practices (BMPs) in this permit; or
- e. You find in your routine facility inspection or quarterly visual assessment that your control measures are not being properly operated and maintained.
- 2. <u>Conditions Requiring Review to Determine if Modifications Are Necessary.</u> If any of the following conditions occur, you shall review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV.A conditions in this permit:
- a. Construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged; or
- b. The average of your four quarterly sampling results exceeds an applicable benchmark (see Part V.B.7). If less than four benchmark samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of quarterly samples results to date is more than four times the benchmark level) this is considered a benchmark exceedance, triggering this review.
- 3. Corrective Action Deadlines. You shall document your discovery of any of the conditions listed in Part IV.D.1 and Part IV.D.2 within 24 hours of making such discovery. Subsequently, within 30 days of such discovery, you shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 30 days is detailed in Part IV.D.4. If you determine that changes are necessary following your review, any modifications to your control measures shall be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

- 4. <u>Corrective Action Report.</u> Within 24 hours of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information:
 - Identification of the condition triggering the need for corrective action review;
 - Description of the problem identified; and
 - Date the problem was identified.

Within 30 days of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information and submit the report to the appropriate Ohio EPA District Office:

- Summary of corrective action taken or to be taken (or, for triggering events identified in Part IV.D.2 where you determine that corrective action is not necessary, the basis for this determination):
- Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

In addition to your corrective action report, you shall also include this documentation in an annual report as required in Part V. A.2 and retain onsite with your SWPPP.

- 5. Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. Ohio EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.
- 6. <u>Substantially Identical Outfalls.</u> If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review shall assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls shall also be made before the next storm event if possible, or as soon as practicable following that storm event.

E. Inspections

Beginning on the effective date of this permit, you shall conduct the inspections in Part IV.E.1 and Part IV.E.2 at your facility.

1. Routine Facility Inspections.

a. Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with Part IV. Items A-C conditions contained in this permit.

Routine facility inspections shall be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to stormwater. Perform these inspections during periods when the facility is in operation. You shall specify the relevant inspection schedules in your SWPPP document as required in Part IV. Items A-C. These routine inspections shall be performed by qualified personnel (for definition see VI - Definitions) with at least one member of your stormwater pollution prevention team

participating. At least once each calendar year, the routine facility inspection shall be conducted during a period when a stormwater discharge is occurring.

You shall document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP. You are not required to submit your routine facility inspection findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of each routine facility inspection shall include:

- i. The inspection date and time;
- ii. The name(s) and signature(s) of the inspector(s);
- iii. Weather information and a description of any discharges occurring at the time of the inspection;
- iv. Any previously unidentified discharges of pollutants from the site;
- v. Any control measures needing maintenance or repairs;
- vi. Any failed control measures that need replacement;
- vii. Any incidents of noncompliance observed; and
- viii. Any additional control measures needed to comply with the permit requirements. Any corrective action required as a result of a routine facility inspection shall be performed consistent with Part IV.D of this permit.
- b. Exceptions to Routine Facility Inspections:

Inactive and Unstaffed Sites: The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. Such a facility is only required to conduct an annual site inspection in accordance with the requirements of Part IV.E.1. To invoke this exception, you shall maintain a statement in your SWPPP pursuant to Part IV.F indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you shall include the same signed and certified statement as above and retain it with your records pursuant to Part IV.J.5.

Ohio EPA's Encouraging Environmental Excellence (E3) Program: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct routine facility inspections for two quarters each year. If Part IV.K of this permit requires your facility to conduct routine facility inspections on a monthly basis, you only need to conduct routine facility inspections on a quarterly basis.

2. Quarterly Visual Assessment of Stormwater Discharges.

a. Quarterly Visual Assessment Procedures

Once each calendar quarter for the entire permit term you shall collect a stormwater sample from Outfall(s) 0ID00014001 and 0ID00014002 and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge. The visual assessment shall be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon as practicable after the first 30 minutes and you shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from your site; and
- For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. If it is not possible to collect the sample on discharges that occur at least 72 hours (3 days) from the previous discharge, the sample shall be collected as close to this storm interval as practicable and you shall document why it was not possible to take samples from a 72-hour (3 day) storm interval.
- Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge.
- For the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

b. Quarterly Visual Assessment Documentation

You shall document the results of your visual assessments and maintain this documentation onsite with your SWPPP. You are not required to submit your visual assessment findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of the visual assessment shall include:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination; and
- If applicable, why it was not possible to take samples within the first 30 minutes and/or from a 72-hour (3 day) storm interval. Any corrective action required as a result of a quarterly visual assessment shall be performed consistent with Part IV.D of this permit.

c. Exceptions to Quarterly Visual Assessments

The following are exceptions to quarterly visual assessments:

Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples
during the quarter, you shall take a substitute sample during the next qualifying storm event.
Documentation of the rationale for no visual assessment for the quarter shall be included with your
SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for

- personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.
- <u>Areas Subject to Snow:</u> In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge, as described in Part IV.E.2.
- <u>Substantially identical outfalls</u>: If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in your SWPPP, you may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that you perform visual assessments on a rotating basis of each substantially identical outfall throughout the period of your coverage under this permit. If stormwater contamination is identified through visual assessment performed at a substantially identical outfall, you shall assess and modify your control measures as appropriate for each outfall represented by the monitored outfall.
- <u>Inactive and unstaffed sites:</u> The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you shall maintain a statement in your SWPPP indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28 of this permit. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies, and you shall immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you shall include the same signed and certified statement as above and retain it with your records.
- <u>Ohio EPA's Encouraging Environmental Excellence (E3) Program</u>: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct quarterly visual assessment of stormwater discharges for two quarters each year.

F. Stormwater Pollution Prevention Plan (SWPPP)

A stormwater pollution prevention plan (SWPPP) shall be developed to address each outfall that discharges to waters of the state that contains stormwater associated with industrial activity. Stormwater pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. The SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in stormwater discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the stormwater pollution prevention plan required under this part as a condition of this permit.

The SWPPP does not contain effluent limitations; the limitations or benchmarks are contained in Part I. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

G. Deadlines to Update the SWPPP

1. The permittee shall continue to implement and be in compliance with the SWPPP required by the previous permit. Within six months of the effective date of this permit, the permittee shall update the SWPPP as necessary to address any new or reviewed requirements of this permit. The plan for a

stormwater discharge associated with industrial activity:

- a. Shall be prepared within six months of the effective date of this permit (and updated based on facility or materials handling changes as specified in Part IV, Item I);
- b. Shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.
- 2. Upon showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a stormwater discharge associated with industrial activity.]
- H. Signature Requirements and SWPPP Availability
- 1. Your plan shall be signed and dated in accordance with Part III, Item 28, and be retained on-site at the facility which generates the stormwater discharge.
- 2. You shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to Ohio EPA; a local agency approving stormwater management plans; and the operator of an MS4 receiving discharges from the site. Ohio EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. Your current SWPPP or certain information from your current SWPPP shall be made available to the public, except any confidential business information (CBI) or restricted information, but you shall clearly identify those portions of the SWPPP that are being withheld from public access. See 40 CFR Part 2 for relevant definitions of CBI: https://www.govinfo.gov/content/pkg/CFR-2013-title40-vol1/pdf/CFR-2013-title40-vol1-part2-subpartB.pdf.
- 3. All stormwater pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. An interested party wishing a copy of a discharger's SWPPP will have to contact the Ohio EPA to obtain a copy.

I. Required SWPPP Modifications

The permittee shall modify your SWPPP whenever necessary to address any of the triggering conditions for corrective action in Part IV.D and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part IV.D.2 indicates that changes to your control measures are necessary to meet the control measures/best management practices (BMPs) in this permit. Changes to your SWPPP document shall be made in accordance with the corrective action deadlines in Part IV.D.3 and Part IV.D.4. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

J. Contents of SWPPP

The plan shall include, at a minimum, the following items:

1. <u>Stormwater Pollution Prevention Team.</u> You shall identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities.

Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team shall have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

- 2. Site Description. Your SWPPP shall include the following:
- a. Activities at the Facility. Provide a description of the nature of the industrial activities at your facility;
- b. *General location map*. Provide a general location map (e.g. U.S. Geologic Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges.
- c. Site map. Provide a site map showing:
 - The size of the property in acres;
 - The location and extent of significant structures and impervious surfaces;
 - Directions of stormwater flow (use arrows);
 - Locations of all existing structural control measures;
 - Locations of all receiving waters in the immediate vicinity of your facility;
 - Locations of all stormwater conveyances including ditches, pipes and swales;
 - Locations of potential pollutant sources identified under Part IV J. 2.b;
 - Locations where significant spills or leaks identified under Part IV J. 2.b. have occurred;
 - Locations of all stormwater monitoring points;
 - Locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g. Outfall 001, Outfall 002, etc), indicating any outfalls that are considered substantially identical to another outfall, and an approximate outline of the areas draining to each outfall;
 - Municipal separate storm sewer systems, where your stormwater discharges to them;
 - Locations and descriptions of all non-stormwater discharges identified under Part IV. C. 10;
 - Locations of the following activities where such activities are exposed to precipitation:
 - o Fueling stations;
 - o Vehicle and equipment maintenance and/or cleaning areas;
 - Loading/unloading areas;
 - o Locations used for the treatment, storage, or disposal of wastes;
 - Liquid storage tanks;
 - o Processing and storage areas;
 - o Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 - Transfer areas for substances in bulk;
 - o Machinery; and
 - Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.
- 3. <u>Summary of Potential Pollutant Sources</u>. You shall document at your facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. Industrial materials or activities, include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final product or waste product. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description shall include, at a minimum:

- a. Activities in the Area. This includes a list of industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).
- b. Pollutants. A list of the pollutant(s) or pollutant constituents (e.g, crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to stormwater in the three years prior to the date you prepare or amend your SWPPP.
- c. Spills and Leaks. You shall document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date you prepare or amend your SWPPP.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Section 9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oil or hazardous substances.

- d. Non-Stormwater Discharges. You shall document that you have evaluated for the presence of non-stormwater discharges, except for those listed in Part I and Part IV.C.10, and that all unauthorized discharges have been eliminated. Documentation of your evaluation shall include:
- The date of any evaluation;
- A description of the evaluation criteria used;
- A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
- The different types of non-stormwater discharge(s) and source locations; and
- The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.
- e. Salt Storage. You shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.
- f. Sampling Data. A summary of existing discharge sampling data describing pollutants in stormwater dischargers from the facility.
- 4. <u>Description of Control Measures.</u> You shall document the location and type of control measures you have installed and implemented at your site to achieve the control measures/best management practices (BMPs) in Part IV.C, and where applicable, in Part IV.K. You shall describe how you addressed the control measure selection and design considerations in Part IV.B. This documentation shall describe how the control measures at your site address both the pollutant sources identified in Part IV.J.2 and any stormwater run-on that commingles with any discharges covered under this permit.
- 5. Schedules and Procedures.
- a. Pertaining to Control Measures used to Comply with the Control Measures/Best Management Practices (BMPs). The following shall be documented in your SWPPP:
- i. Good Housekeeping (See Part IV.C.2) A schedule for regular pickup and disposal of waste materials,

along with routine inspections for leaks and conditions of drums, tanks and containers.

- ii. Maintenance (See Part IV.C.3) Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;
- iii. Spill Prevention and Response Procedures (See Part IV.C.4) Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite (hard copy or electronic) and make it available for review consistent with Part IV.J.5; and
- iv. Employee Training (See Part IV.C.9) A schedule for all types of necessary training.
- b. Pertaining to Monitoring and Inspection. Where applicable, you shall document in your SWPPP your procedures for conducting analytical stormwater monitoring. You shall document in your SWPPP your procedures for performing, as appropriate, the two types of inspections specified by this permit, including: 1) Routine facility inspections (See Part IV.E.1) and 2) Quarterly visual assessment of stormwater discharges (See Part IV.E.2).

For each type of monitoring, your SWPPP shall document:

- Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- Parameters for sampling and the frequency of sampling for each parameter;
- Schedules for monitoring at your facility (see Part 6.1.6);
- Any numeric control values (benchmarks, effluent limitations guidelines, or other requirements) applicable to discharges from each outfall; and
- Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data.

For each type of inspection performed, your SWPPP shall identify:

- Person(s) or positions of person(s) responsible for inspection;
- Schedules for conducting inspections; and
- Specific items to be covered by the inspection, including schedules for specific outfalls.

If you are invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, you shall include in your SWPPP the information to support this claim as required by Parts V.E. If you are invoking the exception for inactive and unstaffed sites for benchmark monitoring, you shall include in your SWPPP the information to support this claim.

You shall document the following in your SWPPP if you plan to use the substantially identical outfall exception for your quarterly visual assessment requirements in Part IV.E.2 or your benchmark monitoring requirements in Part V:

- Location of each of the substantially identical outfalls;
- Description of the general industrial activities conducted in the drainage area of each outfall;
- Description of the control measures implemented in the drainage area of each outfall;

- Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
- An estimate of the runoff coefficient of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%); and
- Why the outfalls are expected to discharge substantially identical effluents.
- 6. <u>Documentation Requirements.</u> You are required to keep inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit:
- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
- Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to surface waters of the State, through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Part IV.C.4);
- Records of employee training, including date training received (see Part IV.C.9);
- Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part IV.C.3);
- All inspection reports, including the Routine Facility Inspection Reports (see Part IV.E.1) and the Quarterly Visual Assessment Reports (see Part IV.E.2);
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes and/or from a 72-hour (3 day) storm interval) (see Parts IV.E.2.a, Part V.B.4 & 7);
- Description of any corrective action taken at your site, including triggering event and dates when problems were discovered and modifications occurred;
- Documentation of any benchmark exceedances and how they were responded to, including either (1) corrective action taken, (2) a finding that the exceedance was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part V.B.7;
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge or were solely attributable to natural background sources (see Part V.B.7); and
- Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part IV.E.1), quarterly visual assessments (see Part IV.E.2), and/or benchmark monitoring (see Part V.B.7).

Where your SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) developed for a National Environmental Performance Track facility, copies of the relevant portions of those documents shall be kept with your SWPPP.

Sector F – Primary Metals.

You shall comply with the following sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Part VI. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

- 1. Additional Control Measures/Best Management Practices (BMPs).
- a. Good Housekeeping Measures. (See also Part IV.C.2) As part of your good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For un-stabilized areas where sweeping is not practicable, consider using stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

2. Additional SWPPP Requirements.

- a. Drainage Area Site Map. (See also Part IV.J.2) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to surface waters of the State.
- b. Inventory of Exposed Material. (See also Part IV.J.3) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible
- 3. Additional Inspection Requirements. (See also Part IV.E.) As part of conducting your quarterly routine facility inspections (Part IV.E.), address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

PART V. MONITORING AND REPORTING REQUIREMENTS

A. Reporting and Recordkeeping

- 1. <u>Reporting Benchmark Monitoring Data to Ohio EPA</u>. Benchmark monitoring data shall be submitted to Ohio EPA in accordance with Part III Item 4. of this permit.
- 2. <u>Annual Report.</u> You shall complete an annual report using the Annual Reporting Form provided by Ohio EPA at the following location:

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fepa.ohio.gov%2Fstatic%2FPortals%2F35%2Fpermits%2FOHR000006%2FARForm.docx&wdOrigin=BROWSELINK

You are not required to submit your annual report to Ohio EPA unless specifically requested. The timeframe to complete the report is at the discretion of the permittee but the same schedule to complete shall be maintained throughout this permit term. You shall keep the completed annual reports with your SWPPP.

B. Stormwater Monitoring Requirements

1. Monitored Outfalls.

Applicable benchmark monitoring requirements apply to stormwater outfalls 0ID00014001 and 0ID00014002 except as otherwise exempt from monitoring as a "substantially identical outfall". For monitoring purposes, an outfall can include a discrete conveyance (i.e., pipe, ditch, channel tunnel or conduit) or a location where sheet flow leaves your facility's property. If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on the similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to stormwater, and runoff coefficients of their drainage areas, you may monitor the effluent of just one of the outfalls and report that the results also apply to the substantially identical outfall(s). As required in Part IV.F, your SWPPP shall identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations. The allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with numeric effluent limitations. You are required to monitor each outfall covered by a numeric effluent limit as identified in Part I.

2. Commingled Discharges.

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges shall be performed at a point before they mix with other waste streams, to the extent practicable.

3. Measurable Storm Event.

All required monitoring shall be performed on a storm event that results in an actual discharge from your site ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (3 days). The 72-hour (3-day) storm interval does not apply if you are able to document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring shall be performed at a time when a measurable discharge occurs at your site.

For each monitoring event, except snowmelt monitoring, you shall identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the

previous measurable storm event. For snowmelt monitoring, you shall identify the date of the sampling event.

4. Sample Type.

You shall take a minimum of one grab sample from a discharge resulting from a measurable storm event as described in Part V.B.3. Samples shall be collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample shall be collected as soon as practicable after the first 30 minutes and documentation shall be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge.

5. Adverse Weather Conditions.

When adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, you shall take a substitute sample during the next qualifying storm event. You shall report any failure to monitor as specified in Part IV.E.2 indicating the basis for not sampling during the usual reporting period.

6. Monitoring for Allowable Non-Stormwater Discharges.

You are only required to monitor allowable non-stormwater discharges (as delineated in Part IV.C.10) when they are commingled with stormwater discharges associated with industrial activity.

7. Benchmark Monitoring.

This permit stipulates pollutant benchmark concentrations that are applicable to certain sectors and subsectors and must be monitored within the first 2-years. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the control measures/best management practices (BMPs) in Part IV. Items A-C.

At your discretion, more than four samples may be taken during separate runoff events and used to determine the average benchmark parameter concentration for facility discharges.

- a. *Benchmark Monitoring Schedule*. During the first 8 quarterly monitoring periods of your permit coverage, you shall select a total of 4 quarterly monitoring periods and perform benchmark monitoring. Over this 2-year period, one benchmark sampling event shall be taken during each of the quarterly monitoring periods unless your facility is always inactive and unstaffed for a particular quarterly monitoring period. After collection of quarterly samples, you shall average your 4 monitoring values and compare to the benchmark concentration.
- b. Data not exceeding benchmarks: After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, you have fulfilled your monitoring requirements for that parameter for the permit term. For averaging purposes, use a value of zero for any individual sample parameter, analyzed using procedures consistent with 40 CFR 136, which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and quantitation limit.

- c. Data Exceeding benchmark: Based on the average of your monitoring results, if the monitoring values for any parameter exceeds the benchmark, you shall in accordance with Part IV.D.2, review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV. Items A-C control measures/best management practices (BMPs) of this permit, and either:
- i. Make the necessary modifications and during the next 8 quarterly monitoring periods, you shall select a total of 4 quarterly monitoring periods and perform benchmark monitoring. Over this 2-year period, one benchmark sampling event shall be taken during each of the quarterly monitoring periods unless your facility is always inactive and unstaffed for a particular quarterly monitoring period. After collection of the quarterly samples, you shall average your 4 monitoring values and compare to the benchmark concentration to determine the effectiveness of your modifications; or
- ii. Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the control measures/best management practices (BMPs) in Part IV. Items A-C of this permit. You shall also document your rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with your SWPPP. You shall also notify Ohio EPA of this determination within 30 days.
- iii. If less than four benchmark samples have been taken, but the results are such that an exceedance of the four-quarter average is mathematically certain (i.e., if the sum of quarterly samples results to date is more than four times the benchmark level), this is considered a benchmark exceedance, triggering this review.

Ideally your stormwater samples will contain only runoff from your site. However, stormwater from a neighboring facility can run-on and comingle with your regulated stormwater discharge, possibly adding contaminants not found at your facility. The SWPPP site description shall document the locations and sources of any run-on. If you feel your discharge is exceeding a benchmark value due to, run-on from neighboring properties, you may collect and analyze samples of the run-on. Determined contaminant concentrations of run-on from neighboring properties may be deducted from your stormwater discharge when determining whether a benchmark has been exceeded. This information shall be documented within eDMR's comment section. All sample data and findings shall be maintained with your SWPPP.

If it is determined that a water quality standard is less restrictive than this permit's benchmark value, you may use the less restrictive value for benchmark monitoring purposes.

Pollutant concentrations from your facility's structures (roofs, walls, fencing, etc.) can be considered to determine if it is technologically available and economically practical and achievable in light of best industry practice to implement additional control measures or not when a benchmark has been exceeded.

In accordance with Part IV.D.2, you shall review your control measures and perform any required corrective action immediately or document why no corrective action is required.

- d. *Natural background pollutant levels:* If you determine that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, you are not required to perform corrective action provided that:
- i. The concentration of your benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
- ii. You document and maintain with your SWPPP your supporting rationale for concluding that

benchmark exceedances are in fact attributable solely to natural background levels. You shall include in your supporting rationale any data previously collected by you or others (including literature studies) that describe the levels of natural background pollutants in your stormwater discharge; and

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring.

- e. Exception for Inactive and Unstaffed Sites. The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you shall do the following:
- i. Maintain a statement onsite with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Part IV.E.1.b.
- ii. If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you shall immediately begin complying with the applicable benchmark monitoring requirements under Part V. B; and
- iii. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you shall notify the appropriate district office of Ohio EPA of this change in your next benchmark monitoring report. You may discontinue benchmark monitoring once you have notified Ohio EPA, and prepared and signed the certification statement described above concerning your facility's qualification for this special exception.

PART VI. DEFINITIONS AND ACRONYMS

Action Area - all areas to be affected directly or indirectly by the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities, and not merely the immediate area involved in these discharges and activities.

Best Management Practices (BMPs) - schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to surface waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

Co-located Industrial Activities - Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in the Industrial Multi-Sector General Permit OHR000007, Appendix D.

Control Measure - refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to surface waters of the State.

Director - the Director of the Ohio Environmental Protection Agency (Ohio EPA).

Discharge - when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a pollutant - any addition of any "pollutant" or combination of pollutants to "surface waters of the State" from any "point source", or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into surface waters of the State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge-related activities - activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

Drought-stricken area - a period of below average water content in streams, reservoirs, ground-water aquifers, lakes and soils.

U.S. EPA Approved or Established Total Maximum Daily Loads (TMDLs) - "U.S. EPA Approved TMDLs" are those that are developed by a State and approved by U.S. EPA. "U.S. EPA Established TMDLs" are those that are developed by U.S. EPA.

Existing Discharger - an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity - any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

Federal Facility - any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to,

the federal government.

Illicit Discharge - is defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

Impaired Water (or "Water Quality Impaired Water" or "Water Quality Limited Segment") - A water is impaired for purposes of this permit if it has been identified by a State or U.S. EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

Industrial Activity - the 10 categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Stormwater - stormwater runoff from industrial activity.

Municipal Separate Storm Sewer - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

New Discharger - a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Source - any building, structure, facility, or installation from which there is or may be a "discharge of pollutants", the construction of which commenced:

- after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

New Source Performance Standards (NSPS) - technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

No exposure - all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

Ohio EPA - the Ohio Environmental Protection Agency.

Operator - any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

(i) The entity has operational control over industrial activities, including the ability to modify those activities; or (ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Person - an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point source - any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. See 40 CFR 122.2.

Pollutant - dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

Pollutant of concern - A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Primary industrial activity - includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Qualified Personnel - Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of control measures.

Reportable Quantity Release - a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Runoff coefficient - the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR

122.26(b)(11).

Run-On - sources of stormwater that drain from land located upslope or upstream from the regulated facility in question.

Semi-Arid Climate - areas where annual rainfall averages from 10 to 20 inches.

Significant materials - includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Special Aquatic Sites - sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Stormwater - stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Stormwater Discharges Associated with Construction Activity - a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Stormwater Discharges Associated with Industrial Activity - the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, byproduct or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14).

Surface Waters of the State - Means all streams, lakes, ponds, marshes, watercourses, waterways, springs, irrigation systems, drainage systems, and all other bodies or accumulations of surface water, natural or

artificial, which are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface waters.

Total Maximum Daily Loads (TMDLs) - A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and shall include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Water Quality Impaired - See "Impaired Water".

Water Quality Standards - A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States and U.S. EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

"You" and "Your" - as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you shall submit" means the permittee shall submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

ABBREVIATIONS AND ACRONYMS

BAT - Best Available Technology Economically Achievable

BOD5 - Biochemical Oxygen Demand (5-day test)

BMP - Best Management Practice

BPJ - Best Professional Judgment

BPT - Best Practicable Control Technology Currently Available

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act

CGP - Construction General Permit

COD - Chemical Oxygen Demand

CWA - Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

CWT - Centralized Waste Treatment

DMR - Discharge Monitoring Report

U.S. EPA - U. S. Environmental Protection Agency

FWS - U. S. Fish and Wildlife Service

LA - Load Allocations

MDMR - MSGP Discharge Monitoring Report

MGD - Million Gallons per Day

MOS - Margin of Safety

MS4 - Municipal Separate Storm Sewer System

MSDS - Material Safety Data Sheet

MSGP - Multi-Sector General Permit

NAICS - North American Industry Classification System

NMFS - U. S. National Marine Fisheries Service

NOI - Notice of Intent

NOT - Notice of Termination

NPDES - National Pollutant Discharge Elimination System

NRC - National Response Center

NTU - Nephelometric Turbidity Unit

OMB - U. S. Office of Management and Budget

ORW - Outstanding Resource Water

OSM - U. S. Office of Surface Mining

POTW - Publicly Owned Treatment Works

RCRA - Resource Conservation and Recovery Act

RQ - Reportable Quantity

SARA - Superfund Amendments and Reauthorization Act

SIC - Standard Industrial Classification

SMCRA - Surface Mining Control and Reclamation Act

SPCC - Spill Prevention, Control, and Countermeasures

SWPPP - Stormwater Pollution Prevention Plan

TMDL - Total Maximum Daily Load

TSDF - Treatment, Storage, or Disposal Facility

TSS - Total Suspended Solids

USGS - United States Geological Survey

WLA - Wasteload Allocation

WQS - Water Quality Standard

National Pollutant Discharge Elimination System (NPDES) Permit Program

FACT SHEET

Regarding an NPDES Permit to Discharge to Waters of the State of Ohio for Cleveland-Cliffs Steel Corporation – Coshocton Works

Public Notice No.: 205702

Public Notice Date: August 29, 2024

Comment Period Ends: September 28, 2024

Ohio EPA Permit No.: 0ID00014*QD

Application No.: OH0004260

Coshocton County

Name and Address of Applicant: Cleveland-Cliffs Steel Corporation – Coshocton Works 17400 State Route 16 Coshocton, OH 43812 Name and Address of Facility Where <u>Discharge Occurs:</u>
Cleveland-Cliffs Steel Corporation – Coshocton Works
17400 State Route 16
Coshocton, OH 43812

Receiving Water: Muskingum River

Subsequent Stream Network: Ohio River

INTRODUCTION

Development of a Fact Sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations (CFR), Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Ohio Environmental Protection Agency (Ohio EPA), as well as the methods by which the public can participate in the process of finalizing those actions.

This Fact Sheet is prepared in order to document the technical basis and risk management decisions that are considered in the determination of water quality based NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, instream biological, chemical and physical conditions, and the relative risk of alternative effluent limitations. This Fact Sheet details the discretionary decision-making process empowered to the Director by the Clean Water Act (CWA) and Ohio Water Pollution Control Law (Ohio Revised Code [ORC] 6111). Decisions to award variances to Water Quality Standards (WQS) or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

Antidegradation provisions in Ohio Administrative Code (OAC) Chapter 3745-1 describe the conditions under which water quality may be lowered in surface waters. No antidegradation review was necessary.

Effluent limits based on available treatment technologies are required by Section 301(b) of the CWA. Many of these have already been established by the United States Environmental Protection Agency (U.S. EPA) in the effluent guideline regulations (a.k.a. categorical regulations) for industry categories in 40 CFR Parts 405-499. Technology-based regulations for publicly-owned treatment works are listed in the Secondary Treatment Regulations (40 CFR Part 133). If regulations have not been established for a category of dischargers, the director may establish technology-based limits based on best professional judgment (BPJ).

Ohio EPA reviews the need for water-quality-based limits on a pollutant-by-pollutant basis. Wasteload allocations (WLAs) are used to develop these limits based on the pollutants that have been detected in the discharge, and the receiving water's assimilative capacity. The assimilative capacity depends on the flow in the water receiving the discharge, and the concentration of the pollutant upstream. The greater the upstream flow, and the lower the upstream concentration, the greater the assimilative capacity is. Assimilative capacity may represent dilution (as in allocations for metals), or it may also incorporate the break-down of pollutants in the receiving water (as in allocations for oxygen-demanding materials).

The need for water-quality-based limits is determined by comparing the WLA for a pollutant to a measure of the effluent quality. The measure of effluent quality is called Projected Effluent Quality (PEQ). This is a statistical measure of the average and maximum effluent values for a pollutant. As with any statistical method, the more data that exists for a given pollutant, the more likely that PEQ will match the actual observed data. If there is a small data set for a given pollutant, the highest measured value is multiplied by a statistical factor to obtain a PEQ; for example if only one sample exists, the factor is 6.2, for two samples - 3.8, for three samples - 3.0. The factors continue to decline as samples sizes increase. These factors are intended to account for effluent variability, but if the pollutant concentrations are fairly constant, these factors may make PEQ appear larger than it would be shown to be if more sample results existed.

SUMMARY OF PERMIT CONDITIONS

New monitoring and a limit are proposed for total residual oxidants at outfall 001 based on Best Technical Judgement(BTJ) in association with chemical treatment additives containing chlorine, bromine and hydrogen peroxide. A compliance schedule is proposed to assess acquisition of monitoring equipment, process control, and potential of needs for additional treatment to achieve compliance with the proposed limit.

Storm water monitoring and benchmarks for total recoverable zinc and total suspended solids are proposed in the permit. Benchmark for total suspended solids is provided as a substitute parameter in lieu of aluminum to the monitoring and benchmark requirements for stormwater associated with industrial activities subsector F1 as referenced in General Permit number OHR000007.

In accordance with Ohio Administrative Code (OAC) 3745-33-07, it has been determined that the effluent from Cleveland-Cliffs Steel Corporation - Coshocton Works does not currently exhibit reasonable potential for acute toxicity to *Ceriodaphnia Dubia*. Monitoring is proposed at reduced frequency to assess whether historical toxicity issues return.

Continuous pH monitoring is provided for flows associated with 001 prior to the 602 contributions. The duration of maximum excursion limitation of 60 minute and monitoring reporting code has been removed from the reporting requirements as it was duplicated by reporting the number of excursions exceeding 60 minutes.

The annual sludge reporting under outfall 588 has been changed from being required in September to the month of December.

Monitoring for nitrite, nitrate, fluoride, dissolved hexavalent chromium, nickel, copper, temperature and total filterable residue at outfall 001 is proposed at a reduced frequency. Nitrite and Nitrate monitoring is proposed to be combined under one monitoring parameter.

Oil & Grease limits have been removed at outfall 001 as it was determined that the effluent does not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Monitoring is proposed to continue at a reduced frequency to document that that Oil & Grease continues to remain at low levels.

Hexavalent chromium monitoring code has been reassigned to 01220 - Chromium, Dissolved Hexavalent. In Part II of the permit, special conditions are included that address storm water compliance; operator certification, minimum staffing and operator of record; whole effluent toxicity (WET) testing; tracking requirement for total residual chlorine; and outfall signage.

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PROCEDURES FOR PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be emailed to <a href="https://

Legal Records Section
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted by email to epa.dswcomments@epa.ohio.gov (preferred method) or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

Ohio Environmental Protection Agency Attention: Division of Surface Water Permits Processing Unit P.O. Box 1049 Columbus, Ohio 43216-1049

The Ohio EPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

For additional information about this fact sheet or the draft permit, contact Aaron Pennington, 740-380-5272, aaron.pennington@epa.ohio.gov.

INFORMATION REGARDING CERTAIN WATER QUALITY BASED EFFLUENT LIMITS

This draft permit may contain proposed water-quality-based effluent limits (WQBELs) for parameters that **are not** priority pollutants. (See the following link for a list of the priority pollutants: https://epa.ohio.gov/static/Portals/35/pretreatment/Pretreatment Program Priority Pollutant Detection Limits.pdf. In accordance with ORC 6111.03(J)(3), the Director established these WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to

accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the timely submitted NPDES permit renewal application, along with any and all pertinent information available to the Director.

This public notice allows the permittee to provide to the Director for consideration during this public comment period additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with the proposed final effluent limitations for these parameters. The permittee shall email to epa.dswcomments@epa.ohio.gov (preferred method) or deliver or mail this information to:

Ohio Environmental Protection Agency Attention: Division of Surface Water Permits Processing Unit P.O. Box 1049 Columbus, Ohio 43216-1049

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with these limitations, a written request for any additional time shall be sent to the above address no later than 30 days after the Public Notice Date on Page 1.

Should the applicant determine that compliance with the proposed WQBELs for parameters other than the priority pollutants is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQS used to develop the proposed effluent limitation in accordance with the terms and conditions set forth in OAC 3745-33-07(D). The permittee shall submit this application to the above address no later than 30 days after the Public Notice Date.

Alternately, the applicant may propose the development of site-specific WQS pursuant to OAC 3745-1-39. The permittee shall submit written notification regarding their intent to develop site specific WQS for parameters that are not priority pollutants to the above address no later than 30 days after the Public Notice Date.

LOCATION OF DISCHARGE/RECEIVING WATER USE CLASSIFICATION

Cleveland-Cliffs Steel Corporation – Coshocton Works discharges to Muskingum River at River Mile 105.88. Figure 1 shows the approximate location of the facility.

This segment of the Muskingum River is described by Ohio EPA River Code: 17-001, Large River Assessment Unit 05040004-90-01, County: Coshocton, Ecoregion: Western Allegheny Plateau. The Muskingum River is designated for the following uses under Ohio's WQS (OAC 3745-1-07): Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation.

Use designations define the goals and expectations of a waterbody. These goals are set for aquatic life protection, recreation use and water supply use, and are defined in the Ohio WQS (OAC 3745-1-07). The use designations for individual waterbodies are listed in rules -08 through -32 of the Ohio WQS. Once the goals are set, numeric WQS are developed to protect these uses. Different uses have different water quality criteria.

Use designations for aquatic life protection include habitats for coldwater fish and macroinvertebrates, warmwater aquatic life and waters with exceptional communities of warmwater organisms. These uses all meet the goals of the federal CWA. Ohio WQS also include aquatic life use designations for waterbodies which cannot meet the CWA goals because of human-caused conditions that cannot be remedied without causing fundamental changes to land use and widespread economic impact. The dredging and clearing of some small streams to support agricultural or urban drainage is the most common of these conditions. These streams are given Modified Warmwater or Limited Resource Water designations.

Recreation uses are defined by the depth of the waterbody and the potential for wading or swimming. Uses are defined for bathing waters, swimming/canoeing (Primary Contact Recreation) and wading only (Secondary Contact which are generally waters too shallow for swimming or canoeing).

Water supply uses are defined by the actual or potential use of the waterbody. Public Water Supply designations apply near existing water intakes so that waters are safe to drink with standard treatment. Most other waters are designated for agricultural water supply and industrial water supply.

FACILITY DESCRIPTION

Cleveland-Cliffs Steel Corporation – Coshocton Works is a specialty steel finishing facility. The industrial processes at the facility include:

- Cold reduction
- Annealing
- Salt bath descaling
- Acid Pickling
- Shot blasting
- Grinding
- Buffing
- Slitting

The process operations at Cleveland-Cliffs Steel Corporation – Coshocton Works are classified in the Standard Industrial Classification (SIC) category 3316, Cold Rolled Steel Sheet, Strip and Bars. The process wastewaters generated from these operations are regulated under 40 CFR Part 420, "Iron and Steel Manufacturing Point Source Category":

• Subpart H, Salt Bath Descaling Subcategory

- Subpart I, Acid Pickling Subcategory
- Subpart J, Cold Forming Subcategory
- Subpart K, Alkaline Cleaning Subcategory

Cleveland-Cliffs Steel Corporation – Coshocton Works obtains water from well water for process operations and non-contact cooling water (NCCW).

DESCRIPTION OF EXISTING DISCHARGE

Cleveland-Cliffs Steel Corporation – Coshocton Works has two final outfalls, three internal monitoring stations, and a sludge reporting station (See Table 1). Outfall 001 discharges treated process wastewater, sanitary wastewater effluent, storm water, NCCW, and excess well water. Outfall 002 serves as a discharge outlet from a recently installed stormwater basin for the drainage from the new continuous anneal line building area. Outfall 002 is directed to unnamed tributary to the Muskingum River and has not discharged since being installed due to the infiltration design of the stormwater retention basin. Internal monitoring station 601 monitors the treated process wastewater prior to commencing the new vertical anneal line, whereas the treated process wastewater will then be monitored and reported under station 603. The new vertical anneal line is anticipated to commence operations within the duration of the proposed permit. Figure 2 provides a flow schematic of the wastewater sources and supplies associated with Cleveland-Cliffs Steel Corporation – Coshocton Works. Process wastewater is treated by the following processes:

- Chemical Reduction
- Neutralization
- Chemical precipitation
- Flocculation
- Clarification
- Thickening
- Sludge dewatering

Internal monitoring station 602 monitors the treated sanitary wastewater prior to discharging to Outfall 001. Sanitary waste is treated by the follow processes: extended aeration, clarification, and UV Disinfection. Sludge is disposed of at another permitted NPDES WWTP and monitored under outfall 588.

There were no effluent violations reported during the review timeframe of May 2018 through April 2023. The average flow rates for the permit cycle for outfall 001 and monitoring stations 601 and 602 are shown on Table 2.

Table 3 presents data compiled from the NPDES permit renewal application Form 2C.

Table 4 presents a summary of unaltered Discharge Monitoring Report (DMR). Data are presented for the period May 2018 through April 2023 and current permit limits are provided for comparison.

Table 5 summarizes the chemical specific data for outfall 001 by presenting the average and maximum PEQ values.

Table 6 summarizes the results of acute and chronic WET tests of the final effluent.

ASSESSMENT OF IMPACT ON RECEIVING WATERS

Pursuant to Section 303(d) of the Clean Water Act, each state is required to develop and submit a list to US EPA of its impaired and threatened waters (e.g. stream/river segments, lakes). For each water on the list, the state identifies the pollutant(s) causing the impairment, when known. The Muskingum River Large River watershed assessment unit, which includes the Muskingum River in the vicinity of Cleveland-Cliffs Steel Corporation – Coshocton Works, is listed as impaired for human health and recreation on Ohio's 303(d) list. The impairment for human health is shown due to PCBs in fish tissue and the impairment for recreation is shown due to elevated concentrations of Escherichia Coli (E. coli). The Cleveland-Cliffs Steel Corporation – Coshocton Works has not been identified as a source of the PCBs and limits have been applied to prevent E. coli in the effluent at levels that would contribute to the impairment.

The full Integrated Report is available through the Ohio EPA, Division of Surface Water website at: https://epa.ohio.gov/static/Portals/35/tmdl/2022intreport/Full-2022-IR.pdf

An assessment of the impact of a permitted point source on the immediate receiving waters includes an evaluation of the available chemical/physical, biological, and habitat data which have been collected by Ohio EPA pursuant to the Five-Year Basin Approach for Monitoring and NPDES Reissuance. Other data may be used provided it was collected in accordance with Ohio EPA methods and protocols as specified by the Ohio WQS and Ohio EPA guidance documents. Other information which may be evaluated includes, but is not limited to: NPDES permittee self-monitoring data; effluent and mixing zone bioassays conducted by Ohio EPA, the permittee, or U.S. EPA.

In evaluating this data, Ohio EPA attempts to link environmental stresses and measured pollutant exposure to the health and diversity of biological communities. Stresses can include pollutant discharges (permitted and unpermitted), land use effects, and habitat modifications. Indicators of exposure to these stresses include whole effluent toxicity tests, fish tissue chemical data, and fish health biomarkers (for example, fish blood tests).

Use attainment is a term which describes the degree to which environmental indicators are either above or below criteria specified by the Ohio WQS (OAC 3745-1). Assessing use attainment status for aquatic life uses primarily relies on the Ohio EPA biological criteria (OAC 3745-1-07; Table 7-1). These criteria apply to rivers and streams outside of mixing zones. Numerical biological criteria are based on measuring several characteristics of the fish and macroinvertebrate communities; these characteristics are combined into multimetric biological indices including the Index of Biotic Integrity and modified Index of Well-Being, which indicate the response of the fish community, and the Invertebrate Community Index, which indicates the response of the macroinvertebrate community. Numerical criteria are broken down by ecoregion, use designation, and stream or river size. Ohio has five ecoregions defined by common topography, land use, potential vegetation and soil type.

Three attainment status results are possible at each sampling location -full, partial, or non-attainment. Full attainment means that all of the applicable indices meet the biocriteria. Partial attainment means that one or more of the applicable indices fails meet the biocriteria. Nonattainment means that either none of the applicable indices meet the biocriteria or one of the organism groups indicates poor or very poor performance. An aquatic life use attainment table is constructed based on the sampling results and is arranged from upstream to downstream and includes the sampling locations indicated by river mile, the applicable biological indices, the use attainment status (i.e., full, partial, or non), the Qualitative Habitat Evaluation Index, and comments and observations for each sampling location.

Biological sampling conducted during the 2006 field season in the Muskingum River showed Full Attainment of the WWH use designation both upstream and downstream of the Cleveland Cliffs – Coshocton Works. The attainment status of the Muskingum River Watershed is reported in the Final Ohio 2022 Integrated Water

Quality Monitoring and Assessment Report. Sampling conducted in 2020 and 2021 continue to show the Muskingum River in Full Attainment of the WWH use designation as summarized at:

https://epa.ohio.gov/static/Portals/35/tmdl/LargeRiverSurvey-DataSummary-2023.pdf

More information can be found in the technical support document: Biological and Water Quality Study of the Muskingum River 2006; March 2007.

A summary of the results from the above reports for the portions of the Muskingum River in the vicinity of the Coshocton WWTP and the Cleveland Cliffs – Coshocton Works discharges can be found in Table 7.

DEVELOPMENT OF WATER-QUALITY-BASED EFFLUENT LIMITS

Determining appropriate effluent concentrations is a multiple-step process in which parameters are identified as likely to be discharged by a facility, evaluated with respect to Ohio water quality criteria, and examined to determine the likelihood that the existing effluent could violate the calculated limits.

Parameter Selection

Effluent data for the Cleveland Cliffs – Coshocton Works were used to determine what parameters should undergo WLA. The parameters discharged are identified by the data available to Ohio EPA, DMR data submitted by the permittee, compliance sampling data collected by Ohio EPA and any other data submitted by the permittee required by the NPDES application or other special conditions in the NPDES permit. The sources of effluent data used in this evaluation are as follows:

Self-monitoring data (DMR) May 2018 through April 2023

NPDES application Form 2C data 2023

Statistical Outliers and Other Non-representative Data

The data were examined and the following values were removed from the evaluation to give a more reliable PEO:

- Total Filterable Residue, 336mg/L, 6/8/20, significantly lower than next lowest and removal improved r-squared value.
- Fluoride, 1.19mg/L and 0.8mg/L, 6/8/20 and 3/9/23 respectively, both values significantly lower than next lowest and removal improved r-squared value.
- Oil & Grease, 14mg/L, 5/14/18, was the only sample out of 241 observations with a result reported greater than method detection limit. The 14mg/L result was more than 2.5 times the MDL.
- Self- monitoring data for zinc was associated with storm water grab sampling intended to assess first
 flush conditions in lieu of composite samples intended for determining projected effluent quality values.
 Therefore, the four self-monitoring data points were removed from consideration for determining
 projected effluent quality values.

This data is evaluated statistically, and PEQ values are calculated for each pollutant. Average PEQ (PEQ_{avg}) values represent the 95th percentile of monthly average data, and maximum PEQ (PEQ_{max}) values represent the 95th percentile of all data points (see Table 5).

The PEQ values are used according to Ohio rules to compare to applicable WQS and allowable WLA values for each pollutant evaluated. Initially, PEQ values are compared to the applicable average and maximum WQS. If both PEQ values are less than 25 percent of the applicable WQS, the pollutant does not have the reasonable potential to cause or contribute to exceedances of WQS, and no WLA is done for that parameter. If either

PEQ_{avg} or PEQ_{max} is greater than 25 percent of the applicable WQS, a WLA is conducted to determine whether the parameter exhibits reasonable potential and needs to have a limit or if monitoring is required (see Table 8).

Wasteload Allocation

For those parameters that require a WLA, the results are based on the uses assigned to the receiving waterbody in OAC 3745-1. Dischargers are allocated pollutant loadings/concentrations based on the Ohio WQS (OAC 3745-1). Most pollutants are allocated by a mass-balance method because they do not degrade in the receiving water. By rule, mixing zones are not authorized for pollutants, such as mercury, which have been designated as bioaccumulative chemicals of concern (BCCs). For BCCs, the WLA is set equal to the respective WQS value.

The methodology employed generally depends on whether the facility is considered a direct discharger to a free-flowing receiving water/stream or non-flowing receiving water/Lake.

For free flowing streams, WLAs for both average and maximum criteria are performed using the following general equation:

Discharger WLA = (Downstream Flow x WOS) - (Upstream Flow x Background Concentration).

Discharger WLAs are divided by the discharge flow so that the allocations are expressed as concentrations.

The following dischargers to the Muskingum River were considered interactive (see Figure 3):

- Coshocton WWTP
- Cleveland-Cliffs Steel Corporation Coshocton Works

The Coshocton WWTP and Cleveland Cliffs – Coshocton Works outfalls were allocated together for most parameters due to the size of the plant discharges, the flows of the Muskingum River, and the relatively close proximity of the discharge points.

The available assimilative capacity was distributed among them using the conservative substance wasteload allocation (CONSWLA) water quality model for conservative parameters. CONSWLA is the model Ohio EPA typically uses in multiple discharger situations. CONSWLA model inputs for flow are fixed at their critical low levels and inputs for effluent flow are fixed at their design or 50th percentile levels. Background concentrations are fixed at a representative value (generally a 50th percentile) using available ambient stream data from upstream sampling stations. A mass balancing method is then used to allocate effluent concentrations that maintain WQS under these conditions. This technique is appropriate when data bases are unavailable to generate statistical distributions for inputs and if the parameters modeled are conservative.

The applicable waterbody uses for this facility's discharge and the associated stream design flows are as follows:

Aquatic life (Warmwater Habitat)

Toxics (metals, organics, etc.)

Average

Maximum

Annual 1Q10

Ammonia

Average

Summer 30Q10

Winter 30Q10

Agricultural Water Supply

Human Health (nondrinking)

Harmonic mean flow

Harmonic mean flow

Allocations are developed using a percentage of stream design flow as specified in Table 9, and allocations cannot exceed the Inside Mixing Zone Maximum (IMZM) criteria. The data used in the WLA are listed in Table 8 and Table 9. The WLA results to maintain all applicable criteria are presented in Table 10.

Whole Effluent Toxicity Wasteload Allocation

Whole effluent toxicity (WET) is the total toxic effect of an effluent on aquatic life measured directly with a toxicity test. Acute WET tests measure survival and mortality of the test organism over a short time period (48-or 96-hours). Chronic WET tests measure survival and mortality, as well as effects on growth and reproduction over a longer period of the test organism's life.

WQS for WET are expressed in Ohio's narrative "free from" WQS rule [OAC 3745-1-04(D)]. These "free froms" are translated into toxicity units (i.e. TUa and TUc) for use in NPDES permits by the associated WQS Implementation Rule (OAC 3745-2-09). The translation results in numeric values of 0.3 TUa and 1.0 TUc. WLAs can then be calculated using these values as if they were water quality criteria.

There are two separate reasonable potential procedures in Ohio - one for the Lake Erie watershed and one for the Ohio River watershed. Dischargers in the Ohio River watershed are assessed using OAC 3745-33-07(B). Dischargers in the Lake Erie watershed are assessed in accordance with the "Great Lakes Water Quality Initiative Implementation Procedures" contained in 40 CFR Part 132, Appendix F, Procedure 6.

The WLA calculations for WET are similar to those for aquatic life criteria - using the chronic toxicity unit (TUc) and 7Q10 flow for the average and the acute toxicity unit (TUa) and 1Q10 flow for the maximum. WET WLAs are based on meeting the values of 0.3 TUa and 1.0 TUc downstream of the discharge, and include any available dilution. These values are the levels of effluent toxicity that should not cause instream toxicity during critical low-flow conditions. WLAs for acute toxicity are capped at 1.0 TUa unless the discharger demonstrates that an Area-of-Initial-Mixing (AIM) exists under OAC 3745-1-06, or that one of the factors in OAC 3745-33-07(B)(5)-(9) allows a higher TUa limit to be granted. For the purposes of establishing WET limitations, the values of 1.0 TUa and 1.0 TUc are the most restrictive limitations that can be applied in NPDES permits [OAC 3745-33-07(B)(10)].

For Cleveland-Cliffs Steel Corporation – Coshocton Works, the WLA values for outfall 001 are 1.0 TUa and 149.5 TUc.

The chronic toxicity unit (TUc) is defined as 100 divided by the estimate of the effluent concentration which causes a 25% reduction in growth or reproduction of test organisms (IC25):

TUc = 100/IC25

This equation applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations except when the following equation is more restrictive (Ceriodaphnia dubia only):

TUc = 100/geometric mean of No Observed Effect Concentration and Lowest Observed Effect Concentration

The acute toxicity unit (TUa) is defined as 100 divided by the concentration in water having 50% chance of causing death to aquatic life (LC50) for the most sensitive test species:

TUa = 100/LC50

This equation applies outside the mixing zone for all designated waters. Based on the above, a value of 1.0 TUa is the lowest value that can be calculated using the equation. TUa values between 0.2 and 1.0 are based on an interpolation of toxic effects where an LC50 cannot be identified.

REASONABLE POTENTIAL/EFFLUENT LIMITS/MANAGEMENT DECISIONS

After appropriate effluent limits are calculated, the reasonable potential of the discharger to violate the WQS must be determined. Each parameter is examined and placed in a defined "group". Parameters that do not have a WQS or do not require a WLA based on the initial screening are assigned to either group 1 or 2. For the allocated parameters, the preliminary effluent limits (PEL) based on the most restrictive average and maximum WLAs are selected from Table 10. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) from Table 5Table 5, and the PEL_{max} is compared to the PEQ_{max}. Based on the calculated percentage of the allocated value [(PEQ_{avg} \div PEL_{avg}) X 100, or (PEQ_{max} \div PEL_{max}) X 100)], the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 11.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 12 presents the final effluent limits and monitoring requirements proposed for Cleveland-Cliffs Steel Corporation - Coshocton Works outfall(s) 001, 002 and internal monitoring stations 601, 602 and 603 and the basis for their recommendation. Unless otherwise indicated, the monitoring frequencies proposed in the permit are continued from the existing permit.

Outfall 001

pH

Current permit limits for pH are proposed to remain in the renewal permit. Effluent pH limitations under continuous monitoring are provided pursuant 40 CFR 401.17. The acceptable pH range is 6.5 to 9.0 as established by Ohio Water Quality Standards. A condition in Part II includes the pH excursion limitations and reporting requirements.

Oil & Grease

Only one observation out of 241 observations was reported greater than MDL and was determined to be an outlier. Oil & Grease is placed in Group 2. This placement supports that Oil & Grease does not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Limits have been removed and monitoring is proposed to continue at a reduced frequency to document that that Oil & Grease continues to remain at low levels.

Total Residual Oxidants

Total Residual Oxidants is a measure of various residual oxidants. Cleveland-Cliffs Steel Corporation identifies various chemical treatment additives used at the facility, some of which contain bromine, hydrogen peroxide, and chlorine that would all cumulatively be assessed as total residual oxidants without speciation. The process flows containing chemical treatment additives comprised of hydrogen peroxide and bromine are directed to the process treatment plant's reaction tank where any residual oxidants would react with sodium bisulfite laden salt bath descaling wastewaters that received hexavalent chromium reduction. In addition, lime and polymer are added in the reaction tank. Flows containing residual chlorine which is present in the potable water supply are directed to the sanitary treatment plant where activated sludge process is employed. Any residual chlorine would be eliminated with inbound wastewaters or in the event levels persisted throughout the sanitary treatment plant it would cause an upset of the activated sludge process. The Ohio EPA risk assessment shown in Table 11 places total residual chlorine in group 5, which recommends limits to protect water quality. Upon more intensive review of the PEQ values calculated for total residual chlorine (Table 5), no limits are proposed specific to total residual chlorine. The PEQs were based on one data point using a colorimetric method that has many possible interferences, specifically the fluoride concentrations in the effluent sample are in a range known to cause significant interferences. A sample was analyzed for total residual oxidants on October 13, 2023 using

amperometric titration and reported less than detection of 0.003 mg/L using a TitraLab AT1000 Series instrument. The less than detection value of 0.003 mg/L using amperometric titration is the only assessed measurement that did not involve a significant interference and accounts for the summation of bromine, hydrogen peroxide and residual chlorine. This value would lead to a Group 2 placement using reasonable potential analysis. However, the IMZM WQS associated with bromine 0.0048 mg/L is proposed as a limit for total residual oxidants based on Best Technical Judgement (BTJ) due to the use of treatment additives. The bromine IMZM WQS is the most stringent in comparison to residual chlorine 0.038 mg/L and hydrogen peroxide 0.180 mg/L when analyzed using total residual oxidants testing methods. The limit associated with bromine ensures that despite the various speciation that water quality standards are not exceeded. A special condition is provided in the permit regarding the Ohio EPA Quantification Level of 0.050 mg/L for total residual oxidants. A compliance schedule for 36 months is included to assess acquisition of monitoring equipment, process control, and potential of needs for additional treatment to achieve compliance with the proposed limit.

Nitrite, Nitrate, Fluoride, Dissolved Hexavalent Chromium, Nickel, Copper, Mercury and Total Filterable Residue

The Ohio EPA risk assessment (Table 11) places nitrite, nitrate, fluoride, dissolved hexavalent chromium, nickel, copper, mercury and total filterable residue in groups 2 and 3. This placement, as well as the data in Table 4 and Table 5, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Monitoring at a reduced frequency is proposed to document that these pollutants continue to remain at low levels. Nitrite and Nitrate monitoring is proposed to be combined under one monitoring parameter. Hexavalent chromium monitoring code has been reassigned to 01220 – Chromium, Dissolved Hexavalent.

Ammonia, Barium, Cadmium, Chromium, Iron, Molybdenum, and Selenium

The Ohio EPA risk assessment (Table 11) places ammonia, barium, cadmium, chromium, iron, molybdenum and selenium in groups 2 and 3. This placement, as well as the data in Table 4 and Table 5, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. No new monitoring is proposed.

Temperature and Flow

Monitoring for these parameters is proposed to continue in order to evaluate the performance of the treatment facilities. Temperature monitoring is proposed at a reduced frequency as temperature does not have reasonable potential to contribute to WQS exceedance.

Whole Effluent Toxicity Reasonable Potential

Based on evaluating the WET data presented in Table 6, Attachment 3 and other pertinent data under the provisions of OAC 3745-33-07(B), the Cleveland-Cliffs Steel Corporation - Coshocton Works is placed in Category 4 with respect to WET. No limits are proposed. Acute toxicity testing is proposed to continue for Ceriodaphnia dubia at a reduced frequency to assess whether historical toxicity issues return.

Zinc and Total Suspended Solids

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. Storm water monitoring and benchmarks for total recoverable zinc and total suspended solids are proposed. Benchmark for total suspended solids is provided as a substitute parameter in lieu of aluminum to the monitoring and benchmark requirements for stormwater associated with industrial activities subsector F1 as referenced in General Permit number OHR000007. See Part V for more details.

Outfall 002

Zinc and Total Suspended Solids

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. Storm water monitoring and benchmarks for total recoverable zinc and total suspended solids are proposed. Benchmark for total suspended solids is provided as a substitute parameter in lieu of aluminum to the monitoring and benchmark requirements for stormwater associated with industrial activities subsector F1 as referenced in General Permit number OHR000007. See Part V for more details.

Internal Monitoring Stations 601 and 603

Total Suspended Solids, Oil & Grease, Chromium and Nickel

Federal effluent guideline limitations (ELGs) are based on available treatment technology. Federal and State laws and regulations require that dischargers meet both the ELGs and any values needed to comply with state WQS. Permit limits are based on the more stringent of the two. The limits recommended for total suspended solids, oil & grease, chromium, and nickel are based on the federal effluent limitation guidelines (ELGs) found in 40 CFR Part 420. All limits are shown tabulated in Attachment 1. Internal monitoring station 601 is intended to apply up until the continuous anneal operation commences operations. Upon startup of the continuous anneal line, the treated process wastewaters are to be reported under internal monitoring station 603.

Dissolved Hexavalent Chromium

Based on best technical judgment, monitoring and limits for dissolved hexavalent chromium are proposed to remain in the permit as previously permitted to ensure the facility adequate provides reduction to the associated wastewaters containing dissolved hexavalent chromium.

Copper, Flow and pH

Monitoring for these parameters is proposed to continue in order to evaluate the performance of the treatment plant.

Napthalene and Tetrachloroethylene

A monitoring waiver is proposed to continue for napthalene and tetrachloroethylene pursuant 40 CFR 122.44(a)(2) as the permittee has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge.

Internal Monitoring Stations 602

Total Suspended Solids and 5-day Carbonaceous Biochemical Oxygen Demand

The limits proposed for total suspended solids and 5-day carbonaceous biochemical oxygen demand are all based on plant design criteria and technology-based treatment standards included in 40 CFR Part 133, Secondary Treatment Regulation. Secondary treatment is defined by the Best Practicable Waste Treatment Technology criteria, which are minimum standards required of all publicly owned treatment works. These limits are protective of WQS.

Fecal Coliform

Based on best technical judgment, monitoring and limits for fecal coliform are proposed to remain in the permit as previously permitted to ensure facility adequate provides disinfection to treated sanitary wastewaters during recreational season.

Flow and pH

Monitoring for these parameters is proposed to continue in order to evaluate the performance of the treatment plant.

Additional Monitoring Requirements

Additional monitoring requirements proposed at the final effluent, influent and upstream/downstream stations are included for all facilities in Ohio and vary according to the type and size of the discharge. In addition to permit compliance, this data is used to assist in the evaluation of effluent quality and treatment plant performance and for designing plant improvements and conducting future stream studies.

Sludge

Monitoring requirements proposed for the disposal of sewage sludge by the following management practices are based on OAC 3745-40: transfer to another facility with an NPDES permit.

OTHER REQUIREMENTS

Operator Certification and Operator of Record

Operator certification requirements have been included in Part II of the permit in accordance with rules adopted in August 2018 (OAC 3745-7-02). These rules require the Cleveland-Cliffs Steel Corporation - Coshocton Works to have a Class A wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through internal monitoring station 602. These rules also require the permittee to designate one or more operator of record to oversee the technical operation of the treatment works.

Outfall Signage

Part II of the permit includes requirements for the permittee to place and maintain a sign at outfall 001 discharging to the Muskingum River providing information about the discharge. Signage at outfalls is required pursuant to OAC 3745-33-08(A).

Part III

Part III of the permit details standard conditions that include monitoring, reporting requirements, compliance responsibilities, and general requirements.

Storm Water Compliance

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. Benchmark monitoring for outfalls 001 and 002 is proposed in accordance with the storm water language. See Part V for more details.

Figure 1. Location of Cleveland-Cliffs Steel Corporation - Coshocton Works

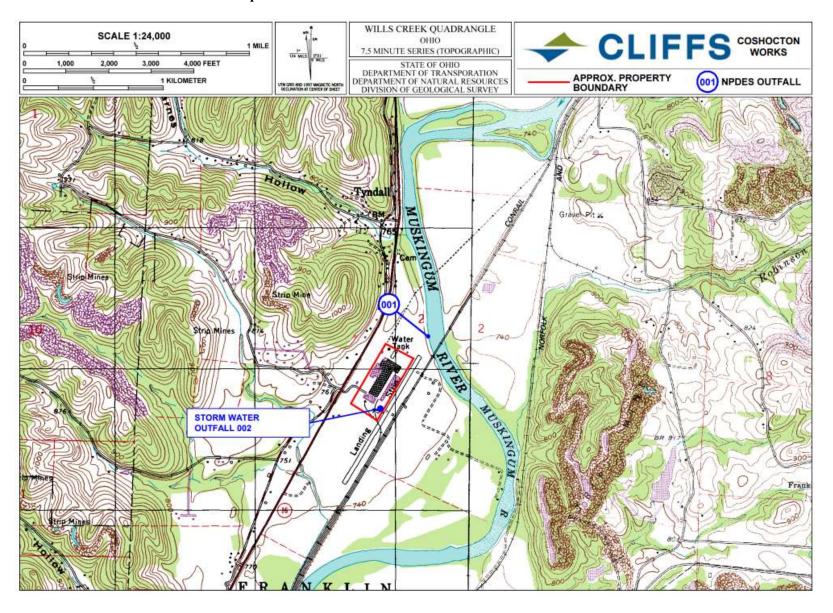


Figure 2. Water Balance Diagram

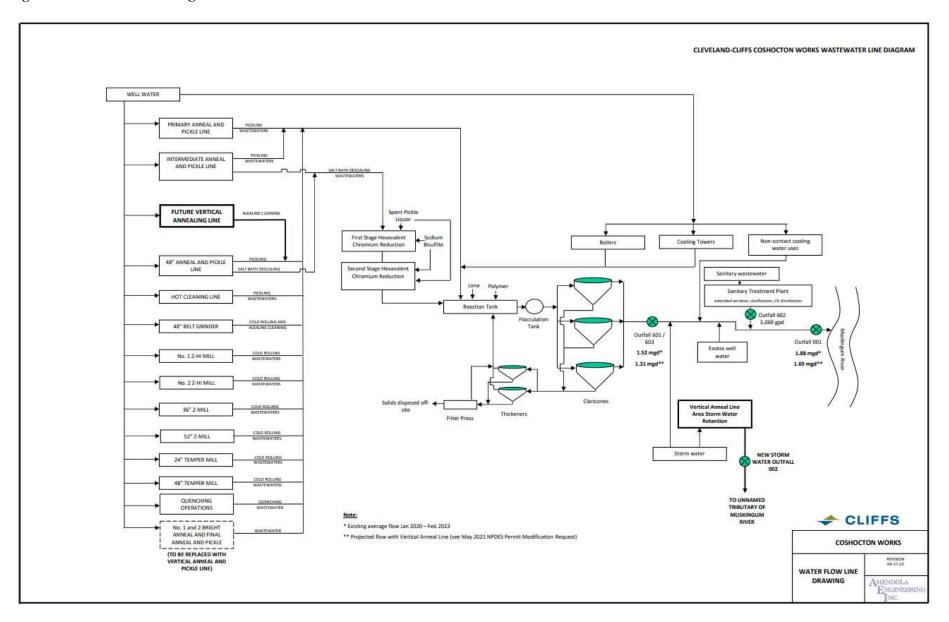


Figure 3. Muskingum River Study Area

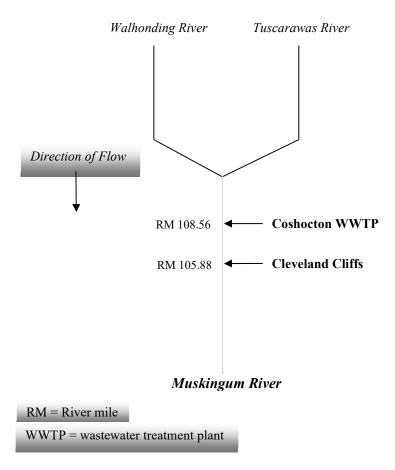


Table 1. Monitoring Stations, Wastewater Sources, Treatment Processes, Discharge Points, and Flow Rates

Station #	Wastewater Source	Treatment Utilized	Discharge/ Receiving Stream	Average Flow Rate per NPDES Application (MGD)
001	Treated process wastewaters from internal monitoring 601 and 603; treated sanitary wastewaters from internal monitoring station 602; noncontact cooling water; storm water; excess well water; and steam condensate.	See stations 601, 602, and 603 for applicable treatment.	Muskingum River	1.88
002	Stormwater from the area associated with the new vertical anneal line building.	Settling and Infiltration	Unnamed tributary to Muskingum River	(No discharge to date)
601 / 603	Salt bath descaling, acid pickling, fume scrubbers, cold rolling and alkaline cleaning, boiler blowdown, contact quench water, storm water; (601 is current designated monitoring station for treated process wastewater until such time that new vertical anneal line operations commence which will then become 603).	Chemical reduction, neutralization, chemical precipitation, flocculation, clarification, thickening, and sludge dewatering.	Directed to 001	1.52
602	Sanitary wastewaters from facility.	Activated sludge, secondary clarification, ultraviolet light disinfection.	Directed to 001	0.0031
588	Sludge removed from sanitary treatment plant.	Sludge is removed from the treatment plant and hauled to another NPDES facility.	N/A	N/A

Table 2. Effluent Flow Rates May 2018 through April 2023

Outfall	Year	# observations	Average (MGD)	Median (MGD)	95th Percentile (MGD)	Maximum (MGD)
			(====)	(====)	(====)	()
	2018	242	2.02	2.10	2.73	3.87
	2019	363	1.99	2.07	2.64	3.54
001	2020	358	2.01	2.09	2.80	4.61
001	2021	365	1.84	1.91	2.61	3.83
	2022	365	1.75	1.80	2.61	3.73
	2023	120	2.31	2.38	3.19	3.65
	2018	237	1.63	1.67	2.14	2.66
	2019	359	1.60	1.67	2.10	2.27
601	2020	355	1.63	1.72	2.21	2.91
001	2021	357	1.51	1.55	2.07	2.63
	2022	354	1.44	1.46	2.08	2.64
	2023	120	1.33	1.38	1.80	2.07
	2018	241	0.0035	0.0035	0.0060	0.0086
	2019	362	0.0036	0.0036	0.0063	0.0092
602	2020	359	0.0031	0.0030	0.0056	0.0070
002	2021	363	0.0031	0.0031	0.0050	0.0071
	2022	365	0.0036	0.0030	0.0059	0.1053
	2023	120	0.0029	0.0028	0.0060	0.0089

MGD = million gallons per day

Table 3. Effluent Characterization Based on Form 2C Data

Parameter	Units	Concentration	Number of
Ammonia	mg/L	1.57	samples
Bromide	-	0.283	1
	mg/L		
Chlorine, Total Residual	mg/L	0.1	1
Phosphorous, Total	mg/L	0.22	1
Sulfate	mg/L	570	1
Barium	μg/L	53	1
Boron	$\mu g/L$	88	1
Iron	μg/L	170	1
Magnesium	mg/L	25	1
Molybdenum	μg/L	460	1
Manganese	μg/L	150	1
Titanium	μg/L	9	1
Cadmium	$\mu g/L$	0.54	1
Chromium	$\mu g/L$	44	1
Selenium	μg/L	0.5	1
Zinc	$\mu g/L$	< 4.6	1

Table 4. Effluent Characterization Using Self-Monitoring Data

			Current Per	mit Limits	#	Perce	entiles	Data
Parameter	Season	Units	30 day	Daily	Obs.	50^{th}	95^{th}	Range
Outfall 001								
Water Temperature	Annual	C	Mon	itor	240	21.6	26.1	13.3-27.5
Residue, Total Dissolved	Annual	mg/l	Mon	itor	24	2710	3730	2170-3780
Total Suspended Solids	Annual	mg/l	Mon	itor	4	11.5	20.5	6-22
Oil and Grease, Total	Annual	mg/l	15	20	241	0	0	0-14
Nitrogen, Nitrite (NO2) ^A	Annual	mg/l	Mon	itor	240	0.49	1.05	0-2.02
Nitrogen, Nitrate (NO3) ^A	Annual	mg/l	Mon	itor	240	189	280	4.47-368
Fluoride, Total (F)	Annual	mg/l	Mon	itor	241	11.6	16	0.8-23.6
Chromium, Dissolved Hexavalent	Annual	$\mu g/l$	Mon	itor	241	0	0	0-12
Nickel, Total Recoverable	Annual	$\mu g/l$	Mon	itor	241	67	156	0-330
Zinc, Total Recoverable ^B	Annual	$\mu g/l$	Mon	itor	4	211	300	87-315
Copper, Total Recoverable	Annual	μ g/l	Mon	itor	241	13	27	0-57
Flow Rate	Annual	MGD	Mon	itor	1813	2.01	2.75	0.001-4.61
Mercury, Total (Low Level)	Annual	ng/l	Mon	itor	11	0	1.13	0-1.5
pH Range Excursion, Maximum Duration	Annual	Minutes		60	1826	0	0	0-55
Acute Toxicity, Ceriodaphnia dubia	Annual	TUa	Mon	itor	20	0	0.05	0-1
pH, Maximum	Annual	S.U.	Mon	itor	1794	8.2	8.5	7.2-12
pH, Minimum	Annual	S.U.	Mon	itor	1794	7.8	8	2-8.2
Residue, Total Filterable	Annual	mg/l	Mon	itor	216	2770	3630	336-4580
pH Range Excursions, > 60 Minutes	Annual	Number/Day		0	1826	0	0	0-0
pH Range Excursions, Monthly Total Duration	Annual	Minutes		446	90	0	0	0-125
Sludge Monitoring Station 588								
Sludge Weight	Annual	Dry Tons	Moni	tor	10	0.233	0.548	0.146-0.605
Sludge Volume, Gallons	Annual	Gals	Moni	tor	10	4000	12000	3500-12000

			Current Per	rmit Limits	#	Perc	entiles	Data
Parameter	Season	Units	30 day	Daily	Obs.	50^{th}	95^{th}	Range
Internal Monitoring Station 601								
pН	Annual	S.U.	Mor	nitor	240	8.57	8.99	7.8-9.3
Total Suspended Solids	Annual	mg/l	Mor	nitor	240	4.4	12.1	0-18
Total Suspended Solids	Annual	kg/day	295	689	240	27	83.8	0-116
Oil and Grease, Total	Annual	mg/l	Mor	nitor	240	0	0	0-0
Oil and Grease, Total	Annual	kg/day	77	232	240	0	0	0-0
Chromium, Dissolved Hexavalent	Annual	$\mu g/l$	Mor	nitor	241	0	0	0-18
Chromium, Dissolved Hexavalent	Annual	kg/day		0.22	241	0	0	0-0.127
Chromium, Total (Cr)	Annual	μg/l	Mor	nitor	241	26	50	0-130
Chromium, Total (Cr)	Annual	kg/day	3.89	9.73	241	0.172	0.354	0-0.79
Nickel, Total (Ni)	Annual	μg/l	Mor	nitor	241	86	193	20-410
Nickel, Total (Ni)	Annual	kg/day	2.92	8.75	241	0.554	1.41	0.111-2.82
Copper, Total Recoverable	Annual	μg/l	Mor	nitor	241	15	33	0-92
Copper, Total Recoverable	Annual	kg/day	Mor	nitor	241	0.101	0.227	0-0.634
Flow Rate	Annual	MGD	Mor	nitor	1782	1.6	2.12	0.24-2.91
Internal Monitoring Station 602								
Flow Rate	Annual	GPD			1810	3210	5770	0-105000
pН	Annual	S.U.			60	7.1	7.36	6.6-7.61
Total Suspended Solids	Annual	mg/l	30	45	60	7	20.1	0-29
Nitrogen, Ammonia (NH3)	Annual	mg/l			60	0.07	15.8	0-85.8
Fecal Coliform	Annual	#/100 ml	1000	2000	30	7.5	111	0-312
CBOD 5 day	Annual	mg/l	25	40	60	0	13.1	0-20

^ANitrate and Nitrate values were added together for use in determining Projected Effluent Quality values.

^BZinc - self- monitoring data for zinc was associated with storm water grab sampling intended to assess first flush conditions in lieu of composite samples meant for determining projected effluent quality values. Therefore, the four self-monitoring data points were removed from consideration for determining projected effluent quality values.

Table 5. Projected Effluent Quality

		Number of	Number >	PEQ	PEQ
Parameter	Units	Samples	MDL	Average	Maximum
Self-Monitoring (DMR) Data ^A					
Ammonia-N (Summer)	mg/L	0	0		
Chromium, Dissolved Hexavalent	$\mu g/L$	241	5	6.132	8.4
Copper - TR	$\mu g/L$	241	158	21.79	30.21
Fluoride	mg/L	239	239	14.11	16.65
Mercury - TR (BCC)	ng/L	11	4	1.862	2.55
Nickel - TR	$\mu g/L$	241	238	135.7	197
Nitrogen, Nitrite ^C	mg/L	240	239	0.845	1.18
Nitrogen, Nitrate ^C	mg/L	240	222	246.4	309.5
Nitrate-N + Nitrite-N ^C	mg/L			247.2	310.7
Total Filterable Residue	mg/L	239	239	3280	3796
Combined Other Data ^B					
Ammonia-N (Winter)	mg/L	1	1	7.106	9.734
Barium	μg/L	1	1	240	329
Cadmium - TR	μg/L	1	1	2.444	3.348
Chlorine – Total Residual	mg/L	1	1	0.453	0.62
Chromium - TR	μg/L	1	1	199.1	272.8
Iron - TR	$\mu g/L$	1	1	769	1054
Magnesium	mg/L	1	1	113	155
Manganese - TR	$\mu g/L$	1	1	679	930
Molybdenum	$\mu g/L$	1	1	2082	2852
Phosphorus	mg/L	1	1	0.996	1.364
Selenium - TR	μg/L	1	1	2.263	3.1
Sulfates	mg/L	1	1	2580	3534
Titanium	$\mu g/L$	1	1	40.73	55.8
Zinc - TR	μg/L	1	0		

A = DMR data combined with Ohio EPA and/or Form 2.C Application data

DMR = Discharge Monitoring Report

^B= Combined other data sources include Form 2.C and Ohio EPA data

^C= Nitrate and Nitrate values were added together for use in determining Projected Effluent Quality values.

MDL = analytical laboratory method detection limit

PEQ = projected effluent quality

TR = total recoverable

Table 6. Summary of Acute Toxicity Results

	Ceriodaphnia Dubia
Date	TU_a
5/9/2018	AA
8/6/2018	AA
11/6/2018	AA
2/5/2019	AA
5/8/2019	AA
8/14/2019	AA
11/6/2019	AA
2/4/2020	AA
5/6/2020	1.0
8/5/2020	AA
11/4/2020	AA
2/2/2021	AA
5/4/2021	AA
8/3/2021	AA
11/2/2021	AA
2/1/2022	AA
5/3/2022	AA
8/22/2022	AA
11/8/2022	AA
2/7/2023	AA

AA = non-detection; analytical method detection limit of $0.2\ TU_a$

 TU_a = acute toxicity unit

Table 7. Use Attainment Table for the Muskingum River Study Area

Location	Year(s)	River Mile	AL Use Designation	Attainment Status	Causes of Impairment	Sources of Impairment
Tuscarawas River SW of Canal Lewisville	2005	3.0	EWH	FULL	N/A	N/A
Tuscarawas River at Coshocton @ Kia Bridge	2005	0.3	EWH	FULL	N/A	N/A
Muskingum River Downstream Walhonding River/Tuscarawas River	2006	110.7	WWH	FULL	N/A	N/A
Muskingum River 1.0 Mile Downstream Coshocton WWTP	2006	107.6	WWH	FULL	N/A	N/A
Muskingum River 1.5 Mile NE of Conesville @ Twp. Rd. 1182	2006	105.0	WWH	FULL	N/A	N/A
Muskingum River 1.5 Mile Upstream. Wills Creek	2006	101.8	WWH	FULL	N/A	N/A

EWH = Exceptional Warmwater Habitat WWH = Warmwater Habitat

WWTP = Wastewater Treatment Plant

Table 8. Water Quality Criteria in the Study Area

			Outside Mi	xing Zone Cr	iteria	Inside	
			Average		Maximum	Mixing	
		Human	Agri-	Aquatic	Aquatic	Zone	
Parameter	Units	Health	culture	Life	Life	Maximum	
Ammonia-N (Summer)	mg/L			0.8			
Ammonia-N (Winter)	mg/L			2.6			
Barium	μg/L			1500	6400	13000	
Cadmium - TR	μg/L		50	5.3	14	27	
Chlorine, Total Residual	mg/L			0.011	0.019	0.038	
Chromium - TR	μg/L		100	190	4000	8000	
Chromium, Dissolved							
Hexavalent	μg/L			11	16	31	
Copper - TR	μg/L		500	21	35	70	
Fluoride	mg/L		2				
Iron - TR	$\mu g/L$		5000				
Magnesium	mg/L						
Manganese - TR	$\mu g/L$						
Mercury - TR (BCC) A	ng/L	12	10000	910	1700	3400	
Molybdenum	$\mu g/L$			20000	190000	370000	
Nickel - TR	μg/L	4600	200	120	1100	2100	
Nitrate-N + Nitrite-N	mg/L		100				
Phosphorus	mg/L						
Selenium - TR	μg/L	4200	50	5	62	120	
Sulfates	mg/L						
Titanium	μg/L						
Total Filterable Residue	mg/L			1500			
Zinc - TR	μg/L	26000	25000	270	270	550	

A = Bioaccumulative Chemical of Concern (BCC)

TR = total recoverable

Table 9. Instream Conditions and Discharger Flow

Parameter	Units		Value	Basis
Upstream Flows				
Muskingum River				
7Q10	cfs	annual	544	Combined USGS gages ^B , 1921-2023 data
1Q10	cfs	annual	385	Combined USGS gages ^B , 1921-2023 data
30Q10	cfs	summer	630	Combined USGS gages ^B , 1921-2023 data
		winter	1093	Combined USGS gages ^B , 1921-2023 data
Harmonic Mean Flow	cfs	annual	2033	Combined USGS gages ^B , 1921-2023 data
Mixing Assumption	%	average	100	Stream-to-discharge ratio
	%	max	100	Stream-to-discharge ratio
Instream Hardness	mg/L	annual	264	Combined EA3 ^A ; 18 values, 2015-20
Instream pH	S.U.	summer	8.11	Combined EA3 ^A ; 16 values, 2015-20
		winter	8.13	Combined EA3 ^A ; 5 values, 2015-20
Instream Temperature	°C	summer	24.2	Combined EA3 ^A ; 17 values, 2015-20
		winter	6.69	Combined EA3 ^A ; 4 values, 2015-20
Discharge Flows				
Coshocton WWTP 001	cfs(MGD)	design	6.81 (4.4)	Average Daily Design Flow
Cleveland Cliffs 001	cfs(MGD)	95 th %	4.18 (2.7)	95th% of values May 2018-April 2023
Background Water Quality				
Ammonia-N (Summer)	mg/L	annual	0.077	MOR 801; 7 values, 2 <mdl, 2006-08<="" td=""></mdl,>
Ammonia-N (Winter)	mg/L	annual	0.098	MOR 801; 8 values, 1 <mdl, 2006-08<="" td=""></mdl,>
Antimony	$\mu g/L$	annual	0	No representative data available.
Arsenic - TR	μg/L	annual	2.19	EA3, 7 values, 0 < MDL, 2006-15
Barium	μg/L	annual	56.3	EA3, 7 values, 0 < MDL, 2006-15
Beryllium	μg/L	annual	0	No representative data available.
Bis(2-ethylhexyl) phthalate	$\mu g/L$	annual	0	No representative data available.
Butyl benzyl phthalate	μg/L	annual	0	No representative data available.
Cadmium - TR	μg/L	annual	0.1	EA3, 7 values, 0 < MDL, 2006-15
Chlorine	mg/L	annual	0	No representative data available.
Chromium - TR	$\mu g/L$	annual	1	EA3, 7 values, 0 < MDL, 2006-15
Chromium, Dissolved	/T		0	NT
Hexavalent	μg/L	annual	0	No representative data available.
Copper - TR	μg/L	annual	1	EA3, 7 values, 0 < MDL, 2006-15
Cyanide - free	μg/L	annual	0	No representative data available.
Fluoride	mg/L	annual	0	No representative data available.

Parameter	Units		Value	Basis
Iron - TR	μ g/L	annual	1642	EA3, 7 values, 0 < MDL, 2006-15
Lead - TR	$\mu g/L$	annual	1.99	EA3, 7 values, 0 < MDL, 2006-15
Molybdenum	$\mu g/L$	annual	0	No representative data available.
Nickel - TR	$\mu g/L$	annual	1.31	EA3, 7 values, 0 < MDL, 2006-15
Nitrate-N + Nitrite-N	mg/L	annual	1.91	EA3, 7 values, 0 < MDL, 2006-15
Selenium - TR	$\mu g/L$	annual	1	EA3, 7 values, 0 < MDL, 2006-15
Silver	$\mu g/L$	annual	0	No representative data available.
Strontium	$\mu g/L$	annual	228	EA3, 7 values, 0 < MDL, 2006-15
Thallium	$\mu g/L$	annual	0	No representative data available.
Total Filterable Residue	mg/L	annual	396	EA3, 7 values, 0 < MDL, 2006-15
Zinc - TR	$\mu g/L$	annual	12.29	EA3, 7 values, 0 < MDL, 2006-15

USGS = United States Geological Survey

WWTP = Wastewater treatment plant

MOR = Monthly Operating Report (Coshocton WWTP)

DSW = Ohio EPA Division of Surface Water

MGD = million gallons per day

NPDES = National Pollutant Discharge Elimination System

EA3 = Ohio EPA Ecological Assessment and Analysis Application – Station R11W01

^A Stations R11W03, 611740 and 601810

^B Stations 03129000 and 03138500

Table 10. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

	_	(Outside Mixing Zone Criteria				
	<u>.</u>		Average		Maximum	Mixing	
		Human	Agri-	Aquatic	Aquatic	Zone	
Parameter	Units	Health	culture	Life	Life	Maximun	
Ammonia-N (Summer)	mg/L			38.5			
Ammonia-N (Winter)	mg/L			229			
Barium ^B	μg/L			66549 ^A	208409 ^A	13000	
Cadmium - TR ^B	$\mu g/L$		8446 ^A	240^{A}	457 ^A	27	
Chlorine, Total Residual	mg/L			1.416 ^A	1.735 ^A	0.038	
Chromium - TR ^B Chromium, Dissolved	$\mu g/L$		16757 ^A	8706	131345 ^A	8000	
Hexavalent B	μg/L			507	526 ^A	31	
Copper - TR	μg/L		84457 ^A	922 ^A	1118 ^A	70	
Fluoride	mg/L		956				
Iron - TR	$\mu g/L$		569987				
Mercury – TR ^C	ng/L	12	$10000{}^{\mathrm{A}}$	910	1700	3400	
Molybdenum	μg/L			$2580000^{\;A}$	$17400000^{\rm \ A}$	370000	
Nickel - TR ^B	μg/L	778334^{A}	33630^{A}	5468 ^A	36087 ^A	2100	
Nitrate-N + Nitrite-N	mg/L		16604				
Selenium - TR	μg/L	710686^{A}	8294^{A}	185 ^A	2004^{A}	120	
Total Filterable Residue	mg/L			51243			
Zinc - TR	μg/L	4400000^{A}	4230000^{A}	11881 ^A	8476 ^A	550	

^A Allocation must not exceed the Inside Mixing Zone Maximum

^B Parameter would not require a WLA based on reasonable potential procedures, but allocation requested by Permits Group.

^C Bioaccumulative Chemical of Concern (BCC), WQS must be met at end-of-pipe.

Table 11. Parameter Assessment

Group 1: Due to a lack of numeric criteria, the following parameters were not evaluated at this time.

Magnesium Manganese - TR

Sulfates Titanium

Group 2: PEQ < 25 percent of WQS or all data below minimum detection limit. WLA not required. No limit recommended; monitoring optional.

Ammonia (S&W) Barium Iron - TR Mercury - TR (BCC) Molybdenum Zinc - TR

Group 3: PEQ_{max} < 50 percent of maximum PEL and PEQ_{avg} < 50 percent of average PEL. No limit recommended; monitoring optional.

Chromium, Dissolved

Cadmium - TR Chromium - TR Hexavalent
Copper - TR Fluoride Nickel - TR

Nitrate-N + Nitrite-N Selenium - TR Total Filterable Residue

Group 4: $PEQ_{max} \ge 50$ percent, but < 100 percent of the maximum PEL or $PEQ_{avg} \ge 50$ percent, but < 100 percent of the average PEL. Monitoring is appropriate.

No parameters meet the criteria of this group.

Group 5: Maximum PEQ ≥ 100 percent of the maximum PEL or average PEQ ≥ 100 percent of the average PEL, or either the average or maximum PEQ is between 75 and 100 percent of the PEL and certain conditions that increase the risk to the environment are present. Limit recommended.

Limits to Protect Numeric Water Quality Criteria

			Recommended Effluent Limits			
Parameter	Units	Period	Average	Maximum		
Chlorine – Total						
Residual	mg/L			0.038		

PEL = preliminary effluent limit

PEQ = projected effluent quality

WLA = wasteload allocation

WQS = water quality standard

Table 12. Final Effluent Limits

		Concen	tration	Loading	g (kg/day)ª	
		30 Day	Daily	30 Day	Daily	•
Parameter	Units	Average	Maximum	Average	Maximum	Basis ^b
Outfall 001						
Water Temperature	$^{\circ}\mathrm{C}$		Moi	nitor		M^c
Total Suspended Solids	mg/L		Moi	nitor		M^{e}
Oil & Grease	mg/L		Moi	nitor		M^c
Nitrite Plus Nitrate, Total	mg/L		Moi	nitor		M^c
Fluoride, Total (F)	mg/L		Moi	nitor		M^{c}
Chromium, Hexavalent Dissolved	μg/L		Moi	nitor		\mathbf{M}^{c}
Nickel, Total Recoverable	μ g/L		Moi	nitor		\mathbf{M}^{c}
Zinc, Total Recoverable	$\mu g/L$		Moi	nitor		M^{e}
Copper, Total Recoverable	μg/L		Moi	nitor		M^{c}
Oxidants, Total Residual	mg/L		0.0048			BTJ
Flow Rate	MGD		Moi	nitor		M^c
Mercury, Total (Low Level)	ng/L		Moi	nitor		M^c
Acute Toxicity, Ceriodaphnia dubia	TUa		Moi	nitor		M^c
pH, Maximum	S.U.		Moi	nitor		WQS^d
pH, Minimum	S.U.		Moi	nitor		WQS^d
Residue, Total Filterable	mg/L		Moi	nitor		M ^c
pH Range Excursions, > 60 Minutes pH Range Excursions, Monthly Total	Number/Day		0			WQSd
Minutes	Minutes		446			WQS ^d
Outfall 002						
Total Suspended Solids	mg/L		Moi	nitor		\mathbf{M}^{e}
Zinc, Total Recoverable	μg/L		Mo	nitor		M ^e
Sludge Monitoring Station 588						
Sludge Weight	Dry Tons		Mo	nitor		M^{c}
Sludge Volume	Gallons		Moi	nitor		M ^c
Internal Monitoring Station 601						
рН	S.U.		Moi	nitor		M^{c}
Total Suspended Solids	mg/L			295	689	BCT
Oil & Grease	mg/L			77	232	BCT
Chromium, Hexavalent Dissolved	μg/L				0.22	BTJ
Chromium	μg/L			3.89	9.73	BAT
Nickel	μg/L			2.92	8.75	BAT
Copper	μg/L		Moi	nitor		M^c

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		Concen	tration	Loading	g (kg/day)a	_
		30 Day	Daily	30 Day	Daily	
Parameter	Units	Average	Maximum	Average	Maximum	Basis ^b
Flow Rate	MGD		Moi	nitor		M ^c
Internal Monitoring Station 602						
Flow Rate	GPD		Moi	nitor		M^c
pН	S.U.		Moi	nitor		M^{c}
Total Suspended Solids	mg/L	30	45			BPT
Fecal Coliform - Summer Carbonaceous Biological Oxygen	#/100 mL	1000	2000			WQS
Demand 5-Day	MGD	25	40			BPT
Internal Monitoring Station 603						
pH	S.U.		Moi	nitor		M^{c}
Total Suspended Solids	mg/L			256	597	BCT
Oil & Grease	mg/L			77	232	BCT
Chromium, Hexavalent Dissolved	$\mu g/L$				0.22	BTJ
Chromium	$\mu g/L$			3.36	8.44	BAT
Nickel	$\mu g/L$			2.53	7.55	BAT
Copper	$\mu g/L$		Moi	nitor		M^{c}
Flow Rate	MGD		Moi	nitor		M^c

^a Loadings for 601 and 603 are summarized in Attachment 1.

Definitions:

BAT = Best Available Technology Economically Achievable, 40 CFR Part 420, Subpart H - Salt Bath Descaling, Subpart I – Acid Pickling, Subpart J – Cold Forming.

BCT = Best Conventional Pollutant Control Technology, 40 CFR Part 420, Subpart H - Salt Bath Descaling, Subpart I - Acid Pickling, Subpart J - Cold Forming, Subpart K - Alkaline Cleaning.

BPT = Best Practicable Waste Treatment Technology, 40 CFR Part 133, Secondary Treatment Regulation

BTJ = Best Technical Judgment

M = Division of Surface Water NPDES Permit Guidance 2: Determination of Sampling Frequency Formula for Industrial Waste Discharges

WQS = Ohio Water Quality Standards (OAC 3745-1)

Monitoring of flow and other indicator parameters is specified to assist in the evaluation of effluent quality and treatment plant performance.

^d pH Effluent limitations under continuous monitoring pursuant 40 CFR 401.17. The acceptable pH range is 6.5 to 9.0 as established by Ohio Water Quality Standards.

^e Total Suspended Solids and Zinc monitoring and benchmarks are proposed at outfalls 001 and 002. Benchmark and monitoring for total suspended solids is provided as a substitute parameter in lieu of aluminum as referenced under industrial activities subsector F1 in General Permit number OHR000007.

Attachment 1. Applicable Federal Effluent Limitation Guidelines

	Production	Applicable ELG		Total Suspe	ended Solids	Oil & (Grease	Total C	hromium	Ni	ckel	Naphthalene	TCE
Operation	tons/day	(40 CFR 420)	Units	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Daily Max	Daily Max
alt Bath Descaling	478	82(a)(4)/83(a)(4)	lbs/1000lbs	0.0964	0.0413			0.00138	0.000551	0.00124	0.000413	1	
Oxidizing - Cont.			lbs/day	92.2	39.5			1.32	0.527	1.19	0.395		9
Acid Pickling	1052	92(c)(3)/93(c)(3)	lbs/1000lbs	0.438	0.188	0.188	0.0626	0.00626	0.00250	0.00563	0.00188		
Combination			lbs/day	922	396	396	132	13.2	5.26	11.8	3.96		21
Cold Rolling	922	102(a)(1)/(103(a)(1)	lbs/1000lbs	0.00125	0.000626	0.000522	0.000209	2.09E-05	0.0000084	1.88E-05	0.0000063	0.0000021	3.1E-06
Single Stand Recirc.			lbs/day	2.31	1.15	0.963	0.385	0.0385	0.015	0.0347	0.012	0.0039	0.0057
Alkaline Cleaning, BPT	46	112(b)	lbs/1000lbs	0.102	0.0438	0.0438	0.0146						
Continuous			lbs/day	9.38	4.03	4.03	1.34		6				3
Alkaline Cleaning, NSPS	240	114(a)	lbs/1000lbs	0.0146	0.00626	0.00626	0.00209	22			221		
			lbs/day	7.01	3.00	3.00	1.00						
Acid Pickling (comb)	11	92(c)(6)/93(c)(6)	kg/unit/day	5.72	2.45	2.45	0.819	0.0819	0.0327	0.0735	0.0245	1.22	
ume Scrubbers		# 18/00/28/16 NOONES	lbs/day	139	59.4	59.4	19.9	1.99	0.793	1.78	0.594		-64 -63
Non-categorical flows	0.246	420.08	mg/I	70	30	30	10	1.0	0.4	0.9	0.3		(,
MGD			lbs/day	144	61.5	61.5	20.5	2.05	0.821	1.85	0.615		1
otal			lbs/day	1315.90	564.58	524.893	175.125	18.5985	7.416	16.6547	5.576	0.0039	0.0057
			kg/day	597	256	238	79.4	8.44	3.36	7.55	2.53	0.002	0.003
		Current 601 limits	kg/day	689	295	232	77	9.73	3.89	8.75	2.92	0.002	0.003
			% Change	-13.4%	-13.2%	2.6%	3.1%	-13.3%	-13.6%	-13.7%	-13.4%	0.0%	0.0%
		Proposed 603 limits	kg/day	597	256	232	77	8.44	3.36	7.55	2.53	0.002	0.003
		No additional loadi	ngs were requ	ested with th	ne modification	, thus Oil & G	rease limits w	/ill remain a	t the previous	ly permitte	d 232 kg/day l	Daily and 77 k	g/day Monti

Attachment 2. List of Approved Boiler/Cooling Water System Additives

Water Treatment Additives

Supplier and Product Name

ChemTreat P817E

ChemTreat B120

ChemTreat CL4386

ChemTreat P810

ChemTreat FO120

ChemTreat CL16

ChemTreat BL1342

ChemTreat CT709

ChemTreat CL1352

ChemTreat CL4850

ChemTreat CT236

ChemTreat CL236

ChemTreat CL206

ChemTreat BL1343

ChemTreat CL2427

Attachment 3. Whole Effluent Toxicity Reasonable Potential Analysis

The reasonable potential analyses in Table A is performed for *Ceriodaphnia dubia* acute (TUa Cd). The facility historically had a presence of *Ceriodaphnia dubia* acute toxicity in the effluent identified by OEPA compliance sampling where limits were subsequently imposed in the permit. Since that time the facility was able to identify the source of the toxicity, adjust treatment operations, and eliminate acute toxicity leading to the removal of the limitation. Continued monitoring was prescribed in the previous permit to assess whether the toxicity returns. Tables B and C are not used as there were no recent near-field or far-field toxicity tests performed during the review period.

Hazard Category Summary

	Ceriodaj	ohnia dubia	Pimephales promelas		
	Acute	Chronic	Acute	Chronic	
Effluent Toxicity (Table A)	4	N/A	N/A	N/A	
Near-Field Impact (Table B)	N/A	N/A	N/A	N/A	
Far-field Impact (Table C)	N/A	N/A	N/A	N/A	
		4	N/.	A	

Hazard Categories:

- 1: Toxicity adequately documented
- 3: Toxicity possible
- 2: Toxicity strongly suspected
- 4: No toxicity

Table A. Effluent Toxicity

	Ceriodap	hnia dubia	Pimephales promelas		
	Acute	Chronic	Acute	Chronic	
WLA	1.0				
# of tests	20				
Maximum value	1.0				
Percent of tests >WLA	0				
Geometric mean	0.11*				
Average Exceedance (Geomean * Percent of tests >WLA)	0				
Average Exceedance / WLA	0				

(*) Geometric mean was calculated using 0.5 times the Method Detection Limit (MDL) for samples reported at less than MDL.

Attribute Evaluated	<u>Hazard</u> Category 1	Hazard Category 2	Hazard Category 3	<u>Hazard</u> Category 4
Degree of Toxicity	Adequately Documented	Strongly Suspected	Possible	None None
(1) Minimum number of tests (Where values are reported) >MDL	3	1	0 or 1 TUa Cd	0 or 1 TUa Cd
(2) Percent of tests >WLA	>30	20 to 30	10 to 20	< <u>10</u> TUa Cd
(3) Average Exceedance/WLA ¹ (Tables B and C data not available)				
(a) Acute ²	> 0.3	≥ 0.3	≥ 0.2	< 0.2 TUa Cd
(4) Maximum TU value (Tables 3B and 3C data not available)	≥(3xWLA)	≥WLA	≥WLA TUa Cd	<wla< td=""></wla<>

Table B. Near-Field Toxicity - Not Used

Attribute Evaluated	Hazard Catagory 1	Hazard Catagory 2	Hazard Catagory 3	Hazard Cotogory 4
Degree of Toxicity	Category 1 Adequately Documented	Category 2 Strongly Suspected	Category 3 Possible	None None
(1) Mortality within mixing zone ³	≥ 20%	≤ 20%	≤ 20%	< 20%
(2) Stream community impact				
(a) implied chemically ^{4, <u>6</u>}	≥3xIMZM or >LC50	≥1.5xIMZM or >LC50	≥0.75xIMZM or >0.75xLC50	≤0.5xIMZM or ≤0.75xLC50
(b) implied toxicologically ⁴	≥1.0 TUa	≥1.0 TUa	≥1.0 TUa	<1.0 TUa
(c) implied biologically	Toxic	Fair/poor community	Slight impact	None
				TUa

Table C. Far-Field Toxicity – Not Used

Attribute Evaluated	Hazard 1	Hazard 2	Hazard 2	<u>Hazard</u>
	Category 1	Category 2	Category 3	Category 4
Degree of Toxicity	Adequately	Strongly	Possible	None
	Documented	Suspected		
(1) Aquatic life use impairment	$\underline{\text{Yes}}^{\underline{5}}$	Yes or partial ⁵	<u>Partial</u>	<u>None</u>
(Ohio EPA biological criteria)				
(2) Stream community impact	Significant effect	Significant effect	Unknown or slight	None
implied toxicologically ³			<u>effect</u>	
	G 1 11 1	a	a	27
(3) Other indicators	Stress indicated	Stress indicated	Stress indicated	No stress

 $^{^1}$ Compare (per cent exceedances x geometric mean TU) to table factor. 2 Use 0.3 x WLA for situations where AIM exists.

³ Results of ambient toxicity test are not binding or required for classification as to category but, if available, will be interpreted under the weight of evidence principle giving due consideration as to sampling location and conditions.

⁴ Based on effluent data. May not be appropriate for situations where AIM exists.

⁵ Lack of attainment due to toxic, complex or unidentifiable type of impact.

⁶ The LC50-based criteria are used only for pollutant parameters that do not have numeric criteria.

Addendum 1. Acronyms

ABS Anti-backsliding

BAT Best Available Technology Economically Achievable
BCT Best Conventional Pollutant Control Technology

BPJ Best professional judgment

BPT Best Practicable Control Technology Currently Available

BTJ Best technical judgment CFR Code of Federal Regulations

CONSWLA Conservative substance wasteload allocation

CWA Clean Water Act

CWIS Cooling water intake structure
DMR Discharge Monitoring Report
DMT Dissolved metal translator

ELG Federal effluent limitation guideline

gpm Gallons per minute

IMZM Inside mixing zone maximum MDL Analytical method detection limit

MGD Million gallons per day

NPDES National Pollutant Discharge Elimination System

NSPS New source performance standards

OAC Ohio Administrative Code

Ohio EPA Ohio Environmental Protection Agency

ORC Ohio Revised Code

ORSANCO Ohio River Valley Water Sanitation Commission

PEL Preliminary effluent limit PEQ Projected effluent quality

PMP Pollution Minimization Program
PPE Plant performance evaluation
SIC Standard Industrial Classification
TBEL Technology-based effluent limit
TMDL Total Daily Maximum Load
TRE Toxicity reduction evaluation

TU Toxicity unit

U.S. EPA United States Environmental Protection Agency

WET Whole effluent toxicity
WLA Wasteload allocation

WQBEL Water-quality-based effluent limit

WQS Water Quality Standards