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Application No. OH0009997 Issue Date: October 31, 1997 Effective Date: December 1, 1997 Expiration Date: November 27, 2002

# 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),

#### AK Steel Corporation

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the wastewater treatment works located at 1801 Crawford Street, Middletown, Ohio, Butler County

and discharging to the Great Miami River, North Branch of Dicks Creek, and Dicks Creek

in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

Applicant AK Steel requests approval to discharge increased loadings of free cyanide to the Great Miami River based on the waiver contained within R.C. 6111.12(A)(3) and Ohio Adm. Code 3745-1-05(D)(1)(b) which allows the Director to allocate as much as 80% of a waterway's pollutant assimilative capacity to existing sources without antidegradation review. The waiver found in R.C. 6111.12(A)(3) was declared unconstitutional and severed from the statute by the Franklin County Court of Common Pleas in <u>Rivers Unlimited</u>, Inc., et al. v. Schregardus (March 3, 1997), 95 CVH12-8797, slip op. at 23.

Applicant also bases its request to discharge increased loadings of free cyanide to the Great Miami River on the "limited water quality" waiver of Ohio Adm. Code 3745-1-05(D)(1)(a). Pursuant to Ohio Adm. Code 3745-1-21, the Great Miami River is classified as a warm water habitat. Thus, the waiver provision of Ohio Adm. Code 3745-1-05(D)(1)(a) does not apply to discharges to the Great Miami River.

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In accordance with the above reasons, I have determined that the request for increased loadings  $\sim$  cannot be granted by waiver and therefore must go through antidegradation review in accordance with R.C. 6111.12 and Ohio Adm. Code 3745-1-05. Based on my review of the antidegradation \_ review criteria given in Ohio Adm. Code 3745-1-05(C), I have determined that a lowering of water quality in the Great Miami River and subsequently the Ohio River is not necessary. Therefore, in accordance with Ohio Adm. Code 3745-1-05(C)(8), I deny the Applicant's request to increase loading limits as proposed.

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.

Donald R Schreyperdus

Donald R. Schregardus Director

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in ~ accordance with the following limitations and monitoring requirements from outfall: IID00001001\*. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUEN	IT CHARAC	TERISTIC		HARGE LIMI		MONITORING REQUIREMENTS		
Reporting Code Units		Parameter	Concentration Specified Units 30 day Daily		Loading* kg/day 30 day Daily		Meas. Freq.	Sample Type
						<		
00530	mg∕l	Total Suspended Solids	•	-	2706	678 <b>9</b>	1/Week	Calculated
00550	mg∕l	Oil and Grease, Total	-	-	173	508	1/Week	Calculated
01051	µg∕l	Lead, Total	-	-	6.33	18.90	1/Week	Calculated
99983	µg∕l	Zinc, Total	-	•	6.56	24.14	1/Week	Calculated
50050	MGD	Flow Rate	-	-	-	-	Daily	Calculated

\* Outfall 11D00001001 is a compliance point established for the sum of the mass discharges from internal stations 11D00001613 and 11D00001614. There is no physical monitoring location for outfall 11D00001001.

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Form EPA 4428

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# Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

IT CHARAC	TERISTIC			TATIONS		MONITORING REQUIREMENTS		
ing					-	Meas.	Sample	
Units	Parameter	30 day	Daily	30 day	Daily	Freq.	Туре	
mg/l	Total Suspended Solids	-	-	•	•	3/Week	24 Hr. Composite	
mg∕l mg∕l	Oil and Grease Nitrogen, Ammonia	•	10	-	•	3/Week	Grab	
	(Summer) (Winter)	•	11.8	-	44.2	3/Week	24 Hr. Composite	
µg/l	Selenium, Total Recoverable	•	-	-	-		24 Hr. Composite II, Item M	
		-	-	•	-	3/Week	24 Hr. Composite Grab	
mgd	Flow Rate	-	•	-	-	Daily	Total	
	<u>Ceriodaphnia</u> dubia	-	•	-	-	2/Year	Part II, Item H.	
TUc		•	•	-	-	2/Year	Part II, Item H.	
TUa	Acute Toxicity,						·	
TUc	Chronic Toxicity,	•	-	-	-	2/Year	Part II, Item H.	
mg∕l	<u>Pimephales</u> Cyanide, Free	-	-	-	-	2/Year 3/Week	Part II, Item H. Grab	
	ng Units mg/l mg/l μg/l μg/l μg/l TUa TUa TUc TUa	Units       Parameter         mg/l       Total Suspended Solids         mg/l       Oil and Grease         mg/l       Nitrogen, Ammonia         (Summer)       (Winter)         µg/l       Selenium, Total Recoverable         µg/l       Selenium, Total Recoverable         µg/l       PCBs         mgd       Flow Rate         TUa       Acute Toxicity,         Ceriodaphnia       dubia         TUc       Chronic Toxicity,         Pimephales       promelas         TUc       Chronic Toxicity,         Pimephales       promelas	ng       Concer         ng       Specifi         Units       Parameter       30 day         mg/l       Oil and Grease       -         mg/l       Oil and Grease       -         mg/l       Nitrogen, Ammonia       -         (Winter)       -       -         µg/l       Selenium, Total Recoverable       -         µg/l       Selenium, Total Recoverable       -         µg/l       Pineyhala       -         TUc       Chronic Toxicity,       -         Ceriodaphnia dubia       -       -         TUa       Acute Toxicity,       -         Pimephales promelas       -       -         TUc       Chronic Toxicity,       -         Pimephales promelas       -       -	ng       Concentration         Units       Parameter       Specified Units         mg/l       Total Suspended Solids       -         mg/l       Oil and Grease       -         mg/l       Oil and Grease       -         mg/l       Nitrogen, Ammonia       -         (Summer)       -       11.8         (Winter)       -       9.9         µg/l       Selenium, Total Recoverable       -         µg/l       Zinc, Total Recoverable       -         µg/l       PCBs       -         mgd       Flow Rate       -         TUa       Acute Toxicity,       -         Ceriodaphnia dubia       -       -         TUa       Acute Toxicity,       -         Pimephales promelas       -       -         TUc       Chronic Toxicity,       -         Pimephales promelas       -       -	ng       Concentration       Load         ng       Specified Units       kg/         Units       Parameter       30 day       Daily       30 day         mg/l       Total Suspended Solids       -       -       -         mg/l       Oil and Grease       -       10       -         mg/l       Nitrogen, Ammonia       -       -       -         (Winter)       -       9.9       -       -         µg/l       Selenium, Total Recoverable       -       -       -         µg/l       Pineyhales       -       -       -         TUa       Acute Toxicity,       -       -       -         Tua       Pimephales promelas       -       -       -         Tube	ng       Concentration       Loading*         Units       Parameter       Specified Units       kg/day         mg/l       Total Suspended Solids       -       -         mg/l       Oil and Grease       -       10       -         mg/l       Nitrogen, Ammonia       -       11.8       -       44.2         (Winter)       -       9.9       -       37.1         µg/l       Selenium, Total Recoverable       -       -       -         µg/l       Selenium, Total Recoverable       -       -       -         µg/l       Concentration       -       -       -         µg/l       Selenium, Total Recoverable       -       -       -         µg/l       Concentration       -       -       -         µg/l       Concentration       -       -       -         µg/l       Selenium, Total Recoverable       -       -       -         µg/l       Poss       -       -       -       -         TUa       Acute Toxicity,       -       -       -       -         TUa       Acute Toxicity,       -       -       -       -         TUa       Acu	ngConcentrationLoading*UnitsParameterSpecified Unitskg/dayMeas.mg/lTotal Suspended Solids3/Weekmg/lOil and Grease-103/Weekmg/lNitrogen, Ammonia-11.8-44.23/Week(Winter)-9.9-37.13/Weekµg/lSelenium, Total RecoverableSee Partµg/lZinc, Total Recoverable3/Weekµg/lPCBsSee Partµg/lCeriodaphnia dubia2/YearTUaAcute Toxicity, Ceriodaphnia dubia2/YearTUcChronic Toxicity, Pimephales promelas2/Year	

The discharge from this outfall is limited to non-contact cooling water, stormwater runoff and river/well water discharges from the coke plant area.

\* Loadings are based on 0.99 MGD.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See Part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
- 4. For the first 18 months of this permit, pH may be monitored by multiple grab samples and reported 3/week. During this time the permittee shall within three months of the effective date of this permit, submit to the Ohio EPA Southwest District Office a schedule for meeting the requirement for continuously monitoring pH at this station, and every six months submit to the Ohio EPA Southwest District Office a status report on meeting the dates in that schedule.

## Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning 53 months from the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001002. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC		HARGE LIMI		-	MONITORING REQUIREMENTS		
•	Reporting Code Units Parameter		Concentration Specified Units 30 day Daily		Loading kg/day 30 day Daily		Meas. Freq.	Sample Type	
00530	mg/l	Total Suspended Solids	-	-	-	-	3/Week	24 Hr. Composite	
00550	mg/l	Oil and Grease	-	10	-	-	3/Week	Grab	
00610	mg/l	Nitrogen, Ammonia							
		(Summer)	2.6	11.8	9.7	44.2	3/Week	24 Hr. Composite	
		(Winter)	-	9.9	-	37.1	3/Week	24 Hr. Composite	
01094	µg/l	Zinc, Total Recoverable	-	-	-	-	3/week	24 Hr. Composite	
39516	µg/l	PCBs	-	•	-	-	1/Month	Grab	
50050	mgd	Flow Rate *	-	•	•	-	Daily	Total	
61425	TÚa	Acute Toxicity,					-		
		Ceriodaphnia dubia	-	-	-	•	Semi-Annu	ally Pt.II, Item H.	
61426	TUc	Chronic Toxicity,							
		Ceriodaphnia dubia	•	-	-	-	Semi-Annu	ally Pt.II, Item H.	
61427	TUa	Acute Toxicity,							
	,	Pimephales prometas	-	-	-	-	Semi-Annu	ally Pt.II, Item H.	
61428	TUc	Chronic Toxicity,						· •	
		Pimephales prometas	-	-	-	-	Semi-Annu	ally Pt.II, Item H.	

The discharge from this outfall is limited to non-contact cooling water, stormwater runoff and river/well water discharges from the coke plant area.

\* Loadings are based on 0.99 MGD.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See Part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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## Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUE	NT CHARAC	TERISTIC		HARGE LIMI			MONITORIN	G REQUIREMENTS
Report	ing		Concentration Specified Units		Loading* kg/day		Meas.	Sample
Code	Units	Parameter	30 day		30 day		Freq.	Туре
00083	units	Color, Severity (1)	-	-	-	-	3/Week	Observation
00530	mg/l	Total Suspended Solids	-	-	-	-	3/Week	24 Hr. Composite
00550	mg/l	Oil and Grease	•	10**	-	-	3/Week	Grab
00610	mg/l	Nitrogen, Ammonia	-	-	-	-	3/Week	24 Hr. Composite
00981	µg/l	Selenium, Total Recoverable	-	-	-	-		II, Item M
00980	µg/l	Iron, Total Recoverable	-	-	-	-	1/Month	24 Hr. Composite
01094	µg/l	Zinc, Total Recoverable	-	•	-	-	3/Week	24 Hr. Composite
39516	μg/l	PCBs	-	-	-	-	1/Month	Grab
50050	mgd	Flow Rate	-	-	-	-	Daily	Total
61424	%Aff	Acute Toxicity,						
		Daphnia Magna 48 hours	-	-	-	•	1/Month	Part II, Item H.
99988	µg/l	Lead, Total Recoverable	-	•	-	-	3/Week	24 Hr. Composite

The discharge from this outfall is limited to stormwater runoff, discharge from station 11D00001631, station 11D00001803, river/well water and cooling tower blowdown.

- \* Loadings are based on 1.27 MGD.
- \*\* Net concentration limit. The difference between the concentration measured at station 1ID00001803 shall not exceed this level.
- (1) See Part II, Item K.
- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See Part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
- 4. For the first 18 months of this permit, pH may be monitored by multiple grab samples and reported 3/week. During this time the permittee shall within three months of the effective date of this permit, submit to the Ohio EPA Southwest District Office a schedule for meeting the requirement for continuously monitoring pH at this station, and every six months submit to the Ohio EPA Southwest District Office a status report on meeting the dates in that schedule.

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning 36 months from the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001003. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUEN	IT CHARAC	TERISTIC	diama and a second s	HARGE LIMI		MONITORIN	MONITORING REQUIREMENTS	
Reporti Code	ng Units	Parameter		ed Units		ading g/day y Daily	Meas. Freq.	Sample Type
00083	units	Color, Severity (1)	-	-	-	-	3/Week	Observation
00530	mg∕l	Total Suspended Solids	-`	-	- 3/	are	3/Week	24 Hr. Composite
00550 00610	mg∕l mg/l	Oil and Grease Nitrogen, Ammonia	-	10** -	- 1	5	J/Week Daily	Grab 24 Hr. Composite
00980	μg/l	Iron, Total Recoverable	-	-	-	-	1/month	24 Hr. Composite
01094	µg/l	Zinc, Total Recoverable	417	457	-	2.2	3/Week	24 Hr. Composite
39516	μg/l	PCBs	-	-	•	-	1/Month	Grab
50050 61421	mgd	Flow Rate -	-	-	-	-	Daily	Total
614-21	%Aff	Acute Toxicity,						
		<u>Daphnia Magna, 48 Hours</u>	-	-	-	-	1/Month	Part II, Item H.
99988	µg/l	Lead, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite

The discharge from this outfall is limited to stormwater runoff, discharge from station 11D00001631, station 11D00001803, river/well water and cooling tower blowdown.

- \* Loadings are based on 1.27 MGD.
- \*\* Net concentration limit. The difference between the concentration measured at station 11D00001803 shall not exceed this level.
- (1) See Part II, Item K.
- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

# Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until 36 months from the effective date of the permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 1ID00001004. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS		
Report	ing		Concentration Specified Units		Loading kg/day		Meas.	Sample	
Code	Units	Parameter	30 day	Daily	30 day	Daily	Freq.	Туре	
00550	mg/l	Oil and Grease	-	10	-	•	3/Week	Grab	
0610	mg/l	Nitrogen, Ammonia	-	-	-	-	3/Week	24 Hr. Composite	
0981	μg/l	Selenium, Total Recoverable	-	-	-	-	See Part I		
1094	µg/l	Zinc, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite	
0050	ngd	Flow Rate	-	-	-	-	Daily	Total	
3599	XTU a	Acute Toxicity,							
	IX-a	Daphnia Magna, 48 Hours	-	•	-	-	Quarterly	Part II, Item I.	
3599	χτυ <sub>c</sub>	Chronic Toxicity,					· · · · · · · · · · · · · · · · · · ·		
	14. c	Daphnia Magna, 21-Day	-	-	-	-	Quarterly	Part II, Item I.	
9988	µg/l	Lead, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite	
9989	μg/l	Copper, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite	

The discharge from this outfall is limited to storm water runoff, discharges from station 11D00001641 and 11D00001642, river/well water and non-contact cooling water.

- The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
- 4. For the first 18 months of this permit, pH may be monitored by multiple grab samples and reported 3/week. During this time the permittee shall within three months of the effective date of this permit, submit to the Ohio EPA Southwest District Office a schedule for meeting the requirement for continuously monitoring pH at this station, and every six months submit to the Ohio EPA Southwest District Office a status report on meeting the dates in that schedule.

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning 36 months from the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001004. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC		DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter		tration ed Units Daily	Load kg/ 30 day	day	Meas. Freq.	Sample Typ <del>e</del>	
00550	mg/l	Oil and Grease	-	10	-	+	3/Week	Grab	
00610	mg/l	Nitrogen, Ammonia	-	•	-	-	3/Week	24 Hr. Composite	
01094	µg/l	Zinc, Total Recoverable	417	457	-	4.7	3/Week	24 Hr. Composite	
50050		Flow Rate	-	-	-	-	Daily	Total	
03599	mgd XTU	Acute Toxicity,							
	/	Daphnia Magna, 48 Hour	-	1.0	-	-	Quarterly	Part II, Item I.	
03598	) truc	Chronic Toxicity,						•	
	/**c	Daphnia Magna, 21-Day	1.0	-	-	-	Quarterly	Part II, Item I.	
99988	µg/l	Lead, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite	
99989	μg/l	Copper, Total Recoverable	63	106	0.64	1.08	3/Week	24 Hr. Composite	

The discharge from this outfall is limited to storm water runoff, discharges from station 11D00001641 and 11D00001642, river/well water and non-contact cooling water.

\* Loadings are based on 2.7 MGD.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001009. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC	DISC	HARGE LIMI	TATIONS		MONITORING REQUIREMENTS		
				tration	Load	•			
Report	ing			ed Units		'day	Meas.*	Sample	
Code	Units	Parameter	30 day	Daily	30 day	Daily	Freq.	Туре	
00335	mg/l	COD	-	-	_	16 <b>9</b>	1/Month	Grab	
00530	mg/l	Total Suspended Solids	-	-	-	-	1/Month	Grab	
00550	mg/l	Oil and Grease	-	-	-	-	1/Month	Grab	
00610	mg/l	Nitrogen, Ammonia	-	-	-	-	1/Month	Grab	
00978	μg/l	Arsenic, Total Recoverable	-	•	-	-	1/Month	Grab	
00981	μg/l	Selenium, Total Recoverable	-	•	-	-	1/Month	Grab	
01079	µg/l	Silver, Total Recoverable	-	-	•	-	1/Month	Grab	
01094	μg/l	Zinc, Total Recoverable	-	-	-	-	1/Month	Grab	
01171	µg/l	Chromium, Hexavalent Dissolved	-	-	-	-	1/Month	Grab	
50050	mgd	Flow	-	•	-	-	Daily	Estimate	
61425	TŪa	Acute Toxicity,							
		Ceriodaphnia dubia	-	-	-	-	6/Year	Part II, Item H.	
61427	TUa	Acute Toxicity,						·	
		Pimephales promelas	-	-	-	-	6/Year	Part II, Item H.	
99984	µg/l	Nickel, Total Recoverable	-	-	-	•	1/Month	Grab	
99988	μg/l	Lead, Total Recoverable	-	-	•	•	1/Month	Grab	
99989	µg/l	Copper, Total Recoverable	-	-	-		1/Month	Grab	
99990	μg/l	Cadmium, Total Recoverable	-	-	-		1/Month	Grab	
99992	μg/l	Mercury, Total Recoverable	-	-	-	•	1/Month	Grab	
99995	mg/l	Cyanide, Free	-	-	•	-	1/Month	Grab	

The discharge from this outfall is limited to storm water runoff from AK Steel's active landfill settling ponds.

See also Parts IV, V, and VI.

- 2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored 1/week\* by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUE	NT CHARAC	TERISTIC		HARGE LIMI tration		ding	MONITORING REQUIREMENTS		
Report	ing			ed Units		/day	Meas.	Sample	
Code	Units	Parameter	30 day		30 day	•	Freq.	Туре	
	mg∕l	Total Suspended Solids	-		-	_	4/Week	24 Hr. Composite	
00550	mg/l	Oil and Grease, Total	-	10	-	-	4/Week	Grab	
00610	mg/l	Nitrogen, Ammonia (NH <sub>z</sub> )					4) NCCN	0.00	
		(Summer)	-	•	-	-	4/Week	24 Hr. Composite	
		(Winter)	-	-	-	-	4/Week	24 Hr. Composite	
00981	µg/l	Selenium, Total Recoverable	-	•	-	•	See Part I	I, Item M	
50050	mgd	Flow Rate -	-	-	•	-	4/Week	Total	
61427	TUa	Acute Toxicity,							
		Pimephales promelas	-	-	-	-	Quarterly	See Pt.II, Item H	
99983	µg/l	Zinc, Total	+	-	-	*	4/Week	24 Hr. Composite	
99988	µg/l	Lead, Total Recoverable	-	-	-	-	4/Week	24 Hr. Composite	
99989	µg∕l	Copper, Total Recoverable	•	-	-	-	4/Week	24 Hr. Composite	
99995	mg/l	Cyanide, Free	-	-	0.27	0.97	4/Week	Grab	

The discharge from this outfall is limited to the discharge from stations 11D00001613 and 11D00001614, excess river/well water, non-contact cooling water and storm water runoff.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See Part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
- 4. For the first 18 months of this permit, pH may be monitored by multiple grab samples and reported 3/week. During this time the permittee shall within three months of the effective date of this permit, submit to the Ohio EPA Southwest District Office a schedule for meeting the requirement for continuously monitoring pH at this station, and every six months submit to the Ohio EPA Southwest District Office a status report on meeting the dates in that schedule.

# Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning 36 months from the effective date of this permit and lasting until 53 months from the effective date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001011. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC	DISCHARGE LIMITATIONS Concentration Loading				MONITORING REQUIREMENTS		
Report	-		Specified Units		kg/day		Meas.	Sample	
Code	Units	Parameter	30 day	Daily	30 day	Daily	Freq.	Туре	
00530	mg/l	Total Suspended Solids	-	-	-	-	4/Week	24 Hr. composite	
00550	mg/l	Oil and Grease, Total	-	10	-	-	4/Week	Grab	
00610	mg/l	Nitrogen, Ammonia (NH <sub>z</sub> )							
	•	(Summer)	-	•	•	-	4/Week	24 Hr. Composite	
		(Winter)	-	-	-	•	4/Week	24 Hr. Composite	
00981	µg/l	Selenium, Total Recoverable	-	-	*	•	4/Week	24 Hr. Composite	
50050	mgd	Flow Rate	-	•	-	-	4/Week	Total	
61427	TUa	Acute Toxicity,							
		Pimephales promelas	-	-	-	-	Quarterly	See Pt.II, Item H	
99983	µg/l	Zinc, Total	541	564	17.2	17.9	4/Week	24 Hr. Composite	
99988	µg/l	Lead, Total Recoverable	63	1173	2.0	37.2	4/Week	24 Hr. Composite	
99989	µg/l	Copper, Total Recoverable	-	•	-	-	4/Week	24 Hr. Composite	
99995	mg∕l	Cyanide, Free	-	0.092	0.27	0.97	4/Week	Grab	

The discharge from this outfall is limited to the discharge from stations 11000001613 and 11000001614, excess river/well water, non-contact cooling water and storm water runoff.

Loadings are based on 8.38 MGD.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning 53 months from the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge inaccordance with the following limitations and monitoring requirements from outfall: 1ID00001011. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	NT CHARAC	TERISTIC		HARGE LIMI	TATIONS Load	MONITORING REQUIREMENTS		
•	Reporting		Specified Units		kg/day		Meas.	Sample
Code	Units	Parameter	30 day	Daily	30 day	Daily	Freq.	Туре
00530	mg∕l	Total Suspended Solids	-	-	-	-	4/Week	24 Hr. Composite
00550	mg/l	Oil and Grease, Total	-	10	-	-	4/Week	Grab
00610	mg/l	Nitrogen, Ammonia (NH <sub>z</sub> )						
		(Summer)	6.5	-	206	•	4/Week	24 Hr. Composite
		(Winter)	6.5	-	206	-	4/Week	24 Hr. Composite
50050	mgd	Flow Rate	-	-	-	-	4/Week	Total
61427	TUa	Acute Toxicity,						
		Pimephales prometas	-	-	-	-	Quarterly	See Pt.II, Item H
99983	µg/l	Zinc, Total	541	564	17.2	17.9	4/Week	24 Hr. Composite
99988	µg/l	Lead, Total Recoverable	63	1173	2.0	37.2	4/Week	24 Hr. Composite
99989	μg/l	Copper, Total Recoverable	•	-	-	-	4/Week	24 Hr. Composite
99995	mg/l	Cyanide, Free	-	0.092	0.27	0.97	4/Week	Grab

The discharge from this outfall is limited to the discharge from stations 11000001613 and 11000001614, excess river/well water, non-contact cooling water and storm water runoff.

\* Loadings are based on 8.38 MGD.

- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See Part II, Item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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The permittee shall have six months from the effective date of this permit this permit to install and make operational a 24-hour composite sampler for the above outfall. During this six-month interim time frame, all samples shall be taken as grab at 4/week.

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001015. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	IT CHARAC	MERISTIC		HARGE LIMI	TATIONS Load	ina <b>t</b>	MONITORING REQUIREMENTS		
Reporti Code	ing Units	Parameter		ed Units		day	Meas. Freq.	Sample Typ <del>e</del>	
00530	mg∕l	Total Suspended Solids	-	-	•	-	3/Week	24 Hr. Composite	
00550	mg∕i	Oil and Grease, Total	-	10	-	-	3/Week	Grab	
00610	mg/l	Nitrogen, Ammonia (NH <sub>3</sub> ) (Summer) (Winter)	:		-	-	3/Week 3/Week	24 Hr. Composite 24 Hr. Composite	
50050	mgd	Flow Rate	-	-	-	-	Daily	Total	
99983	µg∕l	Zinc, Total Recoverable	417	457	-	1.2	3/Week	24 Hr. Composite	
99988	µg∕l	Lead, Total Recoverable	-	-	-	-	3/Week	24 Hr. Composite	

The discharge from this outfall is limited to treated process waters from station 005, continuous casting, vacuum degassing, hot forming operations, well/river water, non-contact cooling water and storm water runoff.

- Loadings are based on 0.69 MGD.
- 2. The pH (Reporting Code 00402 (minimum) and 00401 (maximum))shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored continuously and reported daily. See part II, item L.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
- 4. For the first 18 months of this permit, pH may be monitored by multiple grab samples and reported 3/week. During this time the permittee shall within three months of the effective date of this permit, submit to the Ohio EPA Southwest District Office a schedule for meeting the requirement for continuously monitoring pH at this station, and every six months submit to the Ohio EPA Southwest District Office a status report on meeting the dates in that schedule.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001005\*\*. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS Concentration Loading*				MONITORING REQUIREMENTS	
Reporti Code	ing Units	Parameter		ed Units		day	Meas. Freq.	Sample Type	
00530	mg∕l	Total Suspended Solids	-	*	227	682	1/Week	24 Hr. Composite	
00550	mg∕l	Oil and Grease, Total	-	-	227	227	1/Week	Grab	
01051	µg∕l	Lead, Total	-	-	0.23	0.68	1/Week	24 Hr. Composite	
<b>5005</b> 0	MGD	Flow Rate	-	-	-	-	Daily	Total	
99983	µg∕l	Zinc, Total	-	-	1.45	3.18	1/Week	24 Hr. Composite	

The discharge from this outfall is limited to treated process wastewaters from continuous casting, vacuum degassing and hot forming operations.

- **\*\*** This is an internal station.
- 2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in ~ accordance with the following limitations and monitoring requirements from outfall 1ID00001008. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUENT CHARACTERISTIC	DISCHARGE LIMIT	ATIONS	MONITORING REQUIREMENTS	
Reporting Code Units Parameter	Concentration Specified Units 30 day Daily	Loading* kg/day 30 day Daily	Meas. Freq.	Sample Type

No monitoring in this table.

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These outfalls are stormwater discharges affiliated with industrial activity. See Parts IV, V, and VI for stormwater management and monitoring requirements.

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUE	NT CHARAC	TERISTIC		HARGE LIMI		:	MONITORI	NG REQUIREMENTS
Reporti Code	ing Units	Parameter		tration ed Units Daily	Load kg/ 30 day	day	Meas. Freq.	Sample Type
00530	mg∕l	Total Suspended Solids	-	-	-		1/Week	24 Hr. Composite
00550	mg/l	Oil and Grease, Total	-	-		-	1/Week	Grab
0061 <b>0</b>	mg/l	Nitrogen, Ammonia	-	-	205	410	1/Week	24 Hr. Composite
99996	mg/l	Cyanide, Total	-	-	10.0	19.8	1/Week	Grab
01051	µg∕l	Lead, Total	•	-	-	-	1/Week	24 Hr. Composite
32730	µg∕l	Phenolic 4AAP, Total	•	-	0.9	1.8	1/Week	24 Hr. Composite
99993	µg∕l	Zinc, Total	-	-	-	-	1/Week	24 Hr. Composite
50050	MGD	Flow Rate	-	-	-	-	Daily	Total

The discharge from this outfall is limited to treated process waters from the #3 Blast Furnace and sinter plant, in addition to boiler house and water softening operations.

2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.

3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001614. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS Concentration Loading				MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter		ed Units		day	Meas. Freq.	Sample Type	
00530	mg∕l	Total Suspended Solids	-	*	-	-	1/Week	24 Hr. Composite	
00550	mg∕l	Oil and Grease, Total	-	-		-	1/Week	Grab	
01051	µg/l	Lead, Total	-	-	-	-	1/Week	24 hr. Composite	
34475	µg/l	Tetrachloroethylene	-	-	-	0.37	Yearly	Grab	
34696	µg∕l	Naphthalene	-	-	-	0.25	Yearly	Grab	
50 <b>0</b> 50	MGD	Flow Rate	-	-	-	-	Daily	Total	
99983	µg∕l	Zinc, Total	•	-	-	-	1/Week	24 Hr. Composite	

The discharge from this outfall is limited to treated process waters from the cold forming, acid pickling, alkaline cleaning, coating, boiler house operations and non-contact water from Air Products and the permittee. The treated process waters may include Zinc wastewaters from the no. 2 Electrogalvanizing line on an emergency basis, and other wastewaters from stations 11D00001005, 11D00001641, and 11D00001631.

- 2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in ~ accordance with the following limitations and monitoring requirements from outfall: 1ID00001631. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS Concentration Loading				MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter		ed Units		day Daily	Meas. Freq.	Sample Type	
00530	mg/l	Total Suspended Solids	-	•	400	1264	1/Week	24 Hr. Composite	
01051	µg∕l	Lead, Total	-	-	1.00	3.75	1/Week	24 Hr. Composite	
5005 <b>0</b>	MGD	Flow Rate	-	•	-	•	Daily	Total	
99983	µg∕l	Zinc, Total	-	-	1.80	4.39	1/Week	24 Hr. Composite	

The discharge from this outfall is limited to treated process waters from steelmaking operations at the Basic Oxygen Furnace (BOF).

- 2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001641. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS Concentration Loading				MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter		ed Units		day	Meas. Freq.	Sample Type	
00530	mg∕l	Total Suspended Solids	•	*	553	1224	1/Week	24 Hr. Composite	
00550	mg∕l	Oil and Grease, Total	•	-	308	867	1/Week	Grab	
01051	µg/l	Lead, Total	-	-	1.51	4.12	1/Week	24 Hr. Composite	
99983	µg/l	Zinc, Total	-	-	1.32	1.65	1/Week	24 Hr. Composite	
34475	µg∕l	Tetrachloroethylene	-	-	-	1.91	Yearly	Grab	
50050	MGD	Flow Rate	-	•	-	-	Daily	Total	
34696	µg∕l	Naphthalene	-	-	-	1.27	Yearly	Grab	

The discharge from this outfall is limited to treated process waters from acid pickling, alkaline cleaning, cold forming, and coating operations, treated surface runoff and non-contact cooling water.

- 2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, **OTHER REQUIREMENTS**.

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# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001642. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			HARGE LIMI	TATIONS Load	100	MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter		ed Units		day	Meas. Freq.	Sample Type
00530	mg∕l	Total Suspended Solids	31	60	-	•	1/Week	Composite
00550	mg/l	Oil and Grease, Total	26	52		•	1/Week	Grab
99985	µg∕l	Chromium, Total	1368	2216	**	-	1/Week	Composite
01067	µg∕l	Nickel, Total (Ni)	1904	3184	-	•	1/Week	Composite
01042	µg/l	Copper, Total	-	-	-	-	1/Week	Composite
01092	µg/l	Zinc, Total	1480	2610		•	1/Week	Composite
50050	MGD	Flow Rate	-	0.360**	` <b>_</b>	•	Daily	Total
82090	µg∕l	Total Toxic Organics	-	1704*	-	-	See Part	II, Item G.

AK Steel shall not dilute process wastewater as substitute for treatment to achieve compliance with applicable federal metal finishing point source category (40 CFR 433) effluent guideline limitations. The limitations were reviewed and approved based on information from the permittee that 100 percent of the discharge through this outfall is considered process wastewater in accordance with the previously mentioned federal effluent guidelines. If that figure is incorrect or changes, AK Steel shall notify the Ohio EPA immediately.

- \* This is a guideline based limitation and is not authorization to discharge toxic organic compounds at levels which cause or may cause water quality violations. The discharge of organic compounds at levels which cause or may cause water quality violations is prohibited.
- \*\* This is a limitation.
- 2. The pH (Reporting Code 00400) shall not be less than 6.0 S.U. nor greater than 11.5 S.U. and shall be monitored 1/week by grab sample.
- 3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

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## Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall: 1ID00001099\*. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

EFFLUE	EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
Report Code	ing Units	Parameter	Specifi	itration ed Units Daily		ling** day Daily	Meas. Freq.	Sample Type	
01094	µg/l	Zinc, Total Recoverable	٠	-	8.91	•	3/Week	Calculated	
50050	MGD	Flow Rate	-	-	-		3/Week	Calculated	

- \* Outfall 11000001099 is a compliance point established for the sum of the mass discharges from outfalls 11000001002, 11000001003, 11000001004, and 11000001015.
- \*\* Loading limits are based upon the combined flows from 1ID00001002, 1ID00001003, 1ID00001004, and 1ID00001015 for a total of 5.65 MGD.

Data reported for station 11D00001003, for purposes of this calculated outfall, shall be net values based on data obtained at 11D00001803.

# Part I, B. - ADDITIONAL MONITORING REQUIREMENTS

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1. <u>Upstream</u>. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving ~ stream, upstream of the point of discharge at Station Number 1ID00001804, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

	HARACTERISTIC eporting		MONITORING REQUIREMENTS Measurement		
•	Units	Parameter	Frequency*	Sample Type	
61432	XAff	48-Hr. Acute Toxicity <u>Ceriodaphnia</u> dubia	Quarterly	See Part II, H.	
61435	%Aff	96-Hr. Acute Toxicity <u>Pimephales</u> promelas	Quarterly	See Part II, H.	
61438	%Aff	7-Day Chronic Toxicity <u>Ceriodaphnia</u> <u>dubia</u>	1/Quarterly	See Part II, H.	
61441	%Aff	7-Day Chronic Toxicity Pimephales promelas	1/Quarterly	See Part II, H.	
	%Aff	Acute Toxicity, <u>Daphnia Magna, 48 Hours</u>	1/Month	Part II, Item H.	
	%Aff	Chronic Toxicity, Daphnia Magna, 21-Day	Quarterly	Part II, Item H.	

# Part I, B. - ADDITIONAL MONITORING REQUIREMENTS

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1. <u>Upstream</u>. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving ~ stream, upstream of the point of discharge at Station Number 1ID00001801, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Reporti	ERISTIC ng Units	Parameter	<u>MONITORING RE</u> Measurement Frequency*	QUIREMENTS Sample Type
Code  61435	XAff	96-Hr. Acute Toxicity <u>Pimephales</u> promelas	Quarterly	See Part II, H.

# Part I, B. - ADDITIONAL MONITORING REQUIREMENTS

2. <u>Upstream</u>. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving ~ stream, upstream of the point of discharge at Station Number 1ID00001803, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

	TERISTIC		MONITORING REG	DUIREMENTS
Report Code	Units	Parameter	Frequency*	Sample Type
00083	units	Color, Severity (1)	3/Week	Observation
00400	s.u.	pH, Average	3/week	Grab
00530	mg∕l	Total Suspended Solids	3/Week	24 Hr. Composite
00550	mg/l	Oil and Grease	3/Week	Grab
00 <b>61</b> 0	mg∕l	Nîtrogen, Ammonia	3/Week	24 Hr. Composite
00981	µg/l	Selenium, Total Recoverable		24 Hr. Composite Sta 1/49
00980	µg/l	Iron, Total Recoverable	1/Month	24 Mr. Composite
01094	µg/l	Zinc, Total Recoverable	3/Week	24 Hr. Composite
39516	µg/l	PCBs	1/Month	Grab
50050	MGD	Flow Rate	Daily	24 Hr. Total
99988	µg/l	Lead, Total Recoverable	3/Week	24 Hr. Composite

- \* Samples at this station shall be taken prior to samples at Outfall 11D00001D03. Timing of sampling at 11D00001803 and 11D00001003 must account for travel time and pond retention time. The permittee shall make every reasonable effort to ensure that the 11D00001003 samples represent, in part, the flow and conditions measured at 11D00001803 during the same sampling event.
- (1) See Part II, Item K.

# Part I, C.- SCHEDULE OF COMPLIANCE

- 1. The permittee shall achieve compliance with the final effluent limitations for outfall(s) 1ID00001002, 1ID00001003, 1ID00001004, and 1ID00001011 as specified in Part I.A. of this NPDES permit as expeditiously as practicable. In any event, the permittee shall attain final compliance not later than the dates developed in accordance with the following schedule.
  - A. Within 10 months of the effective date of this NPDES permit, the permittee shall submit to the Ohio EPA Southwest District Office a status report on submitting a complete and approvable Permit to Install (PTI) application and detailed plans for achieving final compliance for outfall(s) 1ID00001002, 1ID00001003, and 1ID00001004.
  - B. Within 10 months of the effective date of this NPDES permit, the permittee shall submit a general plan for various options for achieving final compliance limits for ammonia at outfall 1ID00001011.
  - C. Within 16 months of the effective date of this NPDES permit, the permittee shall submit to the Ohio EPA Southwest District Office a complete and approvable PTI application and detailed plans for achieving final compliance for outfall(s) 1ID00001002, 1ID00001003, and 1ID00001004.
  - D. Within 18 months of the effective date of this NPDES permit, the permittee shall submit a status report on submitting a complete and approvable Permitto-Install (PTI) application and detail plans for achieving final compliance for outfall 1ID00001011.
  - E. Within 24 months of the effective date of this NPDES permit, the permittee shall initiate construction for attainment of final limits at outfalls 11D00001002, 11D00001003 and 11D00001004.
  - F. Within 35 months of the effective date of this NPDES permit, the permittee shall have completed construction for attainment of final limits at outfalls 11D0001002, 11D00001003 and 11D00001004.
  - G. Within 36 months of the effective date of this NPDES permit, the permittee shall have attained full compliance with the final effluent limitations for outfall(s) 1ID00001002, 1ID00001003, and 1ID00001004.
  - H. Within 36 months of the effective date of this NPDES permit, the permittee shall submit to the Ohio EPA Southwest District Office a complete and approvable PTI application and detailed plans for achieving final compliance for outfall 1ID00001011.
  - I. Within 42 months of the effective date of this NPDES permit, the permittee shall initiate construction for attainment of final effluent limits at outfall 1ID00001011.

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Part I, C.- SCHEDULE OF COMPLIANCE (continued)

- J. Within 52 months of the effective date of this NPDES permit, the permittee shall have completed construction for achieving final effluent limits for ~ outfall 1ID00001011.
- K. Within 53 months of the effective date of this NPDES permit, the permittee\_ shall have attained full compliance with the final effluent limits at outfall 1ID00001011.
- L. The permittee shall submit written verification to the Ohio EPA Southwest District Office of the completion of steps 1.E., 1.F., 1.G, 1.I., 1.J, and 1.K. of this schedule of compliance within 14 days after completion of each step.
- 2. As soon as possible, but not later than three (3) months after the effective date of this permit, the permittee shall initiate a Toxicity Reduction EVAluation (TRE) in order to meet the Whole Effluent Toxicity (WET) limits of 1.0 UT, and 1.0 TU, at outfall 1ID00001004. The permittee shall attain compliance as expeditiously as practicable, but not later than the dates developed in accordance with the following schedule.
  - A. Within two (2) months of the effective date of this permit, the permittee shall submit a general plan for attaining compliance with the final WET limitations of 1.0 TU<sub>a</sub> and 1.0 TU<sub>c</sub> at outfall 1ID00001004. The strategy shall address the permittee's general approach for the TRE to meet the WET limits.
  - B. Within three (3) months of the effective date of this permit, the permittee shall implement the general plan in order to attain compliance with the WET limits at outfall 1ID00001004.
  - C. Starting with a report six (6) months after the effective date of this permit and lasting until compliance with the WET limits are achieved, the permittee shall submit annual reports detailing the progress of the TRE. These annual progress reports shall include any biomonitoring results or other relevant information obtained during the TRE.
  - D. Within twenty-one (21) months of the effective date of this permit, the permittee shall submit a specific plan detailing any necessary construction, process changes or other related items that are sufficient to cause compliance with the final WEt limits at outfall 1ID00001004. The strategy shall include, as a minimum:
    - Identification of the source(s) of toxicity with supporting date.
       Technical justification of any necessary changes in treatment and/or operation required to eliminate toxicity, if any.
    - A schedule for initiation and completion of construction, if necessary. A complete Permit-to-Install (PTI) application and approvable detail plans must be submitted to the Ohio EPA, Southwest District Office at the address provided below if construction is needed.
  - E. Within twenty-one (21) months of the effective date of this permit, the permittee shall implement the specific plan and initiate construction, if necessary.

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# Part I, C.- SCHEDULE OF COMPLIANCE (continued)

- F. Within thirty-six (36) months of the effective date of this permit, the permittee shall attain compliance with the final WET limits of 1.0  $\rm UT_a$  and  $\sim$  1.0  $\rm TU_c$  at outfall 1ID00001004.
- G. Reports and plans required by this schedule of compliance for toxicity reduction must be submitted to the Ohio EPA, Division of Surface Water, Enforcement and Compliance Section, 1800 Watermark Drive, P. O. Box 1049, Columbus, OH 43266-0149.
- H. The permittee shall submit written notification to the Ohio EPA, Southwest District Office, 401 East Fifth Street, Dayton, OH 45402, after completion of Items 2.E, and 2.F, above. Notification must be submitted within fourteen (14) days after compliance of each requirements.
- 3. The permittee shall submit the renewal application for this permit by no later than 270 days prior to the expiration date.

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# Part II, OTHER REQUIREMENTS

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А.	Description of the lo	ocation of the required sampling stations are as follows:
	Sampling Station	Description of Location
	11D00001001	A calculated station representing the sum of stations -
elan	1ID00001002	Coke plant cooling water, river and well water, ground water and storm water effluent from SPCC pond prior to
	11D00001003	mixing with Dicks Creek. (Lat. 39° 28' 20" ; Long. 84° 23' 10") Effluent from BOF treatment plant 1ID00001631, well water, storm water drainage and cooling tower blowdown and off site flow, station 1ID00001803, originating from the City
	11D00001004	of Middletown's storm sewers, prior to discharging to Dicks Creek. (Lat. 39° 28' 30"; Long. 84° 22' 20") Effluent from treatment plants 1ID00001641 and 1ID00001642, storm water runoff, well water, ground water and non-contact cooling water in a ditch impoundment prior to entering North Branch of Dicks Creek.
	1ID00001005 ·	(Lat. 39° 28' 30"; Long. 84° 21' 00") Internal discharge of wastewater from the Hot forming mills/continuous caster/vacuum degasser at the Hot Strip Mill Water Clarification Plant and slab reheat furnaces prior to combining with cooling and storm waters in SPCC
	11D00001008	pond which discharges to Dicks Creek. Storm water discharge from south area of plant (between outfalls 003 and 015) to Dicks Creek.
,	1ID00001009	(Lat. 39° 28' 20"; Long. 84° 21' 00") Storm water runoff from AK Steel's active landfill settling ponds prior to discharging to Dicks Creek. (Lat. 39° 28' 20"; Long. 84° 23' 10")
(	11D00001011	At a manhole representative of combined flows (including 1ID00001613 and 1ID00001614 effluents) leaving AK Steel's property.
Dals	11D00001015	(Lat. 39° 30' 10"; Long. 84° 25' 10") Discharge from SPCC pond containing 1ID00001005 effluent, well water and non-contact cooling and storm waters, which enters Dicks Creek.
(~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11D00001099	(Lat. 39° 28' 30"; Long. 84° 21' 00") A calculated station representing the sum of 1ID00001002, 1ID00001003, 1ID00001004, and 1ID00001015 for water
	11D00001613	bubbling purposes. Effluent from the blast furnace/sinter plant wastewater treatment plant including boilerhouse and water softening discharges prior to mixing with other wastewaters that make up the outfall 1ID00001011 discharge to the Great Miami River.

Form EPA 4428

EXHIBIT 3

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A. Continued.

Sampling Station	Description of Location
1ID00001614	Combined process effluent from wastewater treatment plant (North Terminal) prior to mixing with other wastewaters that make up the outfall 1ID00001011 discharge to the Great Miami River.
11D00001631	Effluent from the Basic Oxygen Furnace (BOF) wastewater treatment plant prior to discharge to outfall 1ID00001003.
1ID00001641	Effluent from the cold mill/pickling wastewater treatment plant (South Terminal) prior to discharge from outfall 1ID00001004. Includes discharges from acid pickling, cold forming, coating, alkaline cleaning, storm and non-contact cooling water.
1ID00001642	Effluent from the no. 2 electrogalvanizing waste-water treatment plant prior to discharge through outfall 1ID00001004.
1ID00001801	Upstream in the Great Miami River from outfall 1ID00001011.
1ID00001803	In ditch on north side of property representative of all off-site flows, upstream of 1ID00001003 sources.
1ID00001804	Upstream from outfall 1ID00001004 in North Branch Dicks Creek.

- B. In the event that the permittee's operation requires the use of cooling or boiler water treatment additives that are discharged to surface waters of the state, written permission must be obtained from the director of the Ohio EPA prior to use. Additives currently approved do not need to be re-approved so long as the permittee does not revise product concentrations or volumes as previously approved. Reporting and testing requirements to apply for permission to use additives can be obtained from the Ohio EPA Central Office, Division of Surface Water, Water Resource Management Section. Reported information will be used to evaluate whether the use of the additive(s) at concentrations expected in the final discharge will be harmful or inimical to aquatic life.
- C. Permit limitations may be revised in order to meet water quality standards after a stream use determination and waste load allocation are completed and approved. This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable water quality effluent limitations.
- D. There shall be no detectable amount of any priority pollutant attributable to cooling tower maintenance chemicals in the cooling tower blowdown wastewater.
- E. It is understood by Ohio EPA that, at the time permit 1ID00001\*FD becomes effective, an analytical method is not approved under 40 CFR 136 to evaluate compliance with the free cyanide effluent limitations contained in the permit. The permittee shall utilize method 4500-CN I contained in the 17th edition of Standard Methods (method 412H, 18th edition) until U.S. EPA promulgates a method for analyzing free cyanide under 40 CFR 136.

E. Continued.

If a method(s) for analyzing free cyanide is promulgated by U.S. EPA during the period when this permit is effective, the permittee shall, within twelve months after promulgation, adopt an approved procedure for monitoring compliance with the free cyanide effluent limits contained in the permit. During this twelve month interim period, the permittee shall perform analyses utilizing both the approved procedure and the previous procedure for comparison purposes while reporting only the results of the previous procedure for compliance purposes. Utilization of both types of analyses shall begin within six months of promulgation of the approved procedure allowing a six month evaluation period.

F. Total Toxic Organic (TTO) and Wastewater Characterization Provisions

#### 1. Wastewater Characterization

At least two grab samples for volatile pollutants and either an 8-hour or a 24hour composite sample for acid and base/neutral and pesticide pollutants shall be obtained on each monitoring day. Wastewater samples shall be prepared and analyzed by GC/MS in accordance with U.S. EPA methods 624 and 625. In addition to the quantitative analysis for total toxic organics, a reasonable attempt shall be made to identify and quantify any additional substances indicated to be present in the extracts by peaks on the reconstructed gas chromatograms (total ion plots) more than ten times higher than the adjacent peak-to-peak background noise. Identification shall be by reference to the EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate based upon comparison with an internal standard. GC/MS analysis results are to be reported to the Ohio EPA Southwest District Office within sixty days of sampling. Along with the GC/MS results, the total toxic organics (TTO) measured in the discharge are to be reported in the units of micrograms per liter ( $\mu$ g/l). The term TTO shall mean total toxic organics which is the summation of all quantifiable values greater than 0.01 milligrams per liter for the following toxic organics:

Acenaphthene Acrolein Acrylonitrile Benzene Benzidine Carbon tetrachloride (tetrachloromethane) Chlorobenzene 1,2,4-trichlorobenzene Hexachlorobenzene 1,1,1-trichloroethane Hexachloroethane 1,1-dichloroethane 1,1,2-trichloroethane 1,1,2,2-tetrachloroethane Chloroethane Bis (2-chloroethyl) ether 2-chloronethyl vinyl ether (mixed) 2-Chloronaphthalene 2,4,6-Trichlorophenol Parachlorometa cresol Chloroform (trichloromethane) 2-Chlorophenol 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3-Dichlorobenzidine

G. Continued.

1,1-Dichloroethylene 1,2-Trans-dichloroethylene 2,4-Dichlorophenol 1,2-Dichloropropane 1,3-Dichloropropylene (1,3-dichloropropene) 2,4-Dimethylphenol 2,4-Dinitrotoluene 2,6-Dinitortoluene 1,2-Diphenylhydrazine Ethylbenzene Fluoranthene 4-Chlorophenyl phenyl ether 4-Bromophenyl phenyl ether Bis (2-chloroisopropyl) ether Bis (2-chloroethoxy) methane Methylene chloride (dichloromethane) Methyl chloride (chloromethane) Methyl bromide (bromomethane) Bromoform (tribromomethane) Dichlorobromomethane Chlorodibromomethane Hexachlorobutadiene Hexachlorocyclopentadiene Isophorone Naphthalene Nitrobenzene 2-Nitrophenol 4-Nitrophenol 2,4-Dinitrophenol 4,6-Dinitro-o-cresol N-nitrosodimethylamine N-nitrosodiphenylamine N-nitrosodi-n-propylamine Pentachlorophenol Phenol Bis (2-ethylhexyl) phthalate Butyl benzyl phthalate Di-n-butyl phthalate Di-n-octyl phthalate Diethyl phthalate Dimethyl phthalate 1,2-Benzanthracene (benzo(a) anthracene) Benzo(a)pyrene (3,4-benzopyrene) 3,4-Benzofluoranthene (benzo(b)fluoranthene)

11,12-Benzofluoranthene (benzo(k)fluoranthene) Chrysene Acenaphthylene Anthracene 1,12-Benzoperylene (benzo(ghi)perylene) Fluorene Phenanthrene 1,2,5,6-dibenzanthracene (dibenzo(a,h)anthracene) Indeno(1,2,3-cd)pyrene (2,3-o-phenylenepyrene) Pyrene Tetrachloroethylene Toluene Trichloroethylene Vinyl Chloride (chloroethylene) Aldrin Dieldrin Chlordane (technical mixture and metabolites) 4,4-DDT 4,4-DDE (p,p-DDX) 4,4-DDD (p,p-TDE) Alpha-endosulfan Beta-endosulfan Endosulfan sulfate Endrin Endrin aldehyde Heptachlor Heptachlor epoxide (BHC-hexachlorocyclohexane) Alpha-BHC Beta-BHC Gamma-BHC (lindane) Delta-BHC (PCB-polychlorinated biphenyls) PCB-1242 (Arochlor 1242) PCB-1254 (Arochlor 1254) PCB-1221 (Arochlor 1221) PCB-1232 (Arochlor 1232) PCB-1248 (Arochlor 1248) PCB-1260 (Arochlor 1260) PCB-1016 (Arochlor 1016) Toxaphene 2,3,7,8-tetrachlorodibenzo-pdioxin (TCCD)

G. Continued.

After review of the results of the organic pollutant monitoring program, the Ohio EPA may propose effluent limitations and/or additional monitoring requirements for specific organic pollutants, as appropriate. The Ohio EPA may also required continued monitoring to measure compliance with the TTO standard, notwithstanding the compliance monitoring options set forth in Part II, G.2., below.

## 2. Compliance Monitoring

Upon completion of the wastewater characterization program described in the preceding paragraph, the permittee may elect to continue monitoring in accordance with paragraph 2a. below or, in lieu thereof, adopt and implement a toxic organic management plan and submit monthly certifications in accordance with paragraph 2b. hereof. Within 30 days after completion of the wastewater characterization program, the permittee shall provide written notification to the Surface Water Unit Supervisor at the Ohio EPA Southwest District Office of the option elected.

a. Continued Monitoring Option

If the permittee elects to continue quarterly monitoring to measure compliance with the TTO standard, the monitoring shall be conducted in accordance with the provisions of 1. above except that the permittee shall be required to analyze for only those substances included within the definition of TTO. Depending upon the results of the prior wastewater characterization monitoring and any other information, the Ohio EPA may modify the provision of paragraph 1. as appropriate. Modifications may include, but are not limited to, restricting monitoring to those toxic organics which would reasonably be expected to be present.

#### b. Certification Option

If the permittee elects to certify compliance rather than continue monitoring, the permittee shall:

1. Submit to the Ohio EPA a toxic organic management plan within 90 days after completion of the wastewater characterization monitoring program described in 2. above. The plan shall specify to the satisfaction of the Ohio EPA the toxic organic chemicals used, the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration, and procedures for ensuring that toxic organics do not spill or leak into process wastewaters, non-contact cooling water, ground water, storm water, or surface waters. Upon review and approval of the plan, the Ohio EPA will modify this permit to include the plan as a provision of the permit.

- G. Continued.
  - 2. Except as provided in subparagraph 3 below, make the following certification statement each month:

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report.

This statement is to be attached to the discharge monitoring reports required by 40 CFR 122.44(i), formerly 40 CFR 122.61(i). Upon approval of the toxic organic management plan described in subparagraph 1 above, the permittee shall include the following statement as part of the certification statement:

I further certify that this facility is implementing the toxic organic management plan submitted to the Ohio EPA.

- 3. If the permittee is unable to make the above certification statement, notify the Ohio EPA in accordance with Part III, 12 of this permit.
- H. Biomonitoring Program Requirements for Outfalls 1ID00001002, 1ID0001003, 1ID00001009 and 1ID00001011

As soon as possible but not later than three months after the effective date of this permit, the entity shall initiate an effluent biomonitoring program to determine the toxicity of the effluent from outfalls 1ID00001002, 1ID00001003, 1ID00001009 and 1ID00001011.

## General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with <u>Reporting and Testing Guidance for Biomonitoring Required by the</u> <u>Ohio Environmental Protection Agency</u> (hereinafter, the "biomonitoring guidance"), Ohio EPA, 1991 (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. Chronic Bioassays

The permittee shall conduct semi-annual chronic toxicity tests using *Ceriodaphnia dubia* and fathead minnows (*Pimephales promelas*) on effluent samples from outfall 1ID00001002. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic tests.

- H. Continued.
  - 2. Acute Bioassays

The permittee shall conduct quarterly definitive acute toxicity tests using fathead minnows (*Pimephales promelas*) on effluent samples from outfall 11D00001011. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance.

For a period of one year, the permittee shall conduct bimonthly (six tests per year) definitive acute toxicity tests using *ceriodaphnia dubia* and fathead minnows (*Pimephales promelas*) on effluent grab samples from outfall 1ID00001009. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance.

3. Testing of Ambient Water

The permittee shall conduct monthly screening acute toxicity tests using Daphnia Magna on effluent samples from outfall 1ID00001003. The tests shall be performed only on 100% effluent samples and shall be conducted as specified in Section 2 of the biomonitoring guidance.

- 4. Data Review
  - a. Reporting

Following completion of each quarterly 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. 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

 $TU_{a} = Acute Toxic Units = \frac{100}{LC50} \text{ or } \frac{100}{EC50}$   $TU_{c} = Chronic Toxic Units = \frac{100}{square root of NOEC \times LOEC}$ 

# I. Biomonitoring Program Requirements for outfall 1ID00001004

The following test requirements are to be implemented after completion of the TRE or compliance schedule. In the event that the TRE is discontinued due to evidence that the effluent limitations of 1.0 TUa and 1.0 TUc at outfall 1ID00001004 can be routinely met, the following reporting and testing requirements shall become effective immediately.

#### Compliance Monitoring Program

As soon as possible, but not later than three (3) months after the completion of the TRE, the permittee shall initiate an effluent biomonitoring program to evaluate compliance with whole effluent toxicity limits of 1.0 TUa and 1.0 TUc at outfall 1ID00001004.

## General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with <u>Reporting and Testing Guidance for Biomonitoring Required by the</u> <u>Ohio Environmental Protection Agency</u> (hereinafter, the "biomonitoring guidance"), Ohio EPA, 1991 (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. Chronic Bioassays

The permittee shall conduct quarterly chronic toxicity tests using Daphnia Magna on effluent samples from outfall <u>1ID00001004</u>. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic tests.

Part II, OTHER REQUIREMENTS (continued)

- I. Continued.
  - 2. Data Review
    - a. Reporting

Following completion of each quarterly 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. Ohio EPA will evaluate the results in order to judge compliance with the whole effluent toxicity limitations of 1.0 TUa and 1.0 TUc at outfall 1ID00001004. In addition this permit may be modified to require further investigation of toxicity.

b. Definitions

 $TU_{a} = Acute Toxic Units = \frac{100}{LC50} \text{ or } \frac{100}{EC50}$   $TU_{c} = Chronic Toxic Units = \frac{100}{square root of NOEC \times LOEC}$ 

J. The parameters listed below have had effluent limitations established that are below the OEPA Practical Quantification Level (OEPA PQL) of the 40 CFR Part 136 promulgated analytical procedure for those parameters. In accordance with ORC 6111.13, if an effluent limit is set below the OEPA PQL, any analytical result reported equal to or less than the OEPA PQL shall be considered to be in compliance with that limit.

**REPORTING:** 

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

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

The following table will be used to determine compliance with NPDES permit limit(s):

Parameter POL

Free Cyanide

0.09 mg/l

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# Part II, OTHER REQUIREMENTS (continued)

K. If Severity Units are required for Color, use the following table to determine the value to report.

Reported Value	Severity Description	Color ~ Seen
0	None	No reddish color seen in discharge, no reddish color plume in Dicks Creek.
l	Evident	Reddish Color is seen in discharge, a reddish color plume is seen in Dicks Creek.

- L. On outfalls where pH is monitored continuously, the permittee shall maintain the pH of such wastewater within the range specified in this permit. Excursions from the range are permitted subject to the following limitations.
  - 1. The total time during which pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month.
  - 2. No individual excursions from the range of pH values 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;
    - b. the duration of each excursion;
    - c. the date of each excursion; and
    - d. the total time of all excursions combined.
- M. Total Recoverable Selenium shall be monitored at outfalls 1ID00001002, 1ID00001003, 1ID00001004, and 1ID00001011 for a period of 1/year starting on the effective date of this permit. The monitoring frequency shall be 1/week and the sample type shall be 24 Hour Composites. AK Steel shall submit a report to Ohio EPA, DSW, Central Office and a copy to the Southwest District Office at the end of the 1-year sampling period. This report shall detail the analytical results in  $\mu$ g/l for Total Recoverable Selenium for each of the outfalls jisted above.

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## PART III - GENERAL CONDITIONS

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#### 1. DEFINITIONS

"<u>daily load limitations</u>" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.

"<u>daily concentration limitation</u>" means the arithmetic average (weighted by flow) of all the determinations of concentration made during the day. If only one sample is taken during the day, its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"<u>7-day load limitation</u>" is the total discharge by weight during any 7-day period divided by the number of days in that 7-day period that the facility was in operation. If only one sample is taken in a 7-day period, the weight of pollutant discharge calculated from it is the 7-day load. If more than one sample is taken during the 7-day period, the 7-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 7-day period, and dividing by the number of days sampled.

"<u>7-day concentration limitation</u>" means the arithmetic average (weighted by flow) of all the determinations of daily concentration limitation made during the 7-day period. If only one sample is taken during the 7-day period, its concentration is the 7-day concentration limitation for that 7-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"<u>30-day load limitation</u>" is the total discharge by weight during any 30-day period divided by the number of days in the 30-day period that the facility was in operation. If only one sample is taken in a 30-day period, the weight of pollutant discharge calculated from it is the 30-day load. If more than one sample is taken during one 30-day period, the 30-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 30-day period and dividing by the number of days sampled.

"<u>30-day concentration limitation</u>" means the arithmetic average (weighted by flow) of all the determinations of daily concentration made during the 30-day period. If only one sample is taken during the 30-day period, its concentration is the 30-day concentration for that 30-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"85 percent removal limitations" 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.

"<u>Absolute Limitations</u>" 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.

"<u>Net concentration</u>" 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.

"<u>Net load</u>" 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.

"µg/l" means micrograms per liter.

"<u>Reporting Code</u>" 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.

"<u>Quarterly sampling frequency</u>" means the sampling shall be done in the months of March, June, August, and December.

"Yearly sampling frequency" means the sampling shall be done in the month of September.

"Semi-annual sampling frequency" means the sampling shall be done during the months of June and December.

"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.

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"<u>Upset</u>" 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.

# 2. GENERAL EFFLUENT LIMITATIONS

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 growths 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 <u>only</u> 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 the Ohio EPA as specified in the Paragraph in this PART III entitled, <u>"UNAUTHORIZED DISCHARGES".</u>

#### 4. <u>REPORTING</u>

A. Monitoring data required by this permit shall be reported on the Ohio EPA report form (4500) on a monthly basis. Individual reports for each sampling station for each month are to be received no later than the 15th day of the next month. The original plus first copy of the report form must be signed and mailed to:

Ohio Environmental Protection Agency Division of Surface Water Enforcement Section, ES/MOR P.O. Box 1049 Columbus, Ohio 43266-0149

- B. 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 below, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.
- C. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported on Ohio EPA report form (4500) but records shall be retained as specified in the paragraph entitled <u>"RECORDS RETENTION".</u>

5. SAMPLING AND ANALYTICAL METHODS

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 insure accuracy of measurements.

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# PART III - GENERAL CONDITIONS (continued)

#### 6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record  $\vec{}$  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, including:

- 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 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 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. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Ohio Revised Code Section 6111.99.

## 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. Bypassing or diverting of wastewater from the treatment works is prohibited unless:
  - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

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# PART III - GENERAL CONDITIONS (continued)

- 2. 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 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
- 3. The permittee submitted notices as required under paragraph D. of this section.
- B. 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.
- C. The Director may approve an unanticipated bypass, after considering its adverse effects, if the Director determines that it has met the three conditions listed in paragraph 11.A. of this section.
- D. The permittee shall submit notice of an unanticipated bypass as required in section 12.
- E. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded if that bypass is for essential maintenance to assure efficient operation.

# 12. NONCOMPLIANCE NOTIFICATION

- A. The permittee shall by telephone report any of the following within twenty-four (24) hours of discovery at (toll free) 1-800-282-9378:
  - 1. Any noncompliance which may endanger health or the environment;
  - 2. Any unanticipated bypass which exceeds any effluent limitation in the permit; or
  - 3. Any upset which exceeds any effluent limitation in the permit.
  - 4. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit.
- B. For the telephone reports required by Part 12.A., the following information must be included:
  - 1. The times at which the discharge occurred, and was discovered;
  - 2. The approximate amount and the characteristics of the discharge;
  - The stream(s) affected by the discharge;
  - 4. The circumstances which created the discharge;
  - 5. The names and telephone numbers of the persons who have knowledge of these circumstances;
  - 6. What remedial steps are being taken; and
  - 7. The names and telephone numbers of the persons responsible for such remedial steps.
- C. These telephone reports shall be confirmed in writing within five days of the discharge and submitted to the appropriate Ohio EPA district office. The report shall include the following:
  - 1. The limitation(s) which has been exceeded;
  - The extent of the exceedance(s);
  - The cause of the exceedance(s);
  - The period of the exceedance(s) including exact dates and times;
  - 5. If uncorrected, the anticipated time the exceedance(s) is expected to continue, and
  - Steps being taken to reduce, eliminate, and/or prevent recurrence of the exceedance(s).
- D. Compliance Schedule Events:

If the permittee is unable to meet any date for achieving an event, as specified in the schedule of compliance, the permittee shall submit a written report to the appropriate district office of the Ohio EPA within 14 days of becoming aware of such 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

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5. The probability of complying with subsequent and final events as scheduled.

- E. The permittee shall report all instances of noncompliance not reported under paragraphs A, B, or C of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraphs B and C of this section.
- F. Where the permittee becomes aware that it failed to submit any relevant application or submitted incorrect information in a permit 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:
  - 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(1) 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:
  - 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.

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### 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
  - change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- B. Pursuant to rule 3745-33-06, 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 cannot be transferred or assigned nor shall a new owner or successor be authorized to discharge from this facility, until 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 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;
- C. The Director does not exercise his right within thirty days after receipt of the written agreement to notify the current permittee and the new permittee of his or her intent to modify or revoke the permit and to require that a new application be filed; and
- D. The new owner or successor receives written confirmation and approval of the transfer from the Director of the Ohio EPA.

At anytime 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.

### 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 Act.

## 21. SOLIDS DISPOSAL

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state. For publicly owned treatment works, these shall be disposed of in accordance with the approved Ohio EPA Sludge Management Plan.

# 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 <u>UNAUTHORIZED DISCHARGES</u> or <u>UPSETS</u>, 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 nor 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 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 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(b) and (c).

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

## 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 twenty-five thousand dollars 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.

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# Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan (plan) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water 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 storm water pollution prevention plan required under this part as a condition of this permit.

# A. Deadlines for Plan Preparation and Compliance.

- 1. The plan for a storm water discharge associated with industrial activity:
  - a. shall be prepared within six months of the effective date of this permit (and updated as appropriate);
     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 a showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

# B. Signature and Plan Review.

- 1. The plan shall be signed in accordance with Part VI, and be retained on-site at the facility which generates the storm water discharge.
- The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.
- 3. 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.
- 4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. The permittee may choose to fulfill such requests by allowing viewing of the plan at its facilities, or choosing to copy the plan and sending it to the party making the request. The permittee may charge the party making the request a reasonable fee for copying the plan. The permittee may claim any portion of a storm water pollution plan as confidential in accordance with 40 CFR Part 2 and does not have to release any portion of the plan describing facility security measures (such as provided for in Part IV.D.7.b.(8) of this permit).

## C. Keeping Plans Current.

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the State or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

- D. Contents of Plan. The plan shall include, at a minimum, the following items:
  - Pollution Prevention Team Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
  - 2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:
    - a. Drainage.
      - (1) A site map indicating an outline of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle

D. (continued)

and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

- (2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Flows with a significant potential for causing erosion shall be identified.
- b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of three years prior to the date of the received to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
- c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility after the date of three years prior to the effective date of this permit.
- d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.
- e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concerns shall be identified.
- 3. Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:
  - a. Good Housekeeping Good housekeeping requires the maintenance of a clean, orderly facility.
  - b. Preventive Maintenance A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
  - c. Spill Prevention and Response Procedures Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.
  - d. Inspections In addition to or as part of the comprehensive site evaluation required under Part IV.4. of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.
  - e. Employee Training Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
  - f. Recordkeeping and Internal Reporting Procedures A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
  - g. Non-Storm Water Discharges
    - (1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any

D. (continued)

test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify in accordance with Part IV.A of this permit.

- (2) Except for flows from fire fighting activities, sources of non-storm water listed in Part VI of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- h. Sediment and Erosion Control The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.
- i. Management of Runoff The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Parts IV.D.2.(b), (d) and (e) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: including vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.
- 4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d, in no case less than once a year. Such evaluations shall provide:
  - a. Material handling areas and other potential sources of pollution identified in the plan in accordance with paragraph IV.D.2 of this permit shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
  - b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.2 of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.
  - c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years. The report shall be signed in accordance with Part VI.B of this permit.
- Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.

In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

- 6. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the Act or Best Management Practices (BMP) Programs otherwise required by a NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.
- 7. Additional requirements for storm water discharges associated with industrial activity from facilities subject to SARA Title III, Section 313 requirements. In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under SARA Title III, Section 313 for chemicals which are classified as "Section 313 water priority chemicals" in accordance with the definition in Part VI of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

- D. (continued)
  - . In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:
    - Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or
       Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind blowing.
  - b. In addition to the minimum standards listed under Part IV.D.7.a of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:
    - (1) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.
      - (a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.
      - (b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.
    - (2) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind blowing shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.
    - (3) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.
    - (4) In facility areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall be designed as described in paragraphs (a), (b) and (c) of this section. Additional protection such as covers or guards to prevent wind blowing, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.
    - (5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).
      - (a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by values or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.
      - (b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.
        - (c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
        - (d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

- D. (continued)
  - (6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.
  - (7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage area shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be immediately taken or the unit or process shut down until corrective action can be taken. When a leak or non-containment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.
  - (8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.
  - (9) Training. Facility employees and contractor personnel using the facility shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.
  - (10) Engineering Certification. No storm water pollution prevention plan for facilities subject to SARA Title III, Section 313 requirements for chemicals which are classified as 'Section 313 water priority chemicals' shall be effective to satisfy the requirements of part IV.D.7 of this permit unless it has been reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the plan every three years thereafter. By means of these certifications the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by the plan of their duty to prepare and fully implement such plan.
  - 8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile within two years of the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the State.

Form EPA 4428

# **EXHIBIT 3**

# Part V. NUMERIC EFFLUENT LINITATIONS AND MONITORING REQUIREMENTS

A. Coal Pile Runoff Effluent Limitations. Any discharge of coal pile runoff is authorized to discharge as of the effective date of this permit and shall comply with the following effluent limitations as expeditiously as practicable, but no later than three years after the effective date of this permit. Coal pile runoff shall not be diluted with storm water or other flow in order to meet these limitations.

<u>Units</u>	Parameter	Daily Minimum	Daily Maximum	
mg∕l S.U.	Total Suspended Solids pH	6.0	50 9.0	<b></b> *

Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24-hour rainfall event shall not be subject to the limitation for total suspended solids. It is the permittee's responsibility to demonstrate to the Ohio EPA that a 10 year, 24hour rainfall event has occurred and the volume of the overflow to which the Total Suspended Solids effluent limitation does not apply.

B. Monitoring Requirements. Only the activities described in the following matrix and associated definitions are required to conduct monitoring. The monitoring required in the following matrix shall be conducted annually. Monitoring shall be initiated within twelve months of the effective date of this permit and henceforth on an annual basis, weather conditions permitting. A permittee may, in lieu of annual monitoring, certify that industrial materials are not exposed to storm water; such certification shall be submitted to the Ohio EPA upon request of the Director.

			INDUSTRIAL ACTIVITY CATEGORIES										
Reporting Units	Parameter	a <sup>1</sup>	b <sup>2</sup>	c	d	e	f	g	h	i <sup>3</sup>	j	k	l <sup>2</sup>
mg/l	Oil and Grease	x	x	x	x	x	x	x	x	x	x	x	x
mg/l	5-day Biochemical Oxygen Demand	x	x			L	ļ	<u> </u>		x		x	ļ
mg/l	Chemical Oxygen Demand	x	x	x	x	x	x		x	x	L	ļ	x
mg/l	Total Suspended Solids	x	x	ļ	x	x	x	x	x	x	x	x	x
mg/l	Total Kjeldahl Nitrogen	x		x	ļ	ļ	ļ	ļ	ļ	ļ	ļ	x	ļ
mg/l	Phosphorus	x	[	ļ	ļ	ļ	L	ļ	ļ	L		x	
S.U.	рН	x	x	x	x	x	x	x	x	x	x	x	x
TU	Acute Toxicity	x	<u>x</u> <sup>4</sup>	x	x	x					ļ	<u> </u>	
Hours	Duration of Storm Event	x	x	x	x	x	x	x	x	x	x	x	x
Inches	Precipitation	x	x	x	x	x	x	x	x	x	x	x	x
Hours	Duration Between Storm Events*	x	x	x	x	x	x	x	x	x	x	x	x
Gallons	Volume (est)	x	x	x	x	x	x	x	<b>X</b>	x	x	x	x
mg/l	Nitrate-Nitrogen									[	ļ		
mg/l	Nitrite-Nitrogen										ļ		
μg/l	Lead, Total		x	x					X				
μg/l	Cadmium, Total		x4	x									
μg/l	Copper, Total		<u>x</u> <sup>4</sup>	ļ	4		x	x	x		x		
μg/l	Arsenic, Total		x <sup>4</sup>	x			x						
μg/l	Chromium, Total		x4	x			x						
mg/l	Ammonia												
μg/l	Magnesium, Total			x									

1. MONITORING REQUIREMENTS MATRIX

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# Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

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	INDUSTRIAL ACTIVITY CATEGORIES												
Reporting Units	Parameter	al	b <sup>2</sup>	c	d	c	f	g	h	i <sup>3</sup>	j	k	12
μg/l	Magnesium, Dissolved			x									
mg/l	Total Dissolved Solids			x									
mg/l	Total Organic Carbon			x									
μg/l	Barium, Total			x									
mg/l	Cyanide, Total			x									
μg/l	Mercury, Total			x									
μg/l	Selenium, Total			х									
μg/l	Silver, Total			x									
μg/l	Pentachlorophenol .				x	-							
μg/l	Nickel, Total							x			x		
μg/l	Zinc, Total							x			x		
#/100ml	Fecal Coliform											x	

\* Time between the storm event when sampling is being conducted and the last storm event producing rainfall greater than 0.1 inches.

- (1) and any Section 313 water priority chemical for which the facility is subject to reporting requirements under Section 313 of the Emergency Planning and Community Right to Know Act of 1986.
- (2) and any pollutant limited in an effluent guideline or categorical pretreatment standard which the facility is subject.
- (3) and the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, urea, etc.).
- (4) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for this parameter.
- 2. Industrial Activity Categories Definitions
  - a. Section 313 of SARA Title III Facilities. In addition to any monitoring required by Parts V.B.2.b through l., facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III for chemicals which are classified as 'Section 313 water priority chemicals' are required to monitor storm water that is discharged from the facility that comes into contact with any equipment, tank, container or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car loading or unloading area where a Section 313 water priority chemical is handled.
  - b. Primary Metal Industries. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility.
  - c. Land Disposal Units/Incinerators/BIFs. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes from a facility with a Standard Industrial Classification (SIC) of between 20-39 (manufacturing); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility.
  - d. Wood Treatment Using Chlorophenolic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
  - e. Wood Treatment Using Creosote Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of

# Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- B. (continued)
  - treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
  - f. Wood Treatment Using Chromium-Arsenic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
  - g. Coal Pile Runoff. Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility.
  - h. Battery Reclaimers. Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility.
  - i. Airports. At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility.
  - j. Coal-fired Steam Electric Facilities. Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility.
  - k. Animal Handling / Meat Packing. Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility.
  - 1. Additional Facilities. Facilities with storm water discharges associated with industrial activity that:
    - (1) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);
    - (2) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;
    - (3) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;
    - (4) are from oil handling sites at oil fired steam electric power generating facilities;
    - (5) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit);
    - (6) are from ready-mixed concrete facilities; or
    - (7) are from ship building and repairing facilities; are required to monitor such storm water discharged from the facility.
  - 3. Sample Type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharge shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable. The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Only grab samples must be collected and analyzed for the determination of pH, cyanide, whole effluent toxicity, and oil and grease.

# Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- B. (continued)
  - 4. Sampling Waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
  - 5. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40%), medium (40% to 65%) or high (above 65%) shall be provided.
- C. Toxicity Testing. Permittees that are required to monitor for acute whole effluent toxicity shall initiate the series of tests described below within 365 days of approval from the Director of coverage under this general permit. In lieu of toxicity testing, a facility may analyze its storm water for priority pollutants it knows or has reason to believe have the potential to discharge through an industrial outfall.
  - 1. Test Procedures

The permittee shall conduct acute 24 hour static toxicity tests on both Ceriodaphnia dubia and fathead minnow (Pimephales promelas).

- a. All test organisms, procedures and quality assurance criteria used shall be in accordance with <u>Methods</u> for <u>Measuring the Acute Toxicity of Effluents</u> and <u>Receiving Waters to Freshwater</u> and <u>Marine Organisms</u>, EPA/600/4-90-027 (Rev. September 1991). EPA has proposed to establish regulations regarding these test methods (December 4, 1989, 53 <u>FR</u> 50216).
- b. Tests shall be conducted annually (once per year) on a grab sample of the discharge at 100% strength (no dilution) and a control consisting of either receiving water or synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained. The permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality. If there is statistical difference (exhibits toxicity), the permittee shall report "1". The data shall be submitted to the Ohio EPA upon request by the Director, or his authorized representative.
- 2. If acute whole effluent toxicity (statistically significant difference between the 100% dilution and the control) is detected in storm water discharges collected three years from the effective date, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the source(s) of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

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# Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION

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- A. Failure to Certify. Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director within 180 days of the effective date of this permit. Such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of nonstorm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible.
- B. Signatory Requirements. All storm water pollution prevention plans, reports, certifications or information either submitted to the Director (and/or the operator of a large or medium municipal separate storm sewer system), or that this permit requires be maintained by the permittee, shall be signed.
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) 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 decisionmaking functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
    - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
    - c. For a municipality: State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).
  - All reports required by the permit and other information requested by the Director shall be signed by a
    person described above or by a duly authorized representative of that person. A person is a duly authorized
    representative only if:
    - a. The authorization is made in writing by a person described above and submitted to the Director.
    - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
    - c. Changes to authorization. If an authorization under paragraph VI.B.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph VI.B.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
    - d. Certification. Any person signing documents under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# C. Definitions.

"Section 313 water priority chemical" means a chemical or chemical categories which are: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

"<u>Significant materials</u>" 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 storm water discharges.

"<u>Significant spills</u>" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

## Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION (continued)

C. (continued)

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"<u>Storm Water</u>" means storm water runoff, snow melt runoff, and surface runoff and drainage. "<u>Definition of Storm Water Associated with Industrial Activity</u>" means the discharge from any conveyance which is used for collecting and conveying storm water and which 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. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water 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 40 GFR 401); sites used for disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material handling as she drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (:)-(:)) include those facilities designated under 40 CFR 122.2 this subsection:

- Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph); (i)
- Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 373; (ii)
- Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable (iii) owner/operator;
- Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA; (iv)
- Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;  $(\gamma)$
- Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093; (vi)
- (vii) Steam electric power generating facilities, including coal handling sites;
- Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity; (viii)
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or ireatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;
- Construction activity This category of industrial activity is not regulated under this permit. (x)

Form EPA 4428

# **EXHIBIT 3**

## Part VI. OTHER STORN WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION (continued)

C. (continued)

L

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x)).

"<u>SWPPP</u>" means storm water pollution prevention plan to be completed as a condition of this permit (see Part IV of this permit).

"<u>Time-weighted composite</u>" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"<u>Waste pile</u>" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

"<u>10-year, 24-hour precipitation event</u>" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper No. 40,", May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

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

"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.

### Form EPA 4428

**EXHIBIT 3**