

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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., the "Act"), and IDEM's authority under IC13-15,

ARCELORMITTAL BURNS HARBOR

is authorized to discharge from the integrated steel mill that is located at 250 West Highway 12, Burns Harbor, Indiana, to receiving waters identified as the East Branch of the Little Calumet River and Lake Michigan in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, and IV hereof. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management no later than 180 days prior to the date of expiration.

Signed on \_\_\_\_\_ for the Indiana Department of Environmental Management.

\_\_\_\_\_  
Paul Higginbotham,  
Deputy Assistant Commissioner  
Office of Water Quality

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 001. The discharge is limited to treated wastewater from the Secondary Wastewater Treatment Plant (Internal Outfall 011), non-contact cooling water, storm water, Lake Michigan water, and treated sanitary wastewater from the Town of Burns Harbor's wastewater treatment plant permitted under Operational Permit No. INJ060801. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the East Branch of the Little Calumet River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1] [2] [3] [17]

Outfall 001

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Monthly Average Report	Daily Maximum Report	Units	Monthly Average	Daily Maximum	Units		
Flow	Report	Report	MGD	-----	-----	-----	Continuous	24-Hour Total
Water Cannon Flow	Report	Report	MGD	-----	-----	-----	Continuous	24-Hour Total
TSS	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
O+G	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	Grab
Phenols(4AAP)	14	22	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Copper[4][15]	20	39	lbs/day	0.018	0.035	mg/l	2 X Monthly	24-Hr. Comp.
Silver[4][5][6][8][10][15]	0.054	0.11	lbs/day	0.048	0.097	ug/l	2 X Monthly	24-Hr. Comp.
Mercury[10][12][15]	0.0015	0.0037	lbs/day	1.3	3.2	ng/l	6 X Yearly	Grab
Zinc[4][15]	169	326	lbs/day	150	290	ug/l	2 X Monthly	24-Hr. Comp.
TRC[5][7][9][10][11]	11	23	lbs/day	10	20	ug/l	1 X Weekly	Grab
Temperature	-----	[13]	°F	-----	-----	-----	Continuous	Thermometer
WETT[16]	-----	-----	-----	1.0	1.0	TU	Part.I.F	
Free Cyanide[10][15]	5.0	9.9	lbs/day	4.4	8.8	ug/l	2 X Monthly	24-Hr. Comp.

Table 2

Parameter	Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Daily Minimum	Daily Maximum	Units		
pH[14]	6.0	9.0	s.u.	Continuous	Probe

Table 3

	Pounds per Day (lbs/day)		Milligrams per Liter (mg/l)		Measurement Frequency	Sample Type
	7-Day Average	Daily Maximum	7-Day Average	Daily Maximum		
<u>Ammonia, as N</u> [15]						
January	720	915	0.68	0.86	3 X Weekly	24-Hr. Comp.
February	645	910	0.72	1.02	3 X Weekly	24-Hr. Comp.
March	940	1300	0.9	1.27	3 X Weekly	24-Hr. Comp.
April	730	1030	0.82	1.16	3 X Weekly	24-Hr. Comp.
May	680	970	0.74	1.05	3 X Weekly	24-Hr. Comp.
June	650	920	0.62	0.87	3 X Weekly	24-Hr. Comp.
July	375	540	0.36	0.51	3 X Weekly	24-Hr. Comp.
August	385	540	0.37	0.52	3 X Weekly	24-Hr. Comp.
September	550	775	0.82	1.16	3 X Weekly	24-Hr. Comp.
October	635	900	0.67	0.95	3 X Weekly	24-Hr. Comp.
November	530	680	0.47	0.6	3 X Weekly	24-Hr. Comp.
December	635	900	0.9	1.27	3 X Weekly	24-Hr. Comp.

- [1] See Part I.B. of the permit for the Narrative Water Quality Standards.
- [2] In the event that changes are to be made in the use of water treatment additives including dosage rates contributing to this Outfall, the permittee shall notify the Indiana Department of Environmental Management as required in Part II.C.1 of this permit. The use of any new or changed water treatment additives or dosage rates shall not cause the discharge from any permitted outfall to exhibit chronic or acute toxicity. Acute and chronic aquatic toxicity information must be provided with any notification regarding any new or changed water treatment additives or dosage rates.
- [3] The Storm Water Monitoring and Non Numeric Effluent Limits and the Storm Water Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.
- [4] The permittee shall measure and report the identified metal in total recoverable form.
- [5] The monthly average water quality based effluent limit (WQBEL) for TRC and Silver are less than the limit of quantitation (LOQ) as specified below. Compliance with the monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.

- [6] The daily maximum WQBEL for Silver is less than the LOD as specified below. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOD. Effluent levels greater than or equal to the LOD but less than the LOQ are in compliance with the daily maximum WQBEL, except when confirmed by a sufficient number of analyses of multiple samples and use of appropriate statistical techniques.
- [7] The daily maximum WQBEL for TRC is greater than or equal to the LOD but less than the LOQ as specified below. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ.
- [8] Compliance with the daily maximum mass value for Silver will be demonstrated if the calculated mass value is less than 0.72 lbs/day.
- [9] Compliance with the daily maximum mass value for TRC will be demonstrated if the calculated mass value is less than 68 lbs/day.
- [10] The following EPA test methods and/or Standard Methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631, Revision E	0.2 ng/l	0.5 ng/l
Chlorine	4500-Cl-D,E or 4500-Cl-G	0.02 mg/l	0.06 mg/l
Silver	200.8	0.2 ug/l	0.64 ug/l
Cyanide, Free	1677	0.5 ug/l	1.6 ug/l

Sample preservation procedures and maximum allowable holding times for total cyanide, or available (free) cyanide are prescribed in Table II of 40 CFR Part 136. Note the footnotes specific to cyanide. Preservation and holding time information in Table II takes precedence over information in specific methods or elsewhere.

Case-Specific LOD/LOQ

The permittee may determine a case-specific LOD or LOQ using the analytical method specified above, or any other test method which is approved by the Commissioner prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [11] Monitoring for TRC shall be 1 X Daily during Zebra or Quagga mussel intake chlorination, and continue for three additional days after Zebra or Quagga mussel treatment has been completed.

[12] **Mercury** monitoring shall be conducted bi-monthly in the months of February, April, June, August, October, and December of each year for the term of the permit using EPA Test Method 1631, Revision E.

[13] The temperature of Outfall 001 shall be monitored on a continuous basis. The temperature limitations below are based on an approved 316(a) variance for Alternate Thermal Effluent Limits in accordance with 327 IAC 5-7. The permittee is authorized to use flow augmentation to achieve compliance with the effluent limitations for temperature at Outfall 001. The highest temperature sustained over any two hour period within each day's 24 hour monitoring period shall not exceed the temperatures listed below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
°F	60	60	65	71	81	86	86	86	85	80	75	65

[14] The permittee shall maintain the pH of the discharge within the specified range except that excursions from this range are allowed under the following conditions:

- a. The total time during which the pH values are outside the required range of pH values in Table 2 above shall not exceed seven (7) hours and twenty-six (26) minutes in any calendar month;
- b. No individual excursion from the range of permitted pH values shall exceed sixty (60) minutes in duration or 0.5 s.u. in magnitude.

[15] When the water cannon is not in use, the compliance concentration and mass value is equal to the respective values in Table 1 above. During periods of water cannon use, the permittee shall calculate the daily concentration and mass of each pollutant at Outfall 001 as specified below:

$$C_{001C} = (C_{001M} * Q_{001}) / (Q_{001} - Q_{WC}); \text{ and}$$

$$M_{001C} = C_{001M} * Q_{001} * 8.345$$

where,

$C_{001C}$  = Pollutant concentration at Outfall 001 to determine compliance with the NPDES permit concentration effluent limit.

$M_{001C}$  = Pollutant mass at Outfall 001 to determine compliance with the NPDES permit mass effluent limit.

$C_{001M}$  = Measured pollutant concentration at Outfall 001, (mg/L)

$Q_{001}$  = Flow measured at Outfall 001, (million gallons)

$Q_{WC}$  = Total flow measured at water cannon, (million gallons)

[16] Refer to the Biomonitoring requirements in Part I.F of this permit.

[17] See Part I.G of the permit for the Pollutant Minimization Program (PMP) requirements.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 002. The discharge is limited to non-contact cooling water, treated process wastewater from the lagoon re-circulating pump station, and storm water. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the Burns Harbor. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1] [2] [3]

Outfall 002

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units		
Flow	Report	Report	MGD	-----	-----	-----	Continuous	24-Hour Total
TSS	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
O+G	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	Grab
Ammonia, as N	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly[11]	24-Hr. Comp.
Phenols(4AAP)	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly[11]	Grab
Dissolved Iron	Report	Report	lbs/day	Report	Report	mg/l	1 X Monthly[11]	Grab
Zinc[4]	Report	Report	lbs/day	Report	Report	ug/l	1 X Monthly[11]	24-Hr. Comp.
Lead[4]	Report	Report	lbs/day	Report	Report	ug/l	1 X Monthly[11]	24-Hr. Comp.
Fluoride	Report	Report	lbs/day	Report	Report	mg/l	1 X Monthly[11]	24-Hr. Comp.
TRC[5][6][7][8][9]	24	48	lbs/day	10	20	ug/l	1 X Daily	Grab
Temperature	-----	[10]	°F	-----	-----	-----	Continuous	Thermometer

Table 2

Parameter	Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Daily Minimum	Daily Maximum	Units		
pH[12]	6.0	9.0	s.u.	Continuous	Probe

[1] See Part I.B. of the permit for the Narrative Water Quality Standards.

[2] In the event that changes are to be made in the use of water treatment additives including dosage rates contributing to this Outfall, the permittee shall notify the Indiana Department of Environmental Management as required in Part II.C.1 of this permit. The use of any new or changed water treatment additives or dosage rates shall not cause the discharge from any permitted outfall to exhibit chronic or acute toxicity. Acute and chronic aquatic toxicity information must be provided with any notification regarding any new or changed water treatment additives or dosage rates.

- [3] The Storm Water Monitoring and Non Numeric Effluent Limits and the Storm Water Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.
- [4] The permittee shall measure and report the identified metal in total recoverable form.
- [5] The monthly average water quality based effluent limit (WQBEL) for TRC is less than the limit of quantitation (LOQ) as specified below. Compliance with the monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.
- [6] The daily maximum WQBEL for TRC is greater than or equal to the LOD but less than the LOQ as specified below. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ.
- [7] Compliance with the daily maximum mass value for TRC will be demonstrated if the calculated mass value is less than 110.7 lbs/day.
- [8] The following EPA test methods and/or Standard Methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Chlorine	4500-Cl-D,E or 4500-Cl-G	0.02 mg/l	0.06 mg/l

Case-Specific LOD/LOQ

The permittee may determine a case-specific LOD or LOQ using the analytical method specified above, or any other test method which is approved by the Commissioner prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [9] Monitoring for TRC shall be 1 X Daily during Zebra or Quagga mussel intake chlorination, and continue for three additional days after Zebra or Quagga mussel treatment has been completed.
- [10] The temperature of Outfall 002 shall be monitored on a continuous basis. The temperature limitations below are based on an approved 316(a) variance for Alternate Thermal Effluent Limits in accordance with 327 IAC 5-7. The highest

temperature sustained over any two hour period within each day's 24 hour monitoring period shall not exceed the temperatures listed below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
°F	55	57	63	69	77	82	88	90	88	81	72	63

[11] Monitoring for these parameters shall be 1 x Monthly when treated process wastewater from the lagoon re-circulating pump station is directed to Outfall 002 and occur on the same day of discharge via Outfall 002.

[12] The permittee shall maintain the pH of the discharge within the specified range except that excursions from this range are allowed under the following conditions:

- a. The total time during which the pH values are outside the required range of pH values in Table 2 above shall not exceed seven (7) hours and twenty-six (26) minutes in any calendar month;
- b. No individual excursion from the range of permitted pH values shall exceed sixty (60) minutes in duration or 0.5 s.u. in magnitude.

3. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 003. The discharge is limited to backwash from the Nos. 1 and 2 Lake Water Pump Stations traveling screens. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Lake Michigan. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]

Outfall 003

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Table 1 Quality or Concentration</u>		<u>Units</u>	<u>Monitoring</u>	<u>Requirements</u>
	<u>Monthly</u>	<u>Daily</u>		<u>Monthly</u>	<u>Daily</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Average</u>	<u>Maximum</u>		<u>Average</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Type</u>
TRC[2][3][4][5]	-----	-----	-----	10	20	ug/l	1 X Daily	Grab

- [1] See Part I.B. of the permit for the Narrative Water Quality Standards.
- [2] The monthly average water quality based effluent limit (WQBEL) for TRC is less than the limit of quantitation (LOQ) as specified below. Compliance with the monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.
- [3] The daily maximum WQBEL for TRC is greater than or equal to the LOD but less than the LOQ as specified below. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ.
- [4] The following EPA test methods and/or Standard Methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Chlorine	4500-Cl-D,E or 4500-Cl-G	0.02 mg/l	0.06 mg/l

Case-Specific LOD/LOQ

The permittee may determine a case-specific LOD or LOQ using the analytical method specified above, or any other test method which is approved by the Commissioner prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ

shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [5] Monitoring for TRC shall be 1 X Daily during Zebra or Quagga mussel intake chlorination, and continue for three additional days after Zebra or Quagga mussel treatment has been completed.

4. The permittee is authorized to discharge from the internal monitoring point Outfall 011 (Secondary Wastewater Treatment Plant) in accordance with the terms and conditions of this permit. The discharge is limited to treated process wastewater, leachate from the Deerfield Landfill, storm water, and treated sanitary effluent from the Town of Burns Harbor's wastewater treatment plant permitted under Operational Permit No. INJ060801. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge from the terminal polishing lagoon, but prior to mixing with any other wastewaters. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]

Outfall 011

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units		
Flow[4]	Report	Report	MGD	-----	-----	-----	Continuous	24-Hour Total
TSS	9006	24530	lbs/day	Report	Report	mg/l	3 X Weekly	24-Hr. Comp.
O+G	-----	5584	lbs/day	Report	Report	mg/l	3 X Weekly	Grab
Ammonia, as N	Report	Report	lbs/day	Report	Report	mg/l	3 X Weekly	24-Hr. Comp.
Phenols(4AAP)	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Total Cyanide	Report	21	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Zinc[2]	28.4	85.2	lbs/day	Report	Report	mg/l	3 X Weekly	24-Hr. Comp.
Lead[2]	19.8	40.0	lbs/day	Report	Report	mg/l	3 X Weekly	24-Hr. Comp.
TRC[3]	-----	4.32	lbs/day	Report	Report	ug/l	[3]	Grab
TRC[3]	-----	-----	-----	Report	Report	ug/l	3 X Weekly	Grab
Naphthalene	-----	0.402	lbs/day	Report	Report	ug/l	[5]	Grab
Tetrachloroethylene	-----	0.602	lbs/day	Report	Report	ug/l	[5]	Grab

- [1] The permittee shall not discharge spent hexavalent chromium solutions from the Hot Dip Galvanizing Line into the Burns Harbor wastewater collection and treatment systems. Such solutions shall be disposed of off-site.
- [2] The permittee shall measure and report the identified metal in total recoverable form.
- [3] The daily maximum mass limit for TRC is applicable when the sintering process water is chlorinated, or if the alkaline chlorination wastewater treatment system is being used. Compliance with the daily maximum limit of 4.32 lbs/day will be demonstrated if the observed effluent concentrations are less than the LOQ given below. The permittee shall report the daily maximum and monthly average concentration for TRC based on a 3 x Weekly measurement frequency.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Chlorine	4500-Cl-D,E or 4500-Cl-G	0.02 mg/l	0.06 mg/l

- [4] Flow shall be calculated using measurements from the existing flow measuring devices located at the effluent of the secondary wastewater treatment plant and the lagoon re-circulating pump station.
- [5] A monitoring waiver per 40 CFR Part 122.44 has been granted for Naphthalene and Tetrachloroethylene for the term of this permit. IDEM shall be notified if any changes occur at this facility that would require IDEM to review the conditions required to grant this waiver.

5. The permittee is authorized to discharge from the internal monitoring point Outfall 111 (the discharge from the final thickener at the Reclamation Services Building) in accordance with the terms and conditions of this permit. The discharge is limited to treated process wastewater from the sinter plant, from the dewatering of the BOF wastewater treatment plant slurry, and from the blast furnace slurry processing system. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge from the final thickener at the Reclamation Services Building, but prior to mixing with any other wastewaters. Such discharge shall be limited and monitored by the permittee as specified below:

**DISCHARGE LIMITATIONS [1]**

Outfall 111

Table 1

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring</u>	<u>Requirements</u>
	<u>Monthly</u>	<u>Daily</u>		<u>Monthly</u>	<u>Daily</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Average</u>	<u>Maximum</u>		<u>Average</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Type</u>
2,3,7,8-TCDF	-----	-----	-----	-----	<ML[2]	pg/l	1 X Monthly	24-Hr. Comp.

[1] The permittee may allow a bypass of the Reclamation Services Building (RSB) treatment system when the sinter plant is operating in response to an unintentional incident due to factors beyond the reasonable control of the permittee.<sup>1,2</sup> In such case, the Outfall 111 2,3,7,8-TCDF effluent limit shall apply at Outfall 011. Once the RSB treatment system is not in service for 12 hours or longer, the following conditions shall apply:

- The permittee shall conduct 24-hour composite monitoring of the Outfall 011 effluent for 2,3,7,8-TCDF daily during the period of the bypass. (0600 to 0600, 24-hour composite sample period). Monitoring shall begin during the next available 24-hour composite sampling period immediately following the 12-hour RSB outage. Outfall 011 discharge flow shall be recorded for each monitoring day.

<sup>1</sup> For purposes of this permit, the RSB treatment system comprises the process wastewater treatment equipment used to treat sinter plant scrubber water and blast furnace hydrocyclone overheads. This does not include other equipment located in the RSB building used for purposes other than treating sinter plant scrubber water and blast furnace hydrocyclone overheads.

<sup>2</sup> For purposes of this permit, a bypass of the RSB treatment system is a diversion of the sinter plant scrubber water from the RSB treatment system to the Secondary Wastewater Treatment Plant (SWTP). Taking RSB treatment system equipment items out of service for maintenance or repair while the sinter plant scrubber water is being treated at the RSB treatment system does not constitute a bypass of the RSB treatment system.

- The permittee shall conduct grab sample monitoring for 2,3,7,8-TCDF daily during the period of the bypass of the untreated sinter plant scrubber water. Grab samples shall be collected prior to mixing of the untreated sinter plant scrubber water with other process wastewaters, non-contact cooling waters and storm water. Twenty-four hour sinter plant scrubber water flow shall be recorded for each monitoring day.
- If the permittee is unable to return the RSB treatment system to service within five days of the RSB treatment system bypass, sinter plant production operations shall be shut down in an orderly manner. Sinter plant production operations shall not be resumed until the RSB treatment system is put back into service.

Monitoring for 2,3,7,8-TCDF of the untreated sinter plant scrubber water at Outfall 111 is not required when the sinter plant is not operating. During the period of RSB treatment system is not in service, monitoring for 2,3,7,8-TCDF of the untreated sinter plant scrubber water at Outfall 011 is not required after the sinter plant is not operating for 12 hours.

- [2] The limitation and standard for 2,3,7,8-tetrachlorodibenzofuran (2,3,7,8-TCDF) is expressed as less than the Minimum Level (<ML). The term Minimum Level means the level at which the analytical system gives recognizable signals and an acceptable calibration point. For 2,3,7,8-TCDF, the minimum level is 10 pg/l per EPA Method 1613B for water and wastewater samples. The term pg/l means picograms per liter ( $\text{ppt}=1 \times 10^{-12}$  gram/Liter).

B. NARRATIVE WATER QUALITY STANDARDS

At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:

1. including the mixing zone, to contain substances, materials, floating debris, oil, scum, or other pollutants:
  - a. that will settle to form putrescent or otherwise objectionable deposits;
  - b. that are in amounts sufficient to be unsightly or deleterious;
  - c. that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
  - d. which are in amounts sufficient to be acutely toxic to , or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
  - e. which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
2. outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the discharge.

2. Discharge Monitoring Reports

- a. For parameters with monthly average water quality based effluent limitations (WQBELs) below the LOQ, daily effluent values that are less than the limit of quantitation (LOQ) may be assigned a value of zero (0).
- b. For all other parameters for which the monthly average WQBEL is equal to or greater than the LOQ, calculations that require averaging of measurements of daily values (both concentration and mass) shall use an arithmetic mean. When a daily discharge value is below the

LOQ, a value of zero (0) shall be used for that value in the calculation to determine the monthly average unless otherwise specified or approved by the Commissioner.

- c. Effluent concentrations less than the LOD shall be reported on the Discharge Monitoring Report (DMR) forms as < (less than) the value of the LOD. For example, if a substance is not detected at a concentration of 0.1 µg/l, report the value as <0.1 µg/l.
- d. Effluent concentrations greater than or equal to the LOD and less than the LOQ that are reported on a DMR shall be reported as the actual value and annotated on the DMR to indicate that the value is not quantifiable.
- e. Mass discharge values which are calculated from concentrations reported as less than the value of the limit of detection shall be reported as less than the corresponding mass discharge value.
- f. Mass discharge values that are calculated from effluent concentrations greater than the limit of detection shall be reported as the calculated value.

The permittee shall submit federal and state discharge monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month which shall be postmarked no later than the 28<sup>th</sup> day of the month following each completed monitoring period. The first report shall be submitted by the 28<sup>th</sup> day of the month following the month in which the permit becomes effective. All reports shall be either be mailed to IDEM, Office of Water Quality, Compliance Data Section, 100 North Senate Ave., Indianapolis, Indiana 46204-2251 or submitted electronically by using the NetDMR application, upon registration and approval receipt. Electronically submitted reports (using NetDMR) have the same deadline as mailed reports. After December 31, 2016, all reports shall be submitted using NetDMR and paper reports will no longer be accepted. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

### 3. Definitions

#### a. Monthly Average

- (1) Mass Basis - The “monthly average” discharge means the total mass discharge during a calendar month divided by the number of days in the month that the production or commercial facility was discharging. Where less than daily samples is required by

this permit, the monthly average discharge shall be determined by the summation of the measured daily mass discharges divided by the number of days during the calendar month when the measurements were made.

- (2) Concentration Basis - The “monthly average” concentration means the arithmetic average of all daily determinations of concentration made during a calendar month. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during the calendar day.

b. “Daily Discharge”

- (1) Mass Basis – The “daily discharge” means the total mass discharge by weight during any calendar day.
- (2) Concentration Basis – The “daily discharge” means the average concentration over the calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for the purposes of sampling.

c. “Daily Maximum”

- (1) Mass Basis – The “daily maximum” means the maximum daily discharge mass value for any calendar day.
- (2) Concentration Basis – The “daily maximum” means the maximum daily discharge value for any calendar day.
- (3) Temperature Basis – The “daily maximum” means the highest temperature value measured for any calendar day.

d. A 24-hour composite sample consists of at least 3 individual flow-proportioned samples of wastewater, taken by the grab sample method or by an automatic sampler, which are taken at approximately equally spaced time intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. A flow-proportioned composite sample may be obtained by:

- (1) recording the discharge flow rate at the time each individual sample is taken,
- (2) adding together the discharge flow rates recorded from each individuals sampling time to formulate the “total flow” value,

- (3) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value,
  - (4) then multiply the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.
- e. Concentration -The weight of any given material present in a unit volume of liquid. Unless otherwise indicated in this permit, concentration values shall be expressed in milligrams per liter (mg/l).
  - f. The "Regional Administrator" is defined as the Region 5 Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
  - g. The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, which is located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204.
  - h. "Limit of Detection" or "LOD" means a measurement of the concentration of a substance that can be measured and reported with ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the method detection level or MDL.
  - i. "Limit of Quantitation" or "LOQ" means a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also sometimes called limit quantification or quantification level.
  - j. "Method Detection Level" or "MDL" means the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by procedure set forth in 40 CFR 136, Appendix B. The method detection level or MDL is equivalent to the LOD.
  - k. "Weekly Average" - The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week

for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.

- I. Seven (7) Day Average: Weight Basis – The seven day average discharge is the arithmetic average of the discharge, by weight, during a seven day monitoring period commencing with the first day of each month, with subsequent seven day monitoring periods being exclusive of previously included days. Where less than the required number of samples are collected during a monitoring period, the seven day average discharge shall be determined by the summation of the measured daily discharges, by weight, divided by the number of days during the monitoring period when the measurements were made.
  
- m. Seven (7) Day Average: Concentration Basis – The seven day average concentration is the arithmetic average, proportional to flow, of all daily determinations made during a seven day monitoring period. The monitoring period shall commence on the first day of each month and subsequent seven day monitoring periods are exclusive of previously included seven day monitoring periods. Where less than seven daily samples are collected during a monitoring period, the seven day average discharge shall be determined by the summation of the measured daily concentrations divided by the number of days during the monitoring period when the measurements were made.

#### 4. Test Procedures

The analytical and sampling methods used shall conform to the current version of 40 CFR 136. Multiple editions of Standard Methods for the Examination of Water and Wastewater are currently approved for most methods, however, 40 CFR Part 136 should be checked to ascertain if a particular method is approved for a particular analyte. The approved methods may be included in the texts listed below. However, different but equivalent methods are allowable if they receive the prior written approval of the Commissioner and the U.S. Environmental Protection Agency.

- a. Standard Methods for the Examination of Water and Wastewater 18<sup>th</sup>, 19<sup>th</sup>, or 20<sup>th</sup> Editions, 1992, 1995, or 1998, American Public Health Association, Washington, D.C. 20005.
  
- b. A.S.T.M. Standards, Parts 23, Water; Atmosphere Analysis 1972 American Society for Testing and Materials, Philadelphia, PA 19103.

- c. Methods for Chemical Analysis of Water and Wastes  
June 1974, Revised, March 1983, Environmental Protection Agency,  
Water Quality Office, Analytical Quality Control Laboratory, 1014  
Broadway, Cincinnati, OH 45202.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all monitoring information and monitoring activities, including:

- a. The date, exact place and time of sampling or measurement;
- b. The person(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The person(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such measurements and analyses.

6. Additional Monitoring by Permittee

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 above, the results of this monitoring shall be included in the calculation and reporting of the values required in the monthly Discharge Monitoring Report (DMR) and Monthly Monitoring Report (MMR). Such increased frequency shall also be indicated. Other monitoring data not specifically required in this permit (such as internal process or internal waste stream data) which is collected by or for the permittee need not be submitted unless requested by the Commissioner.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three years shall be extended:

- a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; or
- b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

D. **STORM WATER MONITORING AND NON-NUMERIC EFFLUENT LIMITS**

Within twelve (12) months of the effective date of this permit, the permittee shall implement the non-numeric permit conditions in this Section of the permit for the entire site as it relates to storm water associated with industrial activity regardless which outfall the storm water is discharged from.

1. Control Measures and Effluent Limits

In the technology-based limits included in Part D.2-4., the term “minimize” means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

2. Control Measures

Select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part D.3 to meet the non-numeric effluent limits in Part D.4. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. Any deviation from the manufacturer’s specifications shall be documented. If the control measures are not achieving their intended effect in minimizing pollutant discharges, the control measures must be modified as expeditiously as practicable. Regulated storm water discharges from the facility include storm water run-on that commingles with storm water discharges associated with industrial activity at the facility.

3. Control Measure Selection and Design Considerations

When selecting and designing control measures consider the following:

- a. preventing storm water from coming into contact with polluting materials is generally more effective, and cost-effective, than trying to remove pollutants from storm water;
- b. use of control measures in combination is more effective than use of control measures in isolation for minimizing pollutants in storm water discharge;

- c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- d. minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches), can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;
- e. flow can be attenuated by use of open vegetated swales and natural depressions;
- f. conservation and/or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and
- g. use of treatment interceptors (e.g. swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

4. Technology-Based Effluent Limits (BPT/BAT/BCT): Non-Numeric Effluent Limits

a. Minimize Exposure

Minimize the exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. To the extent technologically available and economically practicable and achievable, either locate industrial materials and activities inside or protect them with storm resistant coverings in order to minimize exposure to rain, snow, snowmelt, and runoff (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, pay particular attention to the following areas:

Loading and unloading areas: locate in roofed or covered areas where feasible; use grading, berming, or curbing around the loading area to divert run-on; locate the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems.

Material storage areas: locate indoors, or in roofed or covered areas where feasible; install berms/dikes around these areas; use dry cleanup methods.

Note: Industrial materials do not need to be enclosed or covered if storm water

runoff from affected areas will not be discharged to receiving waters.

b. Good Housekeeping

Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and stowing materials in appropriate containers.

As part of the developed good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

c. Maintenance

Maintain all control measures which are used to achieve the effluent limits required by this permit in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If control measures need to be replaced or repaired, make the necessary repairs or modifications as expeditiously as practicable.

d. Spill Prevention and Response Procedures

You must minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, you must implement:

- (1) Procedures for plainly labeling containers (e.g., "Used Oil", "Spent Solvents", "Fertilizers and Pesticides", etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- (2) Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;

- (3) Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your storm water pollution prevention team;
- (4) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available;
- (5) Procedures for documenting where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfalls that would be affected by such spills and leaks; and
- (6) A procedure for documenting all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance.

e. Erosion and Sediment Controls

Through the use of structural and/or non-structural control measures stabilize, and contain runoff from, exposed areas to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions to meet this limit, place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to check out information from both the State and EPA websites. The following two websites are given as information sources:

<http://www.in.gov/idem/stormwater/2363.htm> and  
<http://water.epa.gov/polwaste/npdes/swbmp/>

f. Management of Runoff

Divert, infiltrate, reuse, contain or otherwise reduce storm water runoff, to minimize pollutants in the discharge.

g. Salt Storage Piles or Piles Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if storm water runoff from the piles is not discharged.

h. Waste, Garbage, and Floatable Debris

Ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

i. Employee Training

Train all employees who work in areas where industrial material or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training must cover the specific control measures used to achieve the effluent limits in this part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit.

j. Non-Storm water Discharges

You must determine if any non-storm water discharges not authorized by an NPDES permit exist. Any non-storm water discharges discovered must either be eliminated or modified into this permit.

The following non-storm water discharges are authorized and should be documented when they occur in accordance with Part I.E.2.c. of the permit:

- Discharges from fire-fighting activities;
- Fire Hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;

Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

Pavement wash water where no detergents are used and no spills or leaks of toxic or hazardous material have occurred (unless all spilled material has been removed);

Routine external building washdown that does not use detergents;

Uncontaminated ground water or spring water;

Foundation or footing drains where flows are not contaminated with process materials;

Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from cooling towers (e.g., "piped cooling tower blowdown or drains);

Vehicle wash- waters where uncontaminated water without detergents or solvents is utilized; and

Runoff from the use of dust suppressants approved for use by IDEM.

k. Dust Generation and Vehicle Tracking of Industrial Materials

You must minimize generation of dust and off-site tracking of raw, final, or waste materials.

l. Fugitive Dust Emission.

Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, consider procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

m. Delivery Vehicles

Minimize contamination of storm water runoff from delivery vehicles arriving at the plant site. Consider procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

n. Miscellaneous Loading and Unloading Areas

Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading,

berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

o. Liquid Storage Tanks

Minimize contamination of surface runoff from above-ground liquid storage tanks. Consider protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

p. Spill Reduction Measures

Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to storm water, and make any necessary repairs immediately.

q. Oil-Bearing Equipment in Switchyards

Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Consider using level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

5. Annual Review

At least once every 12 months, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limitations in this permit. You must document the results of your review in a report that shall be retained within the SWPPP. You must also submit the report to the Industrial NPDES Permit Section on an annual basis.

6. Corrective Actions – Conditions Requiring Review

a. If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated:

- (1) an unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this NPDES permit) occurs at this facility;

- (2) it is determined that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
- (3) it is determined in your routine facility inspection, an inspection by EPA or IDEM, comprehensive site evaluation, or the Annual Review required in Part D.5 that modifications to the control measures are necessary to meet the effluent limits in this permit or that your control measures are not being properly operated and maintained; or
- (4) Upon written notice by the Commissioner that the control measures prove to be ineffective in controlling pollutants in storm water discharges exposed to industrial activity.

b. If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

- (1) construction or a change in design, operation, or maintenance at your facility that significantly changes the nature of pollutants discharged in storm water from your facility, or significantly increases the quantity of pollutants discharge.

## 7. Corrective Action Deadlines

You must document your discovery of any of the conditions listed in Part I.D.6 within thirty (30) days of making such discovery. Subsequently, within one-hundred and twenty (120) days of such discovery, you must document any corrective action(s) to be taken to eliminate or further investigate the deficiency or if no corrective action is needed, the basis for that determination. Specific documentation required within 30 and 120 days is detailed below. If you determine that changes to your control measures are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but schedules considered reasonable for the documenting of your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

8. Corrective Action Report

Within 30 days of a discovery of any condition listed in Part I.D.6, you must document the following information:

- a. Brief description of the condition triggering corrective action;
- b. Date condition identified; and
- c. How deficiency identified.

Within 120 days of discovery of any condition listed in Part I.D.6, you must document the following information:

- a. Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.D.6.b.(1), where you determine that corrective action is not necessary, the basis for this determination)
- b. Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- c. Date corrective action initiated; and
- d. Date corrective action completed or expected to be completed.

9. Inspections

a. *Routine Facility Inspections*

During normal facility operating hours you must conduct inspections of areas of the facility covered by the requirements in this permit, including the following:

- (1) Areas where industrial materials or activities are exposed to stormwater;
- (2) Areas identified in the SWPPP and those that are potential pollutant sources;
- (3) Areas where spills and leaks have occurred in the past 3 years.
- (4) Discharge points; and
- (5) Control measures used to comply with the effluent limits contained in this permit.

Inspections must be conducted at least quarterly (i.e., once each calendar quarter), or in some instances more frequently (e.g., monthly), as appropriate. Increased frequency may be appropriate for some types of equipment, processes and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater. At least one of your routine inspections must be conducted during a period when a stormwater discharge is occurring.

Inspections must be performed by qualified personnel (as defined in Appendix A) with at least one member of your stormwater pollution prevention team participating. Inspectors must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting inspections.

During the inspection you must examine or look out for the following:

- (6) Industrial materials, residue or trash that may have or could come into contact with stormwater;
- (7) Leaks or spills from industrial equipment, drums, tanks and other containers;
- (8) Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- (9) Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas; and
- (10) Control measures needing replacement, maintenance or repair.

As part of conducting your routine facility inspections at least quarterly, address all potential sources of pollutants.

Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

During an inspection occurring during a stormwater discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. Discharge outfalls must also be observed during this inspection. If such discharge

locations are inaccessible, nearby downstream locations must be inspected.

b. *Routine Facility Inspection Documentation*

The findings of facility inspections must be documented and the report maintained with your SWPPP. Findings must be summarized in the annual report. Document all findings, including but not limited to, the following information:

- (1) The inspection date and time;
- (2) The name(s) and signature(s) of the inspector(s);
- (3) Weather information;
- (4) All observations relating to the implementation of control measures at the facility, including:
  - (a) A description of any discharges occurring at the time of the inspection;
  - (b) Any previously unidentified discharges and/or pollutants from the site;
  - (c) Any evidence of, or the potential for, pollutants entering the drainage system;
  - (d) Observations regarding the physical condition of and around all outfalls including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
  - (e) Any control measures needing maintenance, repairs, or replacement;
- (5) Any additional control measures needed to comply with the permit requirements; and
- (6) Any incidents of noncompliance observed.

Any corrective action required as a result of a routine facility inspection must be performed consistent with Part I.D.6. of this permit.

If discharge was visual assessed as required in Part I.D.9.c. during your facility inspection, you may include the results of the assessment

with the report required in Part I.D.9.a., as long as all components of both types of inspections are included in the report.

c. *Quarterly Visual Assessment Procedures*

Once each quarter for the entire permit term, you must collect a stormwater sample from each outfall and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge. Guidance on monitoring is available at [www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp). The visual assessment must be made:

- (1) Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- (2) On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and you must document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site; and
- (3) For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period.

You must visually inspect or observe the sample for the following water quality characteristics:

- (4) Color;
- (5) Odor;
- (6) Clarity (diminished);
- (7) Floating solids;
- (8) Settled solids;
- (9) Suspended solids;

- (10) Foam;
- (11) Oil sheen; and
- (12) Other obvious indicators of stormwater pollution.

Whenever the visual assessment shows storm water discharges are not in compliance with narrative water quality standards, you must initiate the corrective action procedures in Part I.D.6.

d. *Quarterly Visual Assessment Documentation*

Results of visual assessments must be documented and the documentation maintained onsite with the SWPPP. Documentation of the visual assessment must include, but is not be limited to:

- (1) Sample location(s);
- (2) Sample collection date and time, and visual assessment date and time for each sample;
- (3) Personnel collecting the sample and performing visual assessment, and their signatures;
- (4) Nature of the discharge (i.e., runoff or snowmelt);
- (5) Results of observations of the stormwater discharge;
- (6) Probable sources of any observed stormwater contamination; and
- (7) If applicable, why it was not possible to take samples within the first 30 minutes.

Any corrective action required as a result of a quarterly visual assessment must be performed consistent with Part I.D.6. of this permit.

e. *Exceptions to Quarterly Visual Assessments*

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

personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as extended frozen conditions.

## E. STORM WATER POLLUTION PREVENTION PLAN

### 1. Development of Plan

Within 12 months from the effective date of this permit, the permittee is required to review and update the current Storm Water Pollution Prevention Plan (SWPPP) for the permitted facility. The plan shall at a minimum include the following:

- a. 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. Storm water associated with industrial activity (defined in 40 CFR 122.26(b)(14)) includes, but is not limited to, the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or materials storage areas at an industrial plant;
- b. Describe practices and measure to be used in reducing the potential for pollutants to be exposed to storm water; and
- c. Assure compliance with the terms and conditions of this permit.

### 2. Contents

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

- a. Pollution Prevention Team -The plan shall list, by position title, the member or members of the facility organization as members of a Storm Water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan (SWPPP) and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each storm water pollution prevention team member. Each member of the storm water pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.
- b. Description of Potential Pollutant Sources – The plan shall provide a description of areas at the site exposed to industrial activity and have a reasonable potential for storm water to be exposed to pollutants.

The plan shall identify all activities and significant materials (defined in 40 CFR 122.26(b)), which may potentially be significant pollutant sources. As a minimum, the plan shall contain the following:

- (1) A soils map indicating the types of soils found on the facility property and showing the boundaries of the facility property.
- (2) A graphical representation, such as an aerial photograph or site layout maps, drawn to an appropriate scale, which contains a legend and compass coordinates, indicating, at a minimum, the following:
  - (A) All on-site storm water drainage and discharge conveyances, which may include pipes, ditches, swales, and erosion channels, related to a storm water discharge.
  - (B) Known adjacent property drainage and discharge conveyances, if directly associated with run-off from the facility.
  - (C) All on-site and known adjacent property water bodies, including wetlands and springs.
  - (D) An outline of the drainage area for each outfall.
  - (E) An outline of the facility property, indicating directional flows, via arrows, of surface drainage patterns.
  - (F) An outline of impervious surfaces, which includes pavement and buildings, and an estimate of the impervious and pervious surface square footage for each drainage area placed in a map legend.
  - (G) On-site injection wells, as applicable.
  - (H) On-site wells used as potable water sources, as applicable.
  - (I) All existing major structural control measures to reduce pollutants in storm water run-off.
  - (J) All existing and historical underground or aboveground storage tank locations, as applicable.
  - (K) All permanently designated plowed or dumped snow

storage locations.

- (L) All loading and unloading areas for solid and liquid bulk materials.
  - (M) All existing and historical outdoor storage areas for raw materials, intermediary products, final products, and waste materials. Include materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities.
  - (N) All existing or historical outdoor storage areas for fuels, processing equipment, and other containerized materials, for example, in drums and totes.
  - (O) Outdoor processing areas.
  - (P) Dust or particulate generating process areas.
  - (Q) Outdoor assigned waste storage or disposal areas.
  - (R) Pesticide or herbicide application areas.
  - (S) Vehicular access roads.
  - (T) Identify any storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operation, etc., and could result in a discharge of pollutants.
  - (U) The mapping of historical locations is only required if the historical locations have a reasonable potential for storm water exposure to historical pollutants.
- (3) An area site map that indicates:
- (A) The topographic relief or similar elevations to determine

surface drainage patterns;

- (B) The facility boundaries;
- (C) All receiving waters; and
- (D) All known drinking water wells; and

Includes at a minimum, the features in clauses (A), (C), and (D) within a one-fourth (1/4) mile radius beyond the property boundaries of the facility. This map must be to scale and include a legend and compass coordinates.

- (4) A narrative description of areas that generate storm water discharges exposed to industrial activity including descriptions for any existing or historical areas listed in subdivision 2.b.(2)(J) through (T) of this Part, and any other areas thought to generate storm water discharges exposed to industrial activity. The narrative descriptions for each identified area must include the following:

- (A) Type and typical quantity of materials present in the area.
- (B) Methods of storage, including presence of any secondary containment measures.
- (C) Any remedial actions undertaken in the area to eliminate pollutant sources or exposure of storm water to those sources. If a corrective action plan was developed, the type of remedial action and plan date shall be referenced.
- (D) Any significant release or spill history dating back a period of three (3) years from the effective date of this permit, in the identified area, for materials spilled outside of secondary containment structures and impervious surfaces in excess of their reportable quantity, including the following:
  - i. The date and type of material released or spilled.
  - ii. The estimated volume released or spilled.
  - iii. A description of the remedial actions undertaken, including disposal or treatment.

Depending on the adequacy or completeness of the remedial actions, the spill history shall be used to determine additional pollutant sources that may be exposed to storm water. In subsequent permit terms, the history shall date back for a period of five (5) years from the date of the permit renewal application.

- (E) Where the chemicals or materials have the potential to be exposed to storm water discharges, the descriptions for each identified area must include a risk identification analysis of chemicals or materials stored or used within the area. The analysis must include the following:
  - i. Toxicity data of chemicals or materials used within the area, referencing appropriate material safety data sheet information locations.
  - ii. The frequency and typical quantity of listed chemicals or materials to be stored within the area.
  - iii. Potential ways in which storm water discharges may be exposed to listed chemicals and materials.
  - iv. The likelihood of the listed chemicals and materials to come into contact with water.
  
- (5) A narrative description of existing and planned management practices and measures to improve the quality of storm water run-off entering a water of the state. Descriptions must be created for existing or historical areas listed in subdivision 2.b.(2)(J) through (T) and any other areas thought to generate storm water discharges exposed to industrial activity. The description must include the following:
  - (A) Any existing or planned structural and nonstructural control practices and measures.
  - (B) Any treatment the storm water receives prior to leaving the facility property or entering a water of the state.
  - (C) The ultimate disposal of any solid or fluid wastes collected in structural control measures other than by discharge.

- (6) Describe areas that due to topography, activities, or other factors have a high potential for significant soil erosion.
  - (7) Document the location of any storage piles containing salt used for deicing.
  - (8) Information or other documentation required under subsection (d) of this plan.
  - (9) The results of storm water monitoring. The monitoring data must include completed field data sheets, chain-of-custody forms, and laboratory results. If the monitoring data are not placed into the facility's SWPPP, the on-site location for storage of the information must be reference in the SWPPP.
  - (10) Drainage Area Site Map. Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).
  - (11) Documentation of Good Housekeeping Measures. You must document in your SWPPP the good housekeeping measures implemented to meet the effluent limits in Part I.D.4 of this NPDES permit.
- c. Non-Storm water Discharges – You must document that you have evaluated for the presence of non-storm water discharges not authorized by an NPDES permit. Any non-storm water discharges have either been eliminated or incorporated into this permit. Documentation of non-storm water discharges shall include:
- (1) A written non-storm water assessment, including the following:
    - (A) A certification letter stating that storm water discharges entering a water of the state have been evaluated for the presence of illicit discharges and non-storm water contributions.
    - (B) Detergent or solvent-based washing of equipment or

vehicles that would allow washwater additives to enter any storm water only drainage system shall not be allowed at this facility unless appropriately permitted under this NPDES permit.

- (C) All interior maintenance area floor drains with the potential for maintenance fluids or other materials to enter storm water only storm sewers must be either sealed, connected to a sanitary sewer with prior authorization, or appropriately permitted under this NPDES permit. The sealing, sanitary sewer connecting, or permitting of drains under this item must be documented in the written non-storm water assessment program.
- (D) The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during the test.

d. General Requirements – The SWPPP must meet the following general requirements:

- (1) The plan shall be certified by a qualified professional. The term qualified professional means an individual who is trained and experienced in water treatment techniques and related fields as may be demonstrated by state registration, professional certification, or completion of course work that enable the individual to make sound, professional judgments regarding storm water control/treatment and monitoring, pollutant fate and transport, and drainage planning.
- (2) The plan shall be retained at the facility and be available for review by a representative of the Commissioner upon request. IDEM may provide access to portions of your SWPPP to the public.
- (3) The plan must be revised and updated as required. Revised and updated versions of the plan must be implemented on or before three hundred sixty-five (365) days from the effective date of this permit. The Commissioner may grant an extension of this time frame based on a request by the person showing reasonable cause.
- (4) If the permittee has other written plans, required under applicable federal or state law, such as operation and maintenance, spill prevention control and countermeasures

(SPCC), or risk contingency plans, which fulfill certain requirements of an SWPPP, these plans may be referenced, at the permittee's discretion, in the appropriate sections of the SWPPP to meet those section requirements.

- (5) The permittee may combine the requirements of the SWPPP with another written plan if:
  - (A) The plan is retained at the facility and available for review;
  - (B) All the requirements of the SWPPP are contained within the plan; and
  - (C) A separate, labeled section is utilized in the plan for the SWPPP requirements.

## F. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited. In support of this policy the U.S. EPA in 1995 amended 40 CFR 136.3 (Tables IA and II) by adding testing method for measuring acute and short-term chronic toxicity of whole effluents and receiving waters. To adequately assess the character of the effluent, and the effects of the effluent on aquatic life, the permittee shall conduct Whole Effluent Toxicity Testing. Part 1 of this section describes the testing procedures, Part 2 describes the Toxicity Reduction Evaluation (TRE) which is only required if the effluent demonstrated toxicity, as described in section 1.f.

### 1. Whole Effluent Toxicity Tests

Within 90 days of the effective date of the permit, the permittee shall initiate the series of bioassay tests described below to monitor the toxicity of the discharge from Outfall 001. The permittee shall continue the bioassay tests described below to monitor the toxicity of the discharge from Outfall 001. If toxicity is demonstrated as defined under section f. below, the permittee is required to conduct a toxicity reduction evaluation (TRE).

#### a. Bioassay Test Procedures and Data Analysis

- (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Fourth Edition

Section 13, Cladoceran (*Ceriodaphnia dubia*) Survival and Reproduction Test Method 1002.0.

- (2) Any circumstances not covered by the above methods, or that required deviation from the specified methods shall first be approved by the IDEM's Permit Branch.
- (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA-821-R-02-013), Fourth Edition, October 2002, or most recent update.

b. Types of Bioassay Tests

- (1) The permittee shall conduct 7-day Daphnid (*Ceriodaphnia dubia*) Survival and Reproduction Test on samples of final effluent. All tests will be conducted on 24-hour composite samples of final effluent. All test solutions shall be renewed daily. On days three and five fresh 24-hour composite samples of the effluent collected on alternate days shall be used to renew the test solutions.
- (2) If, in any control, more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test shall be repeated. In addition, if in the *Ceriodaphnia dubia* test control the number of newborns produced per surviving female is less than 15, or if 60% of surviving control females have less than three broods, that test shall also be repeated. Such testing will determine whether the effluent affects the survival, reproduction, and/or growth of the test organisms. Results of all tests regardless of completion must be reported to IDEM.

c. Effluent Sample Collection and Chemical Analysis

- (1) Samples taken for the purposes of Whole Effluent Toxicity Testing will be taken at a point that is representative of the discharge, but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of the 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.

- (2) Chemical analysis must accompany each effluent sample taken for bioassay test, especially the sample taken for the repeat or confirmation test as outlined in section f.3. below. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

d. Testing Frequency and Duration

The chronic toxicity test specified in section b. above shall be conducted at least once every quarter for the duration of the permit. If toxicity is demonstrated as defined under section f., the permittee is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2.

e. Reporting

- (1) Results shall be reported according to EPA 821-R-02-013, October 2002, Section 10 (Report Preparation). The completed report for each test shall be submitted to the Compliance Data Section of IDEM no later than 60 days after completion of the test.

In lieu of mailing reports, reports may be submitted to IDEM electronically as an e-mail attachment. E-mails should be sent to [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov).

- (2) For quality control, the report shall include the results of appropriate standard reference toxic pollutant tests for chronic endpoints and historical reference toxic pollutant data with mean values and appropriate ranges for *Ceriodaphnia dubia*. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.
- (3) Statistical procedures used to analyze and interpret toxicity data including critical values of significance to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

f. Demonstration of Toxicity

- (1) Acute toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU<sub>a</sub> (acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia*.

- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU<sub>c</sub> (chronic toxic units) for *Ceriodaphnia dubia*.
- (3) If toxicity is found in any of the tests as specified above, a confirmation toxicity test using the specified methodology and same test species shall be conducted within two weeks of the completion of the failed test to confirm results. During the sampling for any confirmation test the permittee shall also collect and preserve sufficient effluent samples for use in any Toxicity Identification Evaluation (TIE) and/or Toxicity Reduction Evaluation (TRE), if necessary. If any two (2) consecutive tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended (upon approval from IDEM) while the TRE/TIE are being conducted.

g. Definitions

- (1) TU<sub>c</sub> is defined as 100/NOEC or 100/IC<sub>25</sub>, where the NOEC or IC<sub>25</sub> are expressed as a percent effluent in the test medium.
- (2) TU<sub>a</sub> is defined as 100/LC<sub>50</sub> where the LC<sub>50</sub> is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.
- (3) "Inhibition concentration 25" or "IC<sub>25</sub>" means the toxicant (effluent) concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the test population. For example, the IC<sub>25</sub> is the concentration of toxicant (effluent) that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.
- (4) "No observed effect concentration" or "NOEC" is the highest concentration of toxicant (effluent) to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant (effluent) in which the values for the observed responses are not statistically significantly different from the controls.

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE (including any post-TRE biomonitoring requirements) is only required if toxicity is demonstrated as defined in Part 1, section f. above.

a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee shall submit plans for an effluent toxicity reduction evaluation (TRE) to the Compliance Data Section, Office of Water Quality of the IDEM. The TRE plan shall include appropriate measures to characterize the causative toxicants and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications list below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

Phase I Toxicity Characteristics Procedures, Second Edition (EPA/600/6-91/003, February 1991.

Phase II Toxicity Identification Procedures (EPA 600/R-92/080), September 1993.

Phase III Toxicity Confirmation Procedures (EPA 600/R-92/081), September 1993.

(2) Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I. EPA/600/6-91/005F, May 1992.

(3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs), (EPA/600/2-88/070), April 1989.

(4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatments Plants (EPA/833-B-99-022) August 1999.

b. Conduct the Plan

Within 30 days after the submission of the TRE plan to IDEM, the permittee must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Compliance Data Section, Office of Water Quality of the IDEM beginning 90 days after initiation of the TRE study.

c. Reporting

Within 90 days of the TRE study completion, the permittee shall submit to the Compliance Data Section, Office of Water Quality of the IDEM, the final study results and a schedule for reducing the toxicity to acceptable levels through control of the toxicant source or treatment of whole effluent.

d. Compliance Date

The permittee shall complete items a, b, and c from Section 2 above and reduce the toxicity to acceptable levels as soon as possible, but no later than three years after the date of determination of toxicity.

e. Post-TRE Biomonitoring Requirements (Only Required After Completion of a TRE)

After the TRE, the permittee shall conduct monthly toxicity tests with 2 or more species for a period of three months. Should three consecutive monthly tests demonstrate no toxicity, the permittee may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent, (see section 1.d. above for more specifics on this topic), and conduct chronic tests quarterly for the duration of the permit.

If toxicity is demonstrated, as defined in paragraph 1.f. above, after the initial three month period, testing must revert to a TRE as described in Part 2 (TRE) above.

f. In lieu of mailing reports, reports may be submitted to IDEM electronically via e-mail. E-mails should be sent to wwreports@idem.in.gov.

G. POLLUTION MINIMIZATION PROGRAM

The permittee is required to develop and conduct a pollutant minimization program (PMP) for TRC and Silver.

a. The goal of the pollutant minimization program shall be to maintain the effluent at or below the WQBEL. The pollutant minimization program shall include, but is not limited to, the following:

- (1) Submit a control strategy designed to proceed toward the goal within 180 days of the effective date of this permit.

- (2) Implementation of appropriate cost-effective control measures, consistent with the control strategy within 365 days of the effective date of this permit.
  - (3) Monitor as necessary to record the progress toward the goal. Potential sources of the pollutant shall be monitored on a semi-annual basis. Quarterly monitoring of the influent of the wastewater treatment system is also required. The permittee may request a reduction in this monitoring requirement after four quarters of monitoring data.
  - (4) Submit an annual status to the Commissioner at the address listed in Part I.C.3.g. to the attention of the Office of Water Quality, Compliance Data Section, by January 31 of each year that includes the following information:
    - (i) All minimization program monitoring results for the previous year.
    - (ii) A list of potential sources of the pollutant.
    - (iii) A summary of all actions taken to reduce or eliminate the identified sources of the pollutant.
  - (5) A pollution minimization program may include the submittal of pollution prevention strategies that use changes in production process technology, materials, processes, operations, or procedures to reduce or eliminate the source of the pollutant.
- b. No pollution minimization program is required if the permittee demonstrates that the discharge of a pollutant with a WQBEL below the LOQ is reasonably expected to be in compliance with the WQBEL at the point of discharge into the receiving water. This demonstration may include, but is not limited to, the following:
- (1) Treatment information, including information derived from modeling the destruction or removal of the pollutant in the treatment process.
  - (2) Mass balance information.
  - (3) Fish tissue studies or other biological studies.
- c. In determining appropriate cost-effective control measures to be implemented in a pollution minimization program, the following factors may be considered:
- (1) Significance of sources.

- (2) Economic and technical feasibility.
- (3) Treatability.

#### H. REOPENING CLAUSES

This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing:

1. to comply with any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
  - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - b. controls any pollutant not limited in the permit.
2. to incorporate any of the reopening clause provisions cited at 327 IAC 5-2-16.
3. to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary to meet Indiana Water Quality Standards.
4. to include a case-specific Limit of Detection (LOD) and/or Limit of Quantitation (LOQ). The permittee must demonstrate that such action is warranted in accordance with the procedures specified under Appendix B, 40 CFR Part 136, using the most sensitive analytical methods approved by EPA under 40 CFR Part 136, or approved by the Commissioner.
5. this permit may be modified or revoked and reissued after public notice and opportunity for hearing to revise or remove the requirements of the pollutant minimization program, if supported by information generated as a result of the program.
6. to specify the use of a different analytical method if a more sensitive analytical method has been specified in or approved under 40 CFR 136 or approved by the Commissioner to monitor for the presence and amount in the effluent of the pollutant for which the WQBEL is established. The permit shall specify, in accordance with 327 IAC 5-2-11.6(h)(2)(B), the LOD and LOQ that can be achieved by use of the specified analytical method.

7. to comply with any applicable standards, regulations and requirements issued or approved under section 316(b) of the Clean Water Act. The required studies and information collection activities may take 36 months or longer to complete.
8. to incorporate IDEM approved Alternative Thermal Effluent Limitations (ATELs) supported by a new 316(a) Demonstration. The required studies and information collection activities may take 36 months or longer to complete.
9. to incorporate the permit conditions resulting from an approval for alternate effluent limits based on a 301(g) variance applied for by the permittee in accordance with 327 IAC 5-3-4. The permittee may apply for alternate effluent limits based on a 301(g) variance at any time during the effective term of this permit.

## PART II

### STANDARD CONDITIONS FOR NPDES PERMITS

#### A. GENERAL CONDITIONS

##### 1. Duty to Comply

The permittee shall comply with all terms and conditions of this permit in accordance with 327 IAC 5-2-8(1) and all other requirements of 327 IAC 5-2-8. Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

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 the conditions of the permit.

##### 2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3), the permittee shall take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

##### 3. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit an application for renewal of this permit in accordance with 327 IAC 5-2-8(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. Pursuant to 327 IAC 5-3-2(a)(2), the application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

- a. permission is requested in writing before such deadline;
- b. IDEM grants permission to submit the application after the deadline; and

- c. the application is received no later than the permit expiration date.

Under the terms of the proposed Federal E-Reporting Rule, the permittee may be required to submit its application for renewal electronically in the future.

#### 4. Permit Transfers

In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except in accordance with 327 IAC 5-2-6(c). This permit may be transferred to another person by the permittee, without modification or revocation and reissuance being required under 327 IAC 5-2-16(c)(1) or 16(e)(4), if the following occurs:

- a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date;
- b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner;
- c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility; and
- d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

The Commissioner may require modification or revocation and reissuance of the permit to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act or state law.

#### 5. Permit Actions

In accordance with 327 IAC 5-2-16(b) and 327 IAC 5-2-8(4), this permit may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Failure of the permittee to disclose fully all relevant facts or misrepresentation of any relevant facts in the application, or during the permit issuance process; or
- c. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit, e.g., plant closure, termination of discharge by connection to a POTW, a change in state law that requires the reduction or elimination of the discharge, or information indicating that the permitted discharge poses a substantial threat to human health or welfare.

Filing of either of the following items does not stay or suspend any permit condition: (1) a request by the permittee for a permit modification, revocation and reissuance, or termination, or (2) submittal of information specified in Part II.A.3 of the permit including planned changes or anticipated noncompliance.

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the permitted facility that:

1. could significantly change the nature of, or increase the quantity of pollutants discharged; or
2. the commissioner may request to evaluate whether such cause exists.

In accordance with 327 IAC 5-1-3(a)(5), the permittee must also provide any information reasonably requested by the Commissioner.

## 6. Property Rights

Pursuant to 327 IAC 5-2-8(6) and 327 IAC 5-2-5(b), the issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or private property or invasion of other private rights, any infringement of federal, state, or local laws or regulations. The issuance of the permit also does not preempt any duty to obtain any other state, or local assent required by law for the discharge or for the construction or operation of the facility from which a discharge is made.

## 7. Severability

In accordance with 327 IAC 1-1-3, 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 person or circumstance is held invalid, the invalidity shall not affect any other

provisions or applications of the permit which can be given effect without the invalid provision or application.

8. Oil and Hazardous Substance Liability

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

9. State Laws

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

10. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the Environmental Rules Board is liable for a civil penalty not to exceed twenty-five thousand dollars (\$25,000) per day of any violation.

Pursuant to IC 13-30-5, a person who obstructs, delays, resists, prevents, or interferes with (1) the department; or (2) the department's personnel or designated agent in the performance of an inspection or investigation performed under IC 13-14-2-2 commits a class C infraction.

Pursuant to IC 13-30-10-1.5(k), a person who willfully or recklessly violates any NPDES permit condition or filing requirement, any applicable standards or limitations of IC 13-18-3-2.4, IC 13-18-4-5, IC 13-18-8, IC 13-18-9, IC 13-18-10, IC 13-18-12, IC 13-18-14, IC 13-18-15, or IC 13-18-16, or who knowingly makes any false material statement, representation, or certification in any NPDES form, notice, or report commits a Class C misdemeanor.

Pursuant to IC 13-30-10-1.5(l), an offense under IC 13-30-10-1.5(k) is a Class D felony if the offense results in damage to the environment that renders the environment unfit for human or vertebrate animal life. An offense under IC 13-30-10-1.5(k) is a Class C felony if the offense results in the death of another person.

11. Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(10), the permittee shall comply with monitoring, recording, and reporting requirements of this permit. The Clean Water Act, as well as IC 13-30-10-1, provides that any person who knowingly or intentionally (a) destroys, alters, conceals, or falsely certifies a record that is required to be

maintained under the terms of a permit issued by the department; and may be used to determine the status of compliance, (b) renders inaccurate or inoperative a recording device or a monitoring device required to be maintained by a permit issued by the department, or (c) falsifies testing or monitoring data required by a permit issued by the department commits a Class B misdemeanor.

12. Toxic Pollutants

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant injurious to human health, and that standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition in accordance with 327 IAC 5-2-8(5). Effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants injurious to human health are effective and must be complied with, if applicable to the permittee, within the time provided in the implementing regulations, even absent permit modification.

13. Wastewater treatment plant and certified operators

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7.

327 IAC 5-22-10.5(a) provides that a certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant, if it can be shown that he will give adequate supervision to all units involved. Adequate supervision means that sufficient time is spent at the plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operations conditions. In accordance with 327 IAC 5-22-3(11), "responsible charge operator" means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

Pursuant to 327 IAC 5-22-10(4), the permittee shall notify IDEM when there is a change of the person serving as the certified operator in responsible charge of the wastewater treatment facility. The notification shall be made no later than thirty (30) days after a change in the operator.

14. Construction Permit

In accordance with IC 13-14-8-11.6, a discharger is not required to obtain a state permit for the modification or construction of a water pollution treatment or control facility if the discharger has an effective NPDES permit.

If the discharger modifies their existing water pollution treatment or control facility or constructs a new water pollution treatment or control facility for the treatment or control of any new influent pollutant or increased levels of any existing pollutant, then, within thirty (30) days after commencement of operation, the discharger shall file with the Department of Environment Management a notice of installation for the additional pollutant control equipment and a design summary of any modifications.

The notice and design summary shall be sent to the Office of Water Quality, Industrial NPDES Permits Section, 100 North Senate Avenue, Indianapolis, IN 46204-2251.

15. Inspection and Entry

In accordance with 327 IAC 5-2-8(8), the permittee shall allow the Commissioner, or an authorized representative, (including an authorized contractor acting as a representative of the Commissioner) upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a point source, regulated facility, or activity is located or conducted, or where records must be kept pursuant to the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit; and
- d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

16. New or Increased Discharge of Pollutants into an OSRW

This permit prohibits the permittee from undertaking any action that would result in the following:

- a. A new or increased discharge of a bioaccumulative chemical of concern (BCC), other than mercury.

- b. A new or increased discharge of mercury or a new or increased permit limit for a regulated pollutant that is not a BCC unless one of the following is completed prior to the commencement of the action:
  - (1) Information is submitted to the Commissioner demonstrating that the proposed new or increased discharges will not cause a significant lowering of water quality as defined under 327 IAC 2-1.3-2(50). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the permittee to do the following:
    - (i) Submit an antidegradation demonstration in accordance with 327 IAC 2-1.3-5; and
    - (ii) Implement or fund a water quality improvement project in the watershed of the OSRW that results in an overall improvement in water quality in the OSRW in accordance with 327 IAC 2-1.3-7.
  - (2) An antidegradation demonstration is submitted to and approved by the Commissioner in accordance with 327 IAC 2-1.3-5 and 327 IAC 2-1.3-6 and the permittee implements or funds a water quality improvement project in the watershed of the OSRW that results in an overall improvement in water quality in the OSRW in accordance with 327 IAC 2-1.3-7.

## B. MANAGEMENT REQUIREMENTS

### 1. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for the collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of this permit in accordance with 327 IAC 5-2-8(9).

Neither 327 IAC 5-2-8(9), nor this provision, shall be construed to require the operation of installed treatment facilities that are unnecessary for achieving compliance with the terms and conditions of the permit.

### 2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(12):

- a. Terms as defined in 327 IAC 5-2-8(12)(A):

- (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
  - (2) "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.
- b. The permittee may allow a bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.c., e, and f of this permit.

A bypass of the Reclamation Services Building (RSB) treatment system will qualify for an "authorized bypass" if it meets the conditions in Part I.A.5., footnote [1] and the following:

- (1) The permittee shall at all times continue to operate and maintain the RSB treatment system in good working order to minimize the discharge of 2,3,7,8-TCDF. Except as provided by Part I.A.5., footnote [1], the 2,3,7,8-TCDF effluent limit of less than 10 pg/L shall apply at internal Outfall 111 and monitoring shall be conducted at a frequency of once per month.
- (2) As soon as possible, but in no event later than 90 days after the effective date of this permit, the permittee shall develop and implement a Best Management Practices Plan (BMP Plan), with the objective of ensuring maximum practical availability, reliability and effective operation and maintenance of the RSB treatment system. The BMP Plan must include as a minimum the following:
  - (i) RSB treatment system operation and maintenance manual (O&M manual). The RSB treatment system O&M manual shall include, as a minimum: (1) regular and preventative maintenance schedules, including a program to maintain and replace pumps and other equipment items; (2) a program to perform major maintenance at the RSB treatment system at least annually when the sinter plant is taken off line for major maintenance, and otherwise when the sinter plant is off line; (3) a list of critical RSB treatment system equipment items, including those where in line spares are installed

and those where in line spares are not installed; and, (4) when possible, manage sinter plant operations to provide opportunities for supplemental RSB treatment system maintenance as may be deemed necessary. The RSB O&M manual shall be reviewed by the Maintenance and Utilities Department and the Environmental Department and updated accordingly when new RSB treatment system equipment items are installed, when material RSB treatment system operating changes are implemented, and reviewed at least annually and updated, if necessary.

- (ii) As soon as possible, but in no event later than 90 days of the effective date of this permit, the permittee shall conduct an engineering review of the RSB treatment system with the objective of determining whether it is feasible and reasonable to install in line spares for critical RSB treatment system components where such spares are currently not installed. The permittee shall develop a schedule and install such spares where deemed feasible and reasonable within 18 months of the effective date of this permit. The permittee shall prepare a report of its engineering review. The permittee shall maintain on site spares for all critical RSB treatment system equipment items (listed in the O&M manual equipment table) where it is not feasible or reasonable to install redundant equipment items.
- (iii) Within 30 days of the effective date of this permit, the permittee shall develop and implement communication and reporting protocols among managers and operating staff from the Burns Harbor Iron Producing Department (Sinter Plant), Maintenance & Utilities (RSB Treatment System) and the Environmental Department. The communication protocols must address sinter plant and RSB treatment system operations and scheduled and unscheduled production and treatment system outages and maintenance. The communication plan shall be maintained on site and incorporated into the BMP Plan required under item 2(i) above.
- (iv) The RSB Treatment System BMP Plan and the O&M manual shall be maintained at the RSB and at the Environmental Department and made available for review by IDEM upon request.

- (v) As soon as possible, but in no event later than 90 days after the effective date of this permit, the permittee shall submit the draft BMP Plan to IDEM for review. If there are no comments within 30 days of receipt of the draft BMP Plan, the permittee may proceed with implementation as set forth in the draft BMP Plan.

(3) Additional Notice and Recordkeeping Requirements:

- (i) Beginning on the effective date of this permit, the permittee shall maintain a log on site of RSB treatment system bypasses as defined in Part I.A.5., footnote [1] that occur for more than 12 hours. The log shall include the date, time and duration of each bypass; the root cause of the bypass; corrective actions taken to return the RSB treatment system to service; and, where warranted additional actions taken to prevent recurrence.
  - (ii) For any bypass of the RSB treatment system that occur extends beyond 12 hours, the permittee shall submit a final report within 14 days after the RSB treatment system is returned to service. The final report shall contain at a minimum a description of the root cause of the bypass; the period of the bypass; corrective actions taken to return the RSB treatment system to service; and, where warranted, additional actions taken to prevent recurrence. The final report shall include the flow and 2,3,7,8-TCDF monitoring data collected for the untreated sinter plant scrubber water and at Outfall 011 during the period of the bypass in accord with Part I.A.5., footnote [1]
- c. Bypasses, as defined in (a) above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless the following occur:
- (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
  - (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 equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that

occurred during normal periods of equipment downtime or preventive maintenance; and

- (3) The permittee submitted notices as required under Part II.B.2.e; or
  - (4) The condition under Part II.B.2.b above is met.
- d. Bypasses that result in death or acute injury or illness to animals or humans must be reported in accordance with the “Spill Response and Reporting Requirements” in 327 IAC 2-6.1, including calling 888/233-7745 as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the bypass are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.
- e. The permittee must provide the Commissioner with the following notice:
- (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
  - (2) The permittee shall orally report an unanticipated bypass that exceeds any effluent limitations in the permit within 24 hours of becoming aware of the bypass noncompliance. The permittee must also provide a written report within five (5) days of the time the permittee becomes aware of the bypass event. The written report must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; if the cause of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the bypass event. If a complete fax or e-mail submittal is provided within 24 hours of the time that the permittee became aware of the unanticipated bypass event, then that report will satisfy both the oral and written reporting requirement. E-mails should be sent to [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov).
- f. The Commissioner may approve an anticipated bypass, after considering its adverse effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.c. The

Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.

3. Upset Conditions

Pursuant to 327 IAC 5-2-8(13):

- a. "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.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this section, are met.
- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
  - (1) An upset occurred and the permittee has identified the specific cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee complied with any remedial measures required under Part II.A.2; and
  - (4) The permittee submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.
- d. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof pursuant to 40 CFR 122.41(n)(4).

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal. The discharge of pollutants in treated wastewater is allowed in compliance with the applicable effluent limitations in Part I. of this permit.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(11)(F), the permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. In this context, permitted facility refers to a point source discharge, not a wastewater treatment facility. Notice is required only when either of the following applies:

- a. The alteration or addition may meet one of the criteria for determining whether the facility is a new source as defined in 327 IAC 5-1.5.
- b. The alteration or addition could significantly change the nature of, or increase the quantity of, pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in Part I.A. nor to notification requirements in Part II.C.9. of this permit.

Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited.

2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(10) and 327 IAC 5-2-13 through 15, monitoring results shall be reported at the intervals and in the form specified in "Discharge Monitoring Reports", Part I.C.2.

3. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(11)(C), the permittee shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time permittee becomes aware of such noncompliance. If the noncompliance meets the requirements of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made within those prescribed time frames. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge that is in noncompliance are regulated by this permit, and death or acute

injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any noncompliance which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the noncomplying circumstances;
- c. Any upset (as defined in Part II.B.3 above) that causes an exceedance of any effluent limitation in the permit;
- d. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: lead, zinc, total cyanide, mercury, phenols, copper, and silver.

The permittee can make the oral reports by calling (317)232-8670 during regular business hours or by calling (317) 233-7745 ((888)233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a "Bypass/Overflow Report" (State Form 48373) or a "Noncompliance 24-Hour Notification Report" (State Form 54215), whichever is appropriate, to IDEM at (317) 232-8637 or [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov). If a complete fax or e-mail submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

Upon its effectiveness, the proposed Federal E-Reporting Rule will require these reports to be submitted electronically.

4. Other Compliance/Noncompliance Reporting

Pursuant to 327 IAC 5-2-8(11)(D), the permittee shall report any instance of noncompliance not reported under the "Twenty-Four Hour Reporting Requirements" in Part II.C.3, or any compliance schedules at the time the pertinent Discharge Monitoring Report is submitted. The report shall contain the information specified in Part II.C.3;

The permittee shall also give advance notice to the Commissioner of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements; and

All reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

Upon its effectiveness, the proposed Federal E-Reporting Rule will require these reports to be submitted electronically.

5. Other Information

Pursuant to 327 IAC 5-2-8(11)(E), where the permittee becomes aware of a failure to submit any relevant facts or submitted incorrect information in a permit application or in any report, the permittee shall promptly submit such facts or corrected information to the Commissioner.

6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(15):

a. All reports required by the permit and other information requested by the Commissioner shall be signed and certified by a person described below or by a duly authorized representative of that person:

- (1) For a corporation: by a responsible corporate officer defined as a president, secretary, treasurer, any vice-president of the corporation in charge of a principal business function, or any other person who performs similar policymaking or decision making functions for the corporation or the manager of one or more manufacturing, production or operating facilities employing more than two hundred fifty (250) persons or having the gross annual sales or expenditures exceeding twenty-five million dollars (\$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.
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a Federal, State, or local government body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.

- (4) Under the proposed Federal E-Reporting Rule, a method will be developed for submittal of all affected reports and documents using electronic signatures that is compliant with the Cross-Media Electronic Reporting Regulation (CROMERR). Enrollment and use of NetDMR currently provides for CROMERR-compliant report submittal.
- b. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above.
  - (2) 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 plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - (3) The authorization is submitted to the Commissioner.
- c. Certification. Any person signing a document identified under Part II.C.6. 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 gather and evaluate 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.”

## 7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12.1, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(15) provides 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, shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

9. Changes in Discharge of Toxic Substances

Pursuant to 40 CFR 122.42(a)(1), 40 CFR 122.42(a)(2), and 327 IAC 5-2-9, the permittee shall notify the Commissioner as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any pollutant identified as toxic pursuant to Section 307(a) of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels."
  - (1) One hundred micrograms per liter (100µg/l);
  - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1mg/l) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - (4) A notification level established by the Commissioner on a case-by-case basis, either at his own initiative or upon a petition by the permittee. This notification level may exceed the level specified in subdivisions (1), (2), or (3) but may not exceed the level which can be achieved by the technology-based treatment requirements applicable to the permittee under the CWA (see 327 IAC 5-5-2).
- b. 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 following "notification levels":
  - (1) Five hundred micrograms per liter (500 µg/l);

- (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Sec. 122.21(g)(7).
  - (4) A notification level established by the Commissioner on a case-by-case basis, either at his own initiative or upon a petition by the permittee. This notification level may exceed the level specified in subdivisions (1), (2), or (3) but may not exceed the level which can be achieved by the technology-based treatment requirements applicable to the permittee under the CWA (see 327 IAC 5-5-2).
- c. That it has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant which was not reported in the permit application under 40 CFR 122.21(g)(9).

PART III  
Other Requirements

A. Thermal Effluent Requirements

The regulations applicable to dischargers requesting alternative thermal effluent limitations (ATEL) as allowed by section 316(a) of the Clean Water Act (CWA) are found in 40 CFR 125 subpart H and 327 IAC 5-7. 40 CFR 125 subpart H and 327 IAC 5-7 describe the factors, criteria and standards for the establishment of alternative thermal effluent limitations under section 316(a) of the Act in permits issued under section 402(a) of the Act.

This permit contains ATELS for the discharge from Outfalls 001 and 002 that were approved by U.S. EPA and IDEM in 1990. On July 16, 1990, a letter was sent to the facility, from IDEM, authorizing the addition of up to 35,000 gallons per minute of Lake Michigan water to Outfall 001 to assure compliance with the thermal limits at Outfall 001.

Outfall 001:

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
°F	60	60	65	71	81	86	86	86	85	80	75	65

Outfall 002:

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
°F	55	57	63	69	77	82	88	90	88	81	72	63

B. Polychlorinated Biphenyl

There shall be no discharge of polychlorinated biphenyl (PCBs) compounds such as those commonly used for transformer fluid.

## Part IV Cooling Water Intake Structures

### A. Best Technology Available (BTA) Determination

In accordance with 40 CFR 401.14, the location, design, construction and capacity of cooling water intake structures of any point source for which a standard is established pursuant to section 301 or 306 of the Act shall reflect the best technology available for minimizing adverse environmental impact.

The EPA promulgated a Clean Water Act (CWA) section 316(b) regulation on August 15, 2014, that establishes standards for cooling water intake structures. 79 Fed. Reg. 48300-439 (August 15, 2014). The regulation establishes best technology available standards to reduce impingement and entrainment of aquatic organisms at existing power generation and manufacturing facilities and it became effective on October 14, 2014.

Based on available information, IDEM has made a Best Technology Available (BTA) determination that the existing cooling water intake structures represent best technology available to minimize adverse environmental impact in accordance with Section 316(b) of the federal Clean Water Act (22 U.S.C section 1326) at this time. This determination will be reassessed at the next permit reissuance to ensure that the CWISs continue to meet the requirements of Section 316(b) of the federal Clean Water Act (33 U.S.C. section 1326).

### B. Permit Requirements

- I. In accordance with 40 CFR 125.95(a)(1), the permittee must submit to the IDEM the information required in the applicable provisions of 40 CFR 122.21(r) when applying for a subsequent permit (consistent with the permittee's duty to reapply pursuant to 40 CFR 122.21(d)). Per 40 CFR 125.95(c) after the initial submission of the 40 CFR 122.21(r) permit application studies after October 14, 2014 the permittee may, in subsequent permit applications, request to reduce the information required, if conditions at the facility and in the waterbody remain substantially unchanged since the previous application so long as the relevant previously submitted information remains representative of current source water, intake structure, cooling water system, and operating conditions. The permittee must submit its request for reduced cooling water intake structure and waterbody application information to the IDEM at least two years and six months prior to the expiration of its NPDES permit. The permittee's request must identify each element of the application requirements that it determines has not substantially changed since the previous permit application and the basis for the determination. IDEM has the discretion to accept or reject any part of the request. The permittee shall comply with requirements below:
  1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

2. At all times properly operate and maintain the intake equipment and incorporate management practices and operational measures necessary to ensure proper operation of the CWIS.
3. Provide advance notice to IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.
4. There shall be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.
5. All required reports shall be submitted to the IDEM, Office of Water Quality, NPDES Permits Branch.
6. Submit the information required to be considered by the Director per 40 CFR 125.98 to assist IDEM with the fact sheet or statement of basis for entrainment BTA, as soon as practicable, but no later than with the application for the next permit renewal.