



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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Toll Free (800) 451-6027
www.idem.IN.gov

February 7, 2011

Mr. Madhu Ranade, Vice President and General Manager
ArcelorMittal Burns Harbor LLC.
250 W. U.S. Highway 12
Burns Harbor, IN 46304

Dear Mr. Ranade:

Re: NPDES Permit No. IN0000175
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana Porter County

Your application for a National Pollutant Discharge Elimination System (NPDES) permit for authorization to discharge into the waters of the State of Indiana has been processed in accordance with Section 402 and 405 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, et seq.), and IC 13-15, IDEM's permitting authority. All discharges from this facility shall be consistent with the terms and conditions of this permit.

One condition of your permit requires periodic reporting of several effluent parameters. These forms are available on the internet at the following web site:

<http://www.in.gov/idem/5104.htm>

Additionally, you will soon be receiving a supply of the computer generated preprinted federal NPDES DMR forms. Both the state and federal forms need to be completed and submitted on a routine basis. If you do not receive the preprinted DMR forms in a timely manner, please call this office at 317-232-8670.

Another condition which needs to be clearly understood concerns violation of the effluent limitations in the permit. Exceeding the limitations constitutes a violation of the permit and may subject the permittee to criminal or civil penalties. (See Part II A.2.) It is therefore urged that your office and treatment operator understand this part of the permit.

The response to the comments pertaining to the draft NPDES permit is contained in the Post Public Notice Addendum. The Post Public Notice Addendum is located at the end of the Fact Sheet.

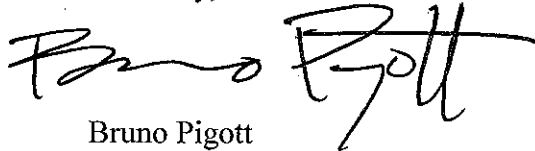
It should also be noted that any appeal must be filed under procedures outlined in IC 13-15-6, IC 4-21.5, and the enclosed Public Notice. The appeal must be initiated by filing a petition for administrative review with the Office of Environmental Adjudication (OEA) within eighteen (18) days of the mailing of this letter by filing at the following address:

Office of Environmental Adjudication
Indiana Government Center North
100 North Senate Avenue, Room 501
Indianapolis, IN 46204

Please send a copy of any written appeal to me at the IDEM, Office of Water Quality - Mail Code 65-42, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions concerning the permit, please contact Mr. Steve Roush at 317/233-5747 or sroush@idem.in.gov. Questions concerning appeal procedures should be directed to the Office of Environmental Adjudication, at 317/232-8591.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bruno Pigott', written in a cursive style.

Bruno Pigott
Assistant Commissioner
Office of Water Quality

Enclosures

cc: U.S. EPA, Region V
Porter County Health Department

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, LLC

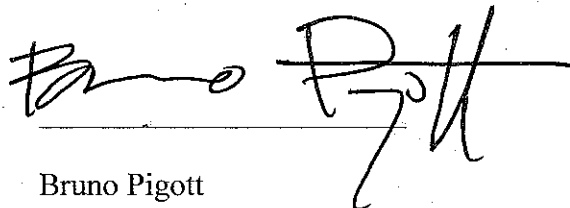
is authorized to discharge from a fully integrated steel mill and the Town of Burns Harbor's wastewater treatment plant that is located at 250 West Highway 12, Burns Harbor, Indiana to receiving waters named the East Branch of the Little Calumet River, East Arm of Port of Indiana / Burns Harbor in Lake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

Effective Date: March 1, 2011

Expiration Date: February 29, 2016

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 February 7, 2011 for the Indiana Department of
Environmental Management



Bruno Pigott
Assistant Commissioner
Office of Water Quality

TREATMENT FACILITY CLASSIFICATION

The discharger has a Class D industrial wastewater treatment plant, classified in accordance with 327 IAC 5-22, Classification of Wastewater Treatment Plants.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge from Outfall 001. The discharge is limited to treated process wastewaters from Internal Monitoring Location Outfall 011 (Secondary Wastewater Treatment Plant), non-contact cooling water, storm water, treated sanitary wastewater from the Town of Burns Harbor's wastewater treatment plant permitted under Operational Permit No. INJ060801 and Lake Michigan water used for control of effluent temperature. 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 [5]

Table 001-1
Outfall 001

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
Water Cannon Flow [8]	Report	Report	MGD	---	---	---	Continuous	24 Hour Total
TSS	Report	Report	lbs/day	Report	Report	mg/l	1 x Weekly	24 Hr Composite
Oil and Grease	Report	Report	lbs/day	Report	Report	mg/l	1 x Weekly	Grab
Phenols (4AAP) 14	22	22	lbs/day	Report	Report	mg/l	3 x Weekly	24 Hr Composite
Copper [1][7][9]								
Interim	Report	Report	lbs/day	Report	Report	mg/l	1 x Weekly	24 Hr. Composite
Final	21	40	lbs/day	0.018	0.035	mg/l	1 x Weekly	24 Hr Composite
Mercury [1][4][7][9]								
Interim	Report	Report	lbs/day	Report	Report	ng/l	6 x Year	Grab
Final	0.0015	0.0037	lbs/day	1.3	3.2	ng/l	6 x Year	Grab
Lead [1]	21.0	41.0	lbs/day	18.0	36.0	ug/l	3 x Weekly	24 Hr Composite
Silver [1][2][3][7][9]								
Interim	Report	Report	lbs/day	Report	Report	ug/l	1 x Weekly	24 Hr. Composite
Final	0.055	0.11	lbs/day	0.048	0.097	ug/l	1 x Weekly	24 Hr. Composite
Zinc [1][7][9]								
Interim	Report	Report	lbs/day	Report	Report	ug/l	1 x Weekly	24 Hr. Composite
Final	171	332	lbs/day	150	290	ug/l	1 x Weekly	24 Hr Composite

Total Residual Chlorine[2][3][6]

11 23 lbs/day 10 20 ug/l 1 x Daily Grab
 Whole Effluent Toxicity See Part I.E. of the permit.

- [1] The permittee shall measure and report the identified metals as total recoverable metals.
- [2] The monthly average water quality based effluent limits (WQBEL) for Total Residual Chlorine and Total Recoverable 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.

The daily maximum WQBELs for Total Residual Chlorine and Total Recoverable Silver are less than the LOD and 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.

Compliance with the daily maximum mass value for Total Residual Chlorine and Total Recoverable Silver will be demonstrated if the calculated mass value is less than 68.6 lbs/day and 0.73 lbs/day, respectively.

<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
Silver	200.8	0.2 ug/l	0.64 ug/l

- [3] 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.
- [4] Mercury monitoring shall be conducted Bi-monthly. (i.e. every other month) for the term of the permit. Bi-monthly monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. Beginning from the effective date of the permit, the permittee shall begin using EPA Test Method 1631, "the most current version". If EPA Test Method 1631,

Revision E, is further revised during the term of the permit, the permittee and/or its contract laboratory are required to utilize the most current version of the method as soon as possible after approval by EPA but no later than the second monitoring event after the revision.

<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

- [5] In the event that changes are to be made in the use of water treatment additives including dosage rates for approved additives contributing to Outfall 001 that are greater than the dosage rate identified in the permit application, 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 greater than the dosage rate identified in the permit application.
- [6] 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.
- [7] See Part I.D. for the fifty-four month (54) schedule of compliance for copper, silver, zinc and mercury.
- [8] The permittee must install a flow measuring device for the discharge from the water cannon used to further cool the effluent from outfall 001 to meet the temperature limits found in Table 001-4 below as soon as possible but no later than one year after the effective date of this permit. During the interim period prior to the installation of the flow measuring device, the permittee may estimate the total 24 hour flow from the water cannon.

Table 001-2
Outfall 001 [9]

	Pounds per Day (lbs/day)		Milligrams per Liter (mg/l)[9]		Measurement Frequency	Sample Type
	7-Day Average	Daily Maximum	7-Day Average	Daily Maximum		
<u>Ammonia as N[9]</u>						
January	720	915	0.68	0.86	3 x Week	24 Hr. Comp.
February	645	910	0.72	1.02	3 x Week	24 Hr. Comp.
March	940	1300	0.9	1.27	3 x Week	24 Hr. Comp.
April	730	1030	0.82	1.16	3 x Week	24 Hr. Comp.
May	680	970	0.74	1.05	3 x Week	24 Hr. Comp.
June	650	920	0.62	0.87	3 x Week	24 Hr. Comp.
July	375	540	0.36	0.51	3 x Week	24 Hr. Comp.
August	385	540	0.37	0.52	3 x Week	24 Hr. Comp.
September	550	775	0.82	1.16	3 x Week	24 Hr. Comp.
October	635	900	0.67	0.95	3 x Week	24 Hr. Comp.
November	530	680	0.47	0.6	3 x Week	24 Hr. Comp.
December	635	900	0.9	1.27	3 x Week	24 Hr. Comp.

[9] the permittee shall calculate the daily concentration and mass of each pollutant at Outfall 001 as specified below:

$$C_{001C} = (C_{001M} * Q_{001}) / (Q_{001} - Q_{WC})$$

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

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)

When the water cannon is not in use, the compliance concentration value = measured concentration value at outfall 001.

Table 001-3
Outfall 001

<u>Parameter</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring</u>	<u>Requirements</u>
	<u>Daily</u>	<u>Daily</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Minimum</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Type</u>
pH	6.0	9.0	s.u.	Continuous	Probe

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 001-3 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.

Table 001-4
Outfall 001

<u>Parameter</u>	<u>Daily</u>	<u>Units</u>	<u>Monitoring</u>	<u>Requirements</u>
	<u>Maximum</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Report</u>	<u>°F</u>	<u>Frequency</u>	<u>Type</u>
Temperature[1]			Continuous	Thermometer

[1] 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

2. The permittee is authorized to discharge from Outfall 002. The discharge is limited to non-contact cooling wastewater, 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 East Arm of the Port of Indiana / Burns Harbor (Lake Michigan). Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [4]

Table 002-1
Outfall 002

<u>Parameter</u>	<u>Quantity or Loading</u>			<u>Quality or Concentration</u>			<u>Monitoring Measurement Frequency</u>	<u>Requirements Sample Type</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Units</u>		
Flow	Report	Report	MGD	-	-	-	Continuous	24 Hour Total
TSS	Report	Report	lbs/day	Report	Report	mg/l	1 x Weekly	24 Hour Composite
Oil and Grease	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	24 Hour Composite
Phenols (4AAP)	Report	Report	lbs/day	Report	Report	mg/l	1 x Weekly	Grab
Iron, Dissolved	Report	Report	lbs/day	Report	Report	mg/l	1 x Monthly	Grab
Zinc[1]	Report	Report	lbs/day	Report	Report	ug/l	2 x Monthly	24 Hour Composite
Lead[1]	Report	Report	lbs/day	Report	Report	ug/l	2 x Monthly	24 Hour Composite
Fluoride	Report	Report	lbs/day	Report	Report	mg/l	2 x Monthly	24 Hour Composite
Total Residual Chlorine [2][3][5]	24	48	lbs/day	10	20	ug/l	1 x Daily	Grab

[1] The permittee shall measure and report the identified metals as total recoverable metals.

[2] The monthly average water quality based effluent limit (WQBEL) for Total Residual Chlorine 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.

The daily maximum WQBEL for Total Residual Chlorine 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.

Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 144.1 lbs/day.

<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

[3] 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.

[4] In the event that changes are to be made in the use of water treatment additives including dosage rates for approved additives contributing to Outfall 002 that are greater than the dosage rate identified in the permit application, 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 greater than the dosage rate identified in the permit application.

[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.

Table 002-2
Outfall 002

<u>Parameter</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring</u>	<u>Requirements</u>
	<u>Daily</u>	<u>Daily</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Minimum</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Type</u>
pH	6.0	9.0	s.u.	Continuous	Probe

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 002-2 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.

Table 002-3
Outfall 002

<u>Parameter</u>	<u>Daily</u> <u>Maximum</u> <u>Report</u>	<u>Units</u> °F	<u>Monitoring</u> <u>Measurement</u> <u>Frequency</u> Continuous	<u>Requirements</u> <u>Sample</u> <u>Type</u> Thermometer
Temperature[1]				

[1] 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

3. 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

Table 003-1
Outfall 003

<u>Parameter</u>	<u>Quality or Concentration</u>			<u>Monitoring</u>	<u>Requirements</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Residual Chlorine [1][2][3]	10	20	ug/l	1 x Daily	Grab

[1] The monthly average water quality based effluent limit (WQBEL) for Total Residual Chlorine 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.

The daily maximum WQBEL for Total Residual Chlorine 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.

<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

[2] 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.

- [3] Monitoring for TRC shall only be required 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 Internal Monitoring Point Outfall 011 (Secondary Wastewater Treatment Plant). The discharge is limited to treated process wastewater, storm 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 from the terminal polishing lagoon but prior to mixing with any other waters. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Table 011-1
Outfall 011 [4]

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>			<u>Monitoring Measurement Frequency</u>	<u>Requirements Sample Type</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Units</u>		
Flow [5]	Report	Report	MGD	-	-	-	Continuous	24 Hour Total
TSS	6,000	20,000	lbs/day	Report	Report	mg/l	3 x Weekly	24 Hr Composite
Oil and Grease	-----	6,000	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 Composite
Phenols (4AAP)	Report	Report	lbs/day	Report	Report	mg/l	3 x Weekly	24 Hr Composite
Cyanide, Total	Report	21	lbs/day	Report	Report	mg/l	1 x Weekly	24 Hr Composite
Lead[1]	Report	Report	lbs/day	Report	Report	mg/l	2 x Month	24 Hr Composite
Zinc[1]	34.6	99.7	lbs/day	Report	Report	mg/l	3 x Weekly	24 Hr. Composite
Total Residual Chlorine [2]	Report	4.42	lbs/day	Report	Report	ug/l	3 x Weekly	Grab
Naphthalene [3]	Report	0.66	lbs/day	Report	Report	ug/l	2 x Month	Grab
Tetrachloroethylene (TCE) [3]	Report	0.99	lbs/day	Report	Report	ug/l	2 x Month	Grab

- [1] The permittee shall measure and report the identified metals as total recoverable metals.
- [2] The chlorine limit is applicable when the sintering process water is chlorinated, or if the alkaline chlorination wastewater treatment system is being used.
- [3] At the end of a twelve month sampling period, the permittee may request, in writing, a review of these monitoring requirements. Upon review by IDEM, the permit may be modified, after public notice and opportunity for hearing, to reduce or delete the monitoring requirements. Compliance with the daily maximum mass values for Naphthalene and Tetrachloroethylene will be demonstrated if the calculated mass values are less than 6.6 lbs/day and 3.3 lbs/day respectively due to the lab reporting levels of 10.0 ug/l for Naphthalene and 5.0 ug/l for Tetrachloroethylene.

- [4] 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 off-site.
- [5] 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. The permittee is authorized to discharge from Internal Monitoring Point Outfall 111 (the discharge from the final thickener at the Reclamation Services Building). 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 prior to mixing with any other waters. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Table 111-1
Outfall 111

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

[1] 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 (ML) 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 (ppt = 1.0 X 10⁻¹² gram/L).

6. The permittee is authorized to discharge from Outfall 009. The discharge is limited to storm water. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge from Outfall 009. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Table 009-1
Outfall 009

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Units</u>	<u>Measurement Frequency [3]</u>	<u>Sample Type</u>
Flow [1]	Report	Report	MGD	-	-	-	Continuous	24 Hour
TSS	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab
Oil and Grease	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab
COD	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab
Total Iron [2]	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab
Total Zinc [2]	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab
Fluoride	-----	-----	-----	-----	Report	mg/l	4 x Year	Grab

Table 009-2
Outfall 009

<u>Parameter</u>	<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Units</u>	<u>Measurement Frequency [3]</u>	<u>Sample Type</u>
pH	Report	Report	s.u.	4 x Year	Probe

- [1] ArcelorMittal Burns Harbor LLC shall install the equipment necessary to accurately measure the discharge flow from Outfall 009 and to facilitate taking samples that are representative of the discharge within one year after the effective date of this permit. During the period of time before the necessary equipment is installed, ArcelorMittal Burns Harbor, LLC may estimate the 24 Hour total flow volume from Outfall 009.
- [2] The permittee shall measure and report the identified metals as total recoverable metals.
- [3] Samples shall be taken once at any time during each of the four annual quarters:
- (A) January-February-March;
 - (B) April-May-June;
 - (C) July-August-September; and
 - (D) October-November-December.

For quarterly monitoring, in the first quarter for example, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

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 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective.

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 individual's 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 V 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.
- l. 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 18th, 19th, or 20th 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 record and maintain records of all monitoring information and monitoring activities under this permit, including the following information:

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

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). 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. SCHEDULE OF COMPLIANCE – Outfall 001 Mercury, Copper, Zinc and Silver

The permittee shall achieve compliance with the effluent limitations specified for Mercury, Copper, Zinc and Silver at Outfall 001 as soon as possible but no later than Fifty-four (54) months from the effective date of this permit in accordance with the following schedule:

1. The permittee shall submit a written Quality Assurance Project Plan (QAPP) to identify the sources of Mercury, Copper, Zinc and Silver to the Data Compliance Section of the Office of Water Quality (OWQ) no later than three (3) months from the effective date of this permit. IDEM will provide any comments within 30 days of receipt of the QAPP. If comments are made, IDEM will provide the permittee with the opportunity to discuss any comments prior to implementation of the QAPP. If IDEM does not comment within 30 days of its receipt of the

QAPP, the permittee may proceed with implementation as set forth in the QAPP. The QAPP shall include a description of the method(s) selected for identifying the sources of Mercury, Copper, Zinc and Silver, in addition to any other relevant information. The QAPP shall include a specific time line specifying when each of the steps will be taken. The new Outfall 001 effluent limits for Mercury, Copper, Zinc and Silver are deferred for the term of this compliance schedule, unless the effluent limits can be met at an earlier date. The permittee shall notify the Data Compliance Section of OWQ as soon as the effluent limits for Mercury, Copper, Zinc and Silver can be met. Upon receipt of such notification by OWQ, the final limits for Mercury, Copper, Zinc and Silver will become effective, but no later than Fifty-four (54) months from the effective date of this permit. Monitoring and reporting of the Outfall 001 effluent for these parameters is required during the interim period. The QAPP shall address, at a minimum, the following:

- a. Identification of the sampling locations that will be utilized to evaluate potential sources of Mercury, Copper, Zinc and Silver to Outfall 001 (current and historic).
 - b. Development of a sampling plan to identify sources of Mercury, Copper, Zinc and Silver.
 - c. Assessment of the potential pollution prevention activities for Mercury, Copper, Zinc and Silver at the facility. The assessment should include a methodology for determining the feasibility of eliminating or reducing Mercury, Copper, Zinc and Silver from the internal wastestreams identified for inclusion in the sampling plan.
2. The permittee shall submit a report to the Data Compliance Section of OWQ no later than Fifteen (15) months from the effective date of this permit. This report shall include detailed information on:
- a. All sampling conducted during the previous 12 months for Mercury, Copper, Zinc and Silver including all analytical results obtained up to the time of the report.
 - b. A description of any pollution prevention activities implemented as a result of the sampling results (such as replacement of raw or intermediate products containing excessive quantities of Mercury, Copper, Zinc or Silver) that reduce or eliminate the addition of Mercury, Copper, Zinc or Silver into Outfall 001.

3. The permittee shall submit a QAPP report to the Data Compliance Section of OWQ no later than 27 months from the effective date of this permit. This report shall include detailed information on:
 - a. The results of all sampling performed during the previous 24 months to evaluate potential sources of Mercury, Copper, Zinc and Silver to Outfall 001.
 - b. The evaluation of short-term and long-term control measures, including, but not limited to, best management practices, pollution prevention activities and treatment technologies that will reduce the concentration of Mercury, Copper, Zinc or Silver in the effluent from Outfall 001.
 - c. A description of any control measures that were identified and implemented during the previous 24 months.
 - d. Any proposed or actual construction of additional treatment technology to reduce the concentration of Mercury, Copper, Zinc or Silver in the effluent from Outfall 001.
 - e. The anticipated date when the permittee will submit the Final Plan for Compliance (FPC) for the final effluent limits for Mercury, Copper, Zinc and Silver.

3. The permittee shall submit a proposed Final Plan for Compliance (FPC) containing the source identification report for Mercury, Copper, Zinc and Silver and the plan for implementing pollution prevent or installing treatment where feasible to achieve compliance with the final limits for Mercury, Copper, Zinc and Silver no later than thirty (30) months after the effective date of this permit. IDEM will provide any comments within 30 days of receipt of the FPC. If comments are made, IDEM will provide the permittee with the opportunity to discuss the comments prior to implementation. If IDEM does not comment within 30 days of its receipt of the FPC, the permittee may proceed with implementation as set forth in the FPC.

4. The permittee shall submit a report to the Data Compliance Section of OWQ no later than Thirty-Nine (39) months from the effective date of this permit. This report shall include detailed information on:
 - a. The implementation of pollution prevention activities such as replacement of raw or intermediate products containing excessive quantities of Mercury, Copper, Zinc or Silver; or production practices that reduce or eliminate the addition of Mercury, Copper, Zinc or Silver into the wastewater.
 - b. The construction of treatment technology identified in the FPC for the reduction of Mercury, Copper, Zinc or Silver in the effluent from Outfall 001

- c. the achievement of milestones identified in the FPC.
 - d. the anticipated date when the discharge from Outfall 001 can achieve compliance with the final effluent limits for Mercury, Copper, Zinc or Silver.
5. The permittee shall submit a progress report to the Data Compliance Section of OWQ no later than Forty-Eight (48) months from the effective date of this permit. This report shall include detailed information on:
 - a. The implementation of pollution prevention activities such as replacement of raw or intermediate products containing excessive quantities of Mercury, Copper, Zinc or Silver; or production practices that reduce or eliminate the addition of Mercury, Copper, Zinc or Silver into the wastewater.
 - b. The construction of treatment technology identified in the FPC for the reduction of Mercury, Copper, Zinc or Silver in the effluent from Outfall 001
 - c. the achievement of milestones identified in the FPC.
 - d. the anticipated date when the discharge from Outfall 001 can achieve compliance with the final effluent limits for Mercury, Copper, Zinc or Silver.
6. Within thirty (30) days of completion of any additional pollutant control equipment, the permittee shall file with the Industrial NPDES Permits Section of OWQ a notice of installation for the additional pollutant control equipment and a design summary of any modifications.
7. The permittee shall comply with the final effluent limitations for Mercury, Copper, Zinc and Silver at Outfall 001 no later than Fifty-four (54) months from the effective date of this permit.
8. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the OWQ stating the cause of noncompliance, and remedial action taken or planned, and the probability of meeting the date fixed for compliance with final effluent limitations.

E. WHOLE EFFLUENT TOXICITY

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 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 on a monthly basis for the first three (3) months and thereafter quarterly for the duration of the NPDES permit. If toxicity is demonstrated as defined under paragraph 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; and Section 11, Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test Method, (1000.0) EPA 821-R-02-013, October 2002, or most recent update.
- (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 Environmental Toxicology and Chemistry Section.
- (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 dition, October 2002, or most recent update.

b. Types of Bioassay Tests

The permittee shall conduct 7-day Daphnid (*Ceriodaphnia dubia*) Survival and Reproduction Test and a 7-day Fathead Minnow

(Pimephales promelas) Larval Survival and Growth 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.

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 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; and in the fathead minnow test if the mean dry weight of 7-day old surviving fish in the control group is less than 0.25 mg, 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 effluent sample should be analyzed for all the parameters detailed under Part I.A. for Outfall 001. The chemical analysis must comply with approved EPA test methods.

d. Testing Frequency and Duration

The chronic toxicity test specified in paragraph b. above shall be conducted monthly for the initial three (3) months and thereafter at least once every quarter for the duration of the permit. After three tests have been completed, that indicate no toxicity as defined in

paragraph f., the permittee may reduce the number of species tested to only include the most sensitive to the toxicity in the effluent. In the absence of toxicity with either species in the initial three monthly tests, the sensitive species will be selected based on frequency and failure of whole effluent toxicity tests with one or the other species in the previous toxicity tests.

If toxicity is demonstrated as defined under paragraph 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). Two copies of the completed report for each test shall be submitted to the Data Compliance Section, Office of Water Quality of the IDEM no later than sixty days after completion of the test.
- (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 the respective test species Ceriodaphnia dubia and Pimephales promelas. 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 used 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_a (acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for Ceriodaphnia dubia or Pimephales promelas, respectively.

TU_a is defined as 100/LC₅₀.

- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas*.
- (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 a Toxicity Identification Evaluation (TIE) and/or a 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 is being conducted.

g. Definitions

- (1) TU_c is defined as $100/NOEC$ or $100/IC_{25}$, where the NOEC or IC_{25} are expressed as a percent effluent in the test medium.
- (2) TU_a is defined as $100/LC_{50}$ where the LC_{50} 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_{25} " 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_{25} 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.

- (5) "Quarterly" for the purposes of taking samples during a given quarter is defined as the months of March, June, September and December.

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 by Paragraph 1.f.

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 Data Compliance 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 600R2-080), September 1993.

Phase III Toxicity Confirmation Procedures (EPA 600R92-081), 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 Data Compliance Section of the Office of Water Quality (OWQ) 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 Data Management and Compliance Evaluation Section of the Office of Water Quality (OWQ) 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, and conduct chronic tests every three months 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 in Part 2 (TRE). These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Testing Section above.

F. POLLUTION MINIMIZATION PROGRAM

The permittee is required to develop and conduct a pollutant minimization program (PMP) for each pollutant with a WQBEL below the LOQ. This permit contains effluent limitations for Total Residual Chlorine that are below the LOQ.

- 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. The permittee may request a reduction in this monitoring requirement after four quarters of monitoring data.
 - (4) 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.

G. 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 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.
5. 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.
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.

H. STORM WATER MONITORING AND NON-NUMERIC CONDITIONS

1. Within twelve (12) months of the effective date of this permit ArcelorMittal shall implement the non-numeric permit conditions in section I.H. of this permit for the entire Burns Harbor site as it relates to storm water associated with industrial activity regardless which outfall the storm water is discharged from.

2. Control Measures and Effluent Limits

In the technology-based limits included in Part H.3-5., 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.

3. Control Measures

Select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part H.4 to meet the non-numeric effluent limits in Part H.5. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. This would also include the BMP requirements for the Coal Processing Area. 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 stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility.

4. Control Measure Selection and Design Considerations

When selecting and designing control measures consider the following:

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

5. 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 stormwater 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 stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

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 stormwater 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; and
- (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 stormwater discharges, and the corresponding outfalls that would be affected by such spills and leaks.
- (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 stormwater 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/4899.htm> and

<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>

f. Management of Runoff

Divert, infiltrate, reuse, contain or otherwise reduce stormwater 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 discharge 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 stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training 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-Stormwater Discharges

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

The following non-stormwater 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;

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.

6. 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.

7. 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-stormwater 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 H.6 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 stormwater from your facility, or significantly increases the quantity of pollutants discharge.

8. Corrective Action Deadlines

You must document your discovery of any of the conditions listed in Part I.H.7 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.

9. Corrective Action Report

Within 30 days of a discovery of any condition listed in Part I.H.7, 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.H.7, you must document the following information:

- a. Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.H.7.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.

10. Inspections

The inspections in this part must be conducted at this facility.

- a. At a minimum, quarterly inspections of the stormwater management measures and stormwater run-off conveyances. The routine inspections must be performed by qualified personnel with at least one member of your storm water pollution prevention team. Inspections must be documented and either contained in, or have the on-site record keeping location referenced in, the SWP3.
- b. Routine Facility Inspection Documentation – You must document the findings of each routine facility inspection performed and maintain this documentation with your SWPPP or have the on-site record keeping location referenced in the SWPPP. At a minimum, your documentation must include:
 - (1) The inspection date and time;
 - (2) The name(s) and signature(s) of the inspectors;

- (3) Weather information and a description of any discharges occurring at the time of the inspection;
- (4) Any previously unidentified discharges of pollutants from the site;
- (5) Any control measures needing maintenance or repairs;
- (6) Any failed control measures that need replacement;
- (7) Any incidents of noncompliance observed; and
- (8) Any additional control measures needed to comply with the permit requirements.

Any corrective action required as a result of a routine facility inspection must be performed consistent with Part I.H.7 of this permit.

- c. Comprehensive Site Compliance Evaluation – Qualified personnel shall conduct a comprehensive site compliance evaluation, at least once per year, to confirm the accuracy of the description of potential pollution sources contained in the plan, determine the effectiveness of the plan, and assess compliance with the permit. Such evaluations shall provide:

- (1) Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measure, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

As part of the routine inspections, address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitator, scrubbers, and cyclones), for any signs of

degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Considering monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material loss due to wind or stormwater runoff.

- (2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part I.I.2.b of this permit and pollution prevention measures and controls identified in the plan in accordance with Part I.H.5. of this permit shall be revised as appropriate within the timeframes contained in Part I.H.9 of this permit.
- (3) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with the above paragraph must be documented and either contained in, or have on-site record keeping location referenced in, the SWP3 at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with the signatory requirements of Part II.C.6 of this permit.
- (4) Where compliance evaluation schedules overlap the inspections required under Part I.I.2.c.(1)(D), the compliance evaluation may be conducted in place of one such inspection.

I. STORM WATER POLLUTION PREVENTION PLAN

1. Development of Plan

Within 12 months from the effective date of this permit, the permittee is required to develop and implement a Storm Water Pollution Prevention Plan (SWP3) 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)) 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 (SWP3) 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 stormwater 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.

The mapping of historical locations is only required if the historical locations have a reasonable potential for stormwater 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 stormwater discharges exposed to industrial activity including descriptions for any existing or historical areas listed in subdivision 2.b.(2)(J) through (S) 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 (S) and any other areas thought to generate storm water discharges exposed to industrial activity. The description must include the following: