



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Eric J. Holcomb**  
Governor

**Bruno Pigott**  
Commissioner

VIA ELECTRONIC MAIL

July 21, 2017

Mr. Thomas Barnett  
ArcelorMittal Indiana Harbor, LLC  
3001 Dickey Rd  
East Chicago, Indiana 46312

Dear Mr. Barnett:

Re: Final NPDES Permit No. IN0063711  
ArcelorMittal Indiana Harbor, LLC –  
Central Wastewater Treatment Plant  
East Chicago, Lake County, Indiana

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. You are required to submit both federal discharge monitoring reports (DMRs) and state Monthly Monitoring Reports (MMRs) on a routine basis. The MMR form can be found on IDEM's web site at <http://www.in.gov/idem/cleanwater/2396.htm>.

Once you are on this page, select the "IDEM Forms" page and locate the "Monthly Monitoring Report (MMR) for Industrial Discharge Permits-30530" under the Wastewater Facilities heading. We recommend selecting the "XLS" version because it will complete all of the calculations when you enter the data.

IDEM no longer accepts paper DMR or MMR. All NPDES permit holders are required to submit their monitoring data to IDEM using NetDMR. Please contact Rose McDaniel at (317) 233-2653 or Helen Demmings at (317) 232-8815 for more information on NetDMR. Information is also available on our website at <http://IN.gov/idem/cleanwater/2422.htm>.

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.

A response to the comments contained in the letter dated May 26, 2017, from Kevin Doyle of ArcelorMittal, 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 fifteen (15) days of the emailing of an electronic copy of this letter or within eighteen (18) days of the mailing of this letter by filing at the following addresses:

Director  
Office of Environmental Adjudication  
Indiana Government Center North  
Room N103  
100 North Senate Avenue  
Indianapolis, Indiana 46204

Commissioner  
Indiana Department of Environmental Management  
Indiana Government Center North  
Room 1301  
100 North Senate Avenue  
Indianapolis, Indiana 46204

If you have any questions concerning the permit, please contact Richard Hamblin at 317/232-8696 or rhamblin@idem.in.gov. Questions concerning appeal procedures should be directed to the Office of Environmental Adjudication, at 317/233-0850.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Higginbotham", with a long horizontal flourish extending to the right.

Paul Higginbotham  
Deputy Assistant Commissioner  
Office of Water Quality

Enclosures

cc: U.S. EPA, Region V  
Lake County Health Department  
Nick Ream, IDEM NWRO

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 INDIANA HARBOR LLC – CENTRAL WASTEWATER TREATMENT  
PLANT

is authorized to discharge from the central wastewater treatment plant that is located at 3001 Dickey Road, East Chicago, Indiana, to receiving waters identified as Indiana Harbor Ship Canal 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: September 1, 2017

Expiration Date: August 31, 2022

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.

Issued July 21, 2017, for the Indiana Department of Environmental Management.



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Paul Higginbotham  
Deputy Assistant Commissioner  
Office of Water Quality

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 001. The discharge is limited to treated wastewater from the Centralized Wastewater Treatment Plant (Internal Outfall 101), non-contact cooling water, site storm water, off-site stormwater from the City of East Chicago, miscellaneous non-process wastewaters, and groundwater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Indiana Harbor Ship Canal. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3]

Outfall 001

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units		
Flow	Report	Report	MGD	-----	-----	----	1 X Daily	24 Hour Total
O+G	Report	Report	lbs/d	10	15	mg/l	2 X Weekly	2 Grabs/24-Hr.[4]
TSS	Report	Report	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
TRC[6][9]	1.2	2.8[8]	lbs/d	0.016[7]	0.038[8]	mg/l	5 X Weekly	Grab
Mercury[5][6][10]	0.00010	0.00024	lbs/d	1.3	3.2	ng/l	6 X Yearly	Grab
Free Cyanide[6][14]								
Interim	Report	Report	lbs/d	Report	Report	mg/l	2 X Monthly	Grab
Final	1.7	3.5	lbs/d	0.022	0.044	mg/l	2 X Monthly	Grab
T. Cyanide[6]	Report	Report	lbs/d	Report	Report	mg/l	2 X Monthly	Grab
Hex. Chromium[11][14]								
Interim	Report	Report	lbs/d	Report	Report	mg/l	2 X Monthly	Grab
Final	1.2	2.4	lbs/d	0.016	0.032	mg/l	2 X Monthly	Grab
Copper[5]	1.8	3.7	lbs/d	0.025	0.050	mg/l	2 X Monthly	24-Hr. Comp.
Lead[5]	4.8	9.5	lbs/d	0.066	0.130	mg/l	2 X Monthly	24-Hr. Comp.
Zinc[5]	15	29	lbs/d	0.200	0.400	mg/l	2 X Monthly	24-Hr. Comp.
Temperature[13]								
Intake	-----	-----	-----	Report	Report	°F	2 X Weekly	Grab
Outfall	-----	-----	-----	Report	Report	°F	2 X Weekly	Grab
WETT[12]								

Table 2

Parameter	Quality or Concentration			Monitoring Measurement Frequency	Requirements Sample Type
	Daily Minimum	Daily Maximum	Units		
pH	6.0	9.0	s.u.	2 X Weekly	Grab

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

- [2] In the event that changes are to be made in the use of water treatment additives that could significantly change the nature of, or increase the discharge concentration of the additive contributing to this Outfall, the permittee shall notify the Indiana Department of Environmental Management as required in Part II.C.1 of this permit. The use of any new or changed water treatment additives or increased dosage rates shall not cause the discharge from any permitted outfall to exhibit chronic or acute toxicity. Acute and chronic aquatic toxicity information must be provided with any notification regarding any new or changed water treatment additives or dosage rates.
- [3] The Storm Water Monitoring and Non Numeric Effluent Limits and the Storm Water Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.
- [4] A minimum of two (2) grab samples shall be collected at equally spaced time intervals (at a minimum of 6 hours apart) for the duration of the discharge within a twenty-four (24) hour period. Each sample shall be analyzed individually, and the arithmetic mean of the concentrations shall be reported as the value for the twenty-four (24) hour period. That value shall be used to assess compliance with the daily maximum effluent limitation, and the arithmetic average of all daily values determined each month shall be used to assess compliance with the monthly average effluent limit.
- [5] The permittee shall measure and report the identified metal in total recoverable form.
- [6] The following EPA test methods and/or Standard Methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631, Revision E	0.2 ng/l	0.5 ng/l
Chlorine	4500-Cl-D,E or 4500-Cl-G	0.02 mg/l	0.06 mg/l
Cyanide, Total	335.4 or 4500 CN-E	5 ug/l	16 ug/l
Cyanide, Free	4500-CN-G	5 ug/l	16 ug/l
Cyanide, Free	1677	0.5 ug/l	1.6 ug/l

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

Case-Specific LOD/LOQ

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

- [7] The monthly average water quality based effluent limit (WQBEL) for TRC is less than the limit of quantitation (LOQ) as specified below. Compliance with the monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.
- [8] The daily maximum WQBEL for TRC is greater than or equal to the LOD but less than the LOQ as specified below. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ. Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 4.4 lbs/day.
- [9] The permittee is required to develop and conduct a pollutant minimization program (PMP) for each pollutant with a WQBEL below the LOQ. See Part I.H of the permit for the Pollutant Minimization Program (PMP) requirements.
- [10] Mercury monitoring shall be conducted bi-monthly in the months of February, April, June, August, October, and December of each year for the term of the permit using EPA Test Method 1631, Revision E.
- [11] Hexavalent Chromium shall be measured and reported as dissolved metal. The Hexavalent Chromium sample type shall be grab method. The maximum holding time for a Hexavalent Chromium sample is 24 hours (40 CFR 136.3 Table IB). Therefore, the grab sample must be analyzed within 24 hours.
- [12] The permittee shall continue the biomonitoring program for Outfall 001 using the procedures contained under Part I.F of this permit.
- [13] See Part III of this permit for additional requirements.
- [14] The permittee has a 3 year schedule of compliance as outlined in Part I.I in which to meet the final effluent limitations for Hexavalent Chromium and Free Cyanide.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Internal Outfall 101. The discharge is limited to treated wastewater from the Centralized Wastewater Treatment Plant. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to comingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]

Internal Outfall 101

Parameter	Quantity or Loading		Units	Quality or Concentration		Units	Monitoring	Requirements
	Monthly Average	Daily Maximum		Monthly Average	Daily Maximum		Measurement Frequency	Sample Type
Flow	Report	Report	MGD	-----	-----	-----	1 X Daily	24 Hour Total
O+G[2]	599	1421	lbs/d	Report	Report	mg/l	2 X Weekly	2 Grabs/24-Hr.[2]
TSS	1119	2429	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Cadmium[4]	3.8	10	lbs/d	Report	Report	mg/l	[3]	
Zinc[4]	25.0	48.5	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
T. Chromium[4]	24.7	40.0	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Hex. Chromium[5]	Report	Report	lbs/d	Report	Report	mg/l	2 X Monthly	Grab
Lead[4]	8.92	18.1	lbs/d	Report	Report	mg/l	[3]	
Nickel[4]	34.3	57.4	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Copper[4]	29.9	48.8	lbs/d	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Silver[4]	3.5	6.2	lbs/d	Report	Report	mg/l	[3]	
T. Cyanide	9.4	17.3	lbs/d	Report	Report	mg/l	2 X Weekly	Grab
Naphthalene	Report	0.0356	lbs/d	Report	Report	mg/l	[3]	
Tetrachloro-ethylene	Report	0.0534	lbs/d	Report	Report	mg/l	[3]	
TTO[6]	-----	30.7	lbs/d	-----	Report	mg/l	1 X Quarterly[7]	Grab

- [1] The permittee shall not discharge spent hexavalent chromium solutions from the Hot Dip Galvanizing Line into the wastewater collection and treatment systems. Such solutions shall be discharged off-site.
- [2] A minimum of two (2) grab samples shall be collected at equally spaced time intervals (at a minimum of 6 hours apart) for the duration of the discharge within a twenty-four (24) hour period. Each sample shall be analyzed individually, and the arithmetic mean of the concentrations shall be reported as the value for the twenty-four (24) hour period. That value shall be used to assess compliance with the daily maximum effluent limitation, and the arithmetic average of all daily values determined each month shall be used to assess compliance with the monthly average effluent limit.
- [3] A monitoring waiver per 40 CFR 122.44 has been granted for this parameter for the term of this permit. IDEM shall be notified if any changes occur at this facility that would require the conditions that this waiver was granted to be reviewed.

- [4] The permittee shall measure and report the identified metal in total recoverable form.
- [5] Hexavalent Chromium shall be measured and reported as dissolved metal. The Hexavalent Chromium sample type shall be grab method. The maximum holding time for a Hexavalent Chromium sample is 24 hours (40 CFR 136.3 Table IB). Therefore, the grab sample must be analyzed within 24 hours.
- [6] The limitation for TTO (Total Toxic Organics) applies to the summation of all quantifiable values greater than 0.01 mg/l for all toxic organics listed under 40 CFR 433.11(e) which are reasonably expected to be present. This is a federal effluent guideline based limitation and is not an authorization to discharge toxic organic compounds at levels which cause or may cause water quality violations. The discharge of organic compounds at levels which cause or may cause water quality violations is prohibited. The intent of this limitation is to assure that any solvent or other products in use at the plant, which contain any of the listed toxic organic compounds, are disposed of properly, and not dumped, spilled, discharged or leaked.

#### Certification Statement

In lieu of once quarterly monitoring for TTO, the party responsible for signing the monthly discharge monitoring report (DMR) forms may make the following statement, as part of the DMR: "Based on my inquiry of the persons directly responsible for managing compliance with the permit limitations for TTO, I certify that, to the best of my knowledge and belief, no disposal of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the Toxic Organic Pollutant Management Plan submitted to the Compliance Data Section of the Office of Water Quality, as required by this permit." The Certification Statement may not be used until completion of the Toxic Organic Pollutant Management Plan required by Part I.G of this permit.

If the above mentioned responsible party is unable to make the above Certification Statement because of discharge or spills of any TTO compounds, the Permittee is required to notify IDEM in accordance with Part II.C.3 of this permit.

- [7] 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 monitoring period which shall be submitted no later than the 28<sup>th</sup> day of the month following each completed monitoring period. The first report shall be submitted by the 28<sup>th</sup> day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (DMR) and the Monthly Monitoring Report (MMR). All reports shall be submitted electronically by using the NetDMR application, upon registration, receipt of the NetDMR Subscriber Agreement, and IDEM approval of the proposed NetDMR Signatory. Access the NetDMR website (for initial registration and DMR/MMR submittal) via CDX at: <https://cdx.epa.gov/>. 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 sampling time to formulate the “total flow” value,
  - (3) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value,
  - (4) then multiply the volume of the total composite sample by each individual sample’s percentage to determine the volume of that individual sample which will be included in the total composite sample.
- e. Concentration -The weight of any given material present in a unit volume of liquid. Unless otherwise indicated in this permit, concentration values shall be expressed in milligrams per liter (mg/l).
  - f. The “Regional Administrator” is defined as the Region 5 Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
  - g. The “Commissioner” is defined as the Commissioner of the Indiana Department of Environmental Management, which is located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204.
  - h. “Limit of Detection” or “LOD” means a measurement of the concentration of a substance that can be measured and reported with ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the method detection level or MDL.
  - i. “Limit of Quantitation” or “LOQ” means a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also sometimes called limit quantification or quantification level.
  - j. “Method Detection Level” or “MDL” means the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by procedure set forth in 40 CFR

136, Appendix B. The method detection level or MDL is equivalent to the LOD.

4. Test Procedures

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

- a. Standard Methods for the Examination of Water and Wastewater 18<sup>th</sup>, 19<sup>th</sup>, or 20<sup>th</sup> Editions, 1992, 1995, or 1998, American Public Health Association, Washington, D.C. 20005.
- b. A.S.T.M. Standards, Parts 23, Water; Atmosphere Analysis 1972 American Society for Testing and Materials, Philadelphia, PA 19103.
- c. Methods for Chemical Analysis of Water and Wastes June 1974, Revised, March 1983, Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, 1014 Broadway, Cincinnati, OH 45202.

5. Recording of Results

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

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

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of this monitoring shall be included in the calculation and reporting of the values required in the monthly Discharge Monitoring Report (DMR) and Monthly Monitoring Report (MMR). Such increased frequency shall also be indicated. Other monitoring data not specifically required in this permit (such as internal process or internal waste stream data) which is collected by or for the permittee need not be submitted unless requested by the Commissioner.

7. Records Retention

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

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

D. STORM WATER MONITORING AND NON-NUMERIC EFFLUENT LIMITS

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

1. Control Measures and Effluent Limits

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

2. Control Measures

Select, design, install, and implement control measures (including best management practices) to minimize pollutant discharges that address the selection and design considerations in Part D.3 to meet the non-numeric effluent limits in Part D.4. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Any deviation from the manufacturer's specifications shall be documented. If the control measures are not achieving their intended effect in minimizing pollutant discharges, the control measures must be modified as in accordance with the corrective action requirements in Part I.D.6. Regulated storm water discharges from the facility include storm water run-on that commingles with storm water discharges associated with industrial activity at the facility.

3. Control Measure Selection and Design Considerations

When selecting and designing control measures consider the following:

- a. preventing storm water from coming into contact with polluting materials is generally more effective, and cost-effective, than trying to remove pollutants from storm water;
- b. use of control measures in combination may be more effective than use of control measures in isolation for minimizing pollutants in storm water discharge;
- c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- d. minimizing impervious areas at the 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 to reduce in-stream impacts of erosive flow;
- f. conservation and/or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and
- g. use of treatment interceptors (e.g. swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

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

a. Minimize Exposure

Minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. To the extent technologically available and economically practicable and achievable, either locate industrial materials and activities inside or protect them with storm resistant coverings in order to minimize exposure to rain, snow, snowmelt, and runoff (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, pay particular attention to the following areas:

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

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

Note: Industrial materials do not need to be enclosed or covered if storm water runoff from affected areas will not be discharged to receiving waters.

b. Good Housekeeping

Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, store materials in appropriate containers, identify and control all on-site sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation, and ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

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

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

- i. 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;
- ii. Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- iii. 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 the storm water pollution prevention team;
- iv. 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; and
- v. A procedure for documenting all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance.

e. Erosion and Sediment Controls

Through the use of structural and/or non-structural control measures stabilize, and contain runoff from, exposed areas to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. In selecting, designing, installing, and implementing appropriate control measures for erosion and sediment control, check out information from both the State and EPA websites. The following two websites are given as information sources:

<http://www.in.gov/idem/stormwater/2363.htm>

and

<http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-Pollution-Prevention-Plans-for-Construction-Activities.cfm>

f. Management of Runoff

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

g. Salt Storage Piles or Piles Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. 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. Employee Training

Train employees with responsibility for environmental management within each department who work in areas where industrial material or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team.

The following personnel must understand the requirements of Part I.D. and Part I.E. of this permit and their specific responsibilities with respect to those requirements: Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures); personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges; personnel who are responsible for conducting and documenting monitoring and inspections related to storm water; and personnel who are responsible for taking and documenting corrective actions as required in Part I.D.6.

Personnel must be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections): an overview of what is in the SWPPP; spill response procedures, good housekeeping, maintenance requirements, and material management practices; the location of all controls on the site required by this permit, and how they are to be maintained; the proper

procedures to follow with respect to the permit's pollution prevention requirements; and when and how to conduct inspections, record applicable findings, and take corrective actions.

i. Non-Storm water Discharges

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

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

Discharges from fire-fighting activities;  
Fire Hydrant flushings;  
Potable water, including water line flushings;  
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;  
Ground water or spring water;  
Foundation or footing drains where flows are not contaminated with process materials;  
Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from cooling towers (e.g., "piped cooling tower blowdown or drains); and  
Vehicle wash- waters where detergents or solvents are not utilized.

j. Dust Generation and Vehicle Tracking of Industrial Materials

Minimize generation of dust and off-site tracking of raw, final, or waste materials.

5. Annual Review

At least once every 12 months, prepare an Annual Report which includes the following: the results or a summary of the past year's routine facility inspection documentation and quarterly visual assessment documentation; information copied or summarized from the corrective action documentation required (if applicable). If corrective action is not yet completed at the time of preparation of this Annual Report, describe the status of any outstanding corrective action(s); and any incidents of noncompliance observed or, if there is no noncompliance, a certification signed by a responsible corporate officer, general partner or the proprietor, executive officer or ranking elected official, stating the facility is in compliance with this permit.

6. Corrective Actions – Conditions Requiring Review

- a. If any of the following conditions occur, review the SWPPP to determine if and where revisions may need to be made to eliminate the condition and prevent its reoccurrence:
  - i. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this NPDES permit) occurs at the facility;
  - ii. Control measures are not stringent enough for the discharge to meet applicable water quality standards;
  - iii. A required control measure was never installed, was installed incorrectly, or is not being properly operated or maintained;
  - iv. Visual assessments indicate obvious signs of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam); or
- b. If construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in storm water from the facility, or significantly increases the quantity of pollutants discharge the permittee must review and revise the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the effluent limits in this permit.

7. Corrective Action Deadlines

If additional changes are necessary, a new or modified control must be installed and made operational, or a repair completed, before the next storm event if possible, otherwise as soon as reasonably practicable given the scope of the corrective action. The reasons for any schedule for a corrective action requiring more than 90 days to complete shall be documented.

Where corrective actions result in changes to any of the controls or procedures documented in the SWPPP, the SWPPP must be modified accordingly within 14 calendar days of completing corrective action work.

These time intervals are not grace periods, but are schedules considered reasonable for documenting the findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

8. Corrective Action Report

The existence of any of the conditions listed in Part I.D.6 must be documented within 24 hours of becoming aware of such condition. The following information must be included in the documentation:

- a. Identification and description of the condition triggering the need for corrective action review. For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of U.S., through stormwater or otherwise;
- b. Date the condition was identified; and
- c. A discussion of whether the triggering condition requires corrective action. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases.

Document the corrective actions taken that occurred as a result of the conditions listed in Part I.D.6. within 30 days from the time of discovery of any of those conditions. Provide the dates when each corrective action was initiated and completed (or is expected to be completed). If applicable, document why it is infeasible to complete necessary installations or repairs within the 30-day timeframe and document the schedule for installing the controls and making them operational as soon as practicable after the 30-day timeframe.

9. Inspections

- a. Routine Facility Inspections

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

- i. Areas where industrial materials or activities are exposed to stormwater;
- ii. Areas identified in the SWPPP and those that are potential pollutant sources;
- iii. Areas where spills and leaks have occurred in the past 3 years.
- iv. Discharge points; and
- v. Control measures used to comply with the effluent limits contained in this permit.

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

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

During the inspection examine or look out for the following:

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

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

b. Routine Facility Inspection Documentation

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

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

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

If the discharge was visual assessed, as required in Part I.D.9.c., during the facility inspection, include the results of the assessment with the report required in Part I.D.9.a., as long as all components of both types of inspections are included in the report.

c. Quarterly Visual Assessment Procedures

Once each quarter for the entire permit term, collect a stormwater sample from each outfall and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge. Guidance on monitoring is available at:

<http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm>

The visual assessment must be made:

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

Visually inspect or observe the sample for the following water quality characteristics:

- iv. Color;
- v. Odor;
- vi. Clarity (diminished);
- vii. Floating solids;
- viii. Settled solids;
- ix. Suspended solids;
- x. Foam;
- xi. Oil sheen; and
- xii. Other obvious indicators of stormwater pollution.

Whenever the visual assessment shows obvious signs of stormwater pollution, initiate the corrective action procedures in Part I.D.6.

d. Quarterly Visual Assessment Documentation

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

- i. Sample location(s);
- ii. Sample collection date and time, and visual assessment date and time for each sample;

- iii. Personnel collecting the sample and performing visual assessment, and their signatures;
- iv. Nature of the discharge (i.e., runoff or snowmelt);
- v. Results of observations of the stormwater discharge;
- vi. Probable sources of any observed stormwater contamination; and
- vii. If applicable, why it was not possible to take samples within the first 30 minutes.

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

e. Exceptions to Quarterly Visual Assessments

- i. Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included with the SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as extended frozen conditions.
- ii. Snow: In areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge, taking into account the exception described above for climates with irregular stormwater runoff.
- iii. For outfalls that discharge non-contact cooling water and/or process water where the dry weather discharge flow is substantially greater than typical storm water contributions to the overall discharge flow, quarterly visual assessments are not required.

E. STORM WATER POLLUTION PREVENTION PLAN

To the extent other facility contingency plans prepared outside the scope of the NPDES permit (e.g., SPCC, RCRA) address either directly or indirectly storm water pollution prevention measures, those plans are incorporated by reference and may be cited by the permittee as means to comply with the provisions of this section.

1. Development of Plan

Within 18 months from the effective date of this permit, the permittee is required to revise and update the current Storm Water Pollution Prevention Plan (SWPPP) to ensure the SWPPP is appropriate for the permitted facility. The SWPPP does not contain effluent limitations. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the additional documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

2. Contents

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

- a. Pollution Prevention Team – The SWPPP must identify the staff members (by name or title) that comprise the facility’s stormwater pollution prevention team as well as their individual responsibilities. The stormwater pollution prevention team is responsible for overseeing development of the SWPPP, any later modifications to it, and for compliance with permit Parts I.D. and I.E. of this permit. 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, the most updated copy of the SWPPP, other relevant documents or information that must be kept with the SWPPP.
- b. Site Description – As a minimum, the plan shall contain the following:
  - i. *Activities at the Facility.* Provide a description of the nature of the industrial activities at the facility.
  - ii. *General location map.* Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters for the stormwater discharges.
  - iii. *Site map.* Provide a map showing:
    - (A) Boundaries of the property and the size of the property in acres;
    - (B) Location and extent of significant structures and impervious surfaces;
    - (C) Directions of stormwater flow (use arrows);
    - (D) Locations of all stormwater control measures;
    - (E) Locations of all receiving waters, including wetlands, in the immediate vicinity of the facility. Indicate which waterbodies are listed as impaired and which are identified by the State of Indiana or EPA as Tier 2 or Tier 2.5 waters;

- (F) Locations of all stormwater conveyances including ditches, pipes, and swales;
- (G) Locations of potential pollutant sources identified;
- (H) Locations where significant spills or leaks identified have occurred;
- (I) Locations of all stormwater monitoring points;
- (J) Locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2), indicating if you are treating one or more outfalls as “substantially identical”, and an approximate outline of the areas draining to each outfall;
- (K) If applicable, municipal separate storm sewer systems and where the stormwater discharges to them;
- (L) Areas of federally-listed critical habitat for endangered or threatened species, if applicable.
- (M) Locations of the following activities where such activities are exposed to precipitation:
  - (a) fueling stations;
  - (b) vehicle and equipment maintenance and/or cleaning areas;
  - (c) loading/unloading areas;
  - (d) locations used for the treatment, storage, or disposal of wastes;
  - (e) liquid storage tanks;
  - (f) processing and storage areas;
  - (g) immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
  - (h) transfer areas for substances in bulk; and
  - (i) locations and sources of run-on to the site from adjacent property that contains significant quantities of pollutants.
- (N) Identify in the SWPPP where any of the following activities are exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants in storm water.

c. Potential Pollutant Sources:

The SWPPP must document areas at the facility where industrial materials or activities are exposed to stormwater or from which allowable non-stormwater discharges may be released. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For structures located in areas of industrial activity, be aware that the structures themselves are potential sources of pollutants. This could occur, for example, when metals such as aluminum or copper are leached from the structures as a result of acid rain.

For each area identified, the description must include:

- i. *Activities in the Area.* A list of the industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).
- ii. *Pollutants.* A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity, which could be exposed to rainfall or snowmelt and could be discharged from the facility. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to stormwater in the three years prior to the date the SWPPP is prepared or amended.
- iii. *Spills and Leaks.* The SWPPP must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The SWPPP must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date the SWPPP is prepared or amended.
- iv. *Non-Storm water Discharges* – The SWPPP must document that you have evaluated for the presence of non-storm water discharges not authorized by an NPDES permit. Any non-storm water discharges have either been eliminated or incorporated into this permit. Documentation of non-storm water discharges shall include:

A written non-storm water assessment, including the following:

- (1) The date of the evaluation;
  - (2) A description of the evaluation criteria used;
  - (3) A list of the outfalls or onsite drainage points that were directly observed during the evaluation; and
  - (4) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), or documentation that a separate NPDES permit was obtained. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.
- v. Salt Storage - The location of any storage piles containing salt used for deicing or other commercial or industrial purposes must be documented in the SWPPP.
- vi. Sampling Data - All stormwater discharge sampling data collected at the facility during the previous permit term must be summarized in the SWPPP.
- vii. Description of Control Measures to Meet Technology-Based Effluent Limits - The location and type of control measures you have specifically chosen and/or designed to comply with Permit Part I.D. must be documented in the SWPPP. Regarding the control measures, the following must be documented as appropriate:
- (a) How the selection and design considerations of control measures were addressed.
  - (b) How the control measures address the pollutant sources identified.
- d. Schedules and Procedures

The following must be documented in the SWPPP:

- i. Good Housekeeping – Any schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;
- ii. Maintenance – Preventative maintenance procedures, including regular inspections, testing, maintenance and repair of all control measures to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the storm water requirements.

- iii. Spill Prevention and Response Procedures – Procedures for preventing and responding to spills and leaks, including notification procedures. For preventing spills, include in the SWPPP the control measures for material handling and storage, and the procedures for preventing spills that can contaminate stormwater. Also specify cleanup equipment, procedures and spill logs, as appropriate, in the event of spills. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review;
- iv. Erosion and Sediment Control – If you use polymers and/or other chemical treatments as part of the controls, identify the polymers and/or chemicals used and the purpose; and
- v. Employee Training – The elements of the employee training plan shall include all, but not be limited to, the requirements set forth in Permit Part.I.D., and also the following:
  - (1) The content of the training;
  - (2) The frequency/schedule of training for employees within each department with responsibility for environmental management who have duties in areas of industrial activities subject to this permit;
  - (3) A log of the dates on which designated employees received training.

e. Pertaining to Inspections

Document in the SWPPP the procedures for performing, as appropriate, the types of inspections specified by this permit, including:

- i. Routine facility inspections and;
- ii. Quarterly visual assessment of stormwater discharges.

For each type of inspection performed, the SWPPP must identify:

- iii. Person(s) or positions of person(s) responsible for inspection;
- iv. Schedules for conducting inspections, including tentative schedule for irregular stormwater runoff discharges; and
- v. Specific items to be covered by the inspection, including schedules for specific outfalls.

f. Pertaining to Monitoring

For each type of monitoring, the SWPPP must document:

- i. Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- ii. Parameters for sampling and the frequency of sampling for each parameter;
- iii. Schedules for monitoring at the facility, including schedule for alternate monitoring periods for climates with irregular stormwater runoff;
- iv. Any numeric control values (effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
- v. Procedures (e.g., responsible staff, logistics, laboratory to be used) for gathering storm event data.

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

- i. The SWPPP shall be prepared in accordance with good engineering practices and to industry standards. The SWPPP may be developed by either a person on the staff or a third party, and it shall be certified in accordance with the signature requirements, under Part II.C.6.
- ii. Retain a complete copy of the current SWPPP required by this permit at the facility in any accessible format. A complete SWPPP includes any documents incorporated by reference and all documentation supporting parts I.D. and I.E. of this permit, as well as the signed and dated certification page. Regardless of the format, the SWPPP must be immediately available to facility employees, EPA, a state or tribe, the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection. The current SWPPP or certain information from the current SWPPP must also be made available to the public (except any confidential business information (CBI) or restricted information, but clearly identify those portions of the SWPPP that are being withheld from public access.
- iii. Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS), copies of the relevant portions of those documents must be kept with the SWPPP.

## F. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

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

### 1. Whole Effluent Toxicity Tests

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

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

- (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Fourth Edition Section 13, Cladoceran (*Ceriodaphnia dubia*) Survival and Reproduction Test Method 1002.0; 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 Permit Branch.
- (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA-821-R-02-013), Fourth Edition, October 2002, or most recent update.

b. Types of Bioassay Tests

- (1) The permittee shall conduct 7-day Daphnid (*Ceriodaphnia dubia*) Survival and Reproduction Test 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.
- (2) If, in any control, more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test shall be repeated. In addition, if in the *Ceriodaphnia dubia* test control the number of newborns produced per surviving female is less than 15, or if 60% of surviving control females have less than three broods; 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.

b. Effluent Sample Collection and Chemical Analysis

- (1) Samples taken for the purposes of Whole Effluent Toxicity Testing will be taken at a point that is representative of the discharge, but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of the 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.
- (2) Chemical analysis must accompany each effluent sample taken for bioassay test, especially the sample taken for the repeat or confirmation test as outlined in section f.3. below. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

d. Testing Frequency and Duration

The chronic toxicity test specified in section b. above shall be conducted at least once annually for the duration of the permit. After three tests have been completed, and if no toxicity is demonstrated, as defined in section f. below, 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 monthly testing for three (3) months in the current tests, sensitive species will be selected based on frequency and failure of whole effluent toxicity tests with one or the other species in the immediate past.

If toxicity is demonstrated as defined under section f., the permittee is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2.

e. Reporting

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

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

- (2) For quality control, the report shall include the results of appropriate standard reference toxic pollutant tests for chronic endpoints and historical reference toxic pollutant data with mean values and appropriate ranges for 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 to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

f. Demonstration of Toxicity

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

- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 7.6 TU<sub>c</sub> (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 any Toxicity Identification Evaluation (TIE) and/or Toxicity Reduction Evaluation (TRE), if necessary. If any two (2) consecutive tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended (upon approval from IDEM) while the TRE/TIE are being conducted.

g. Definitions

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

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

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

a. Development of TRE Plan

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

(1) Methods for Aquatic Toxicity Identification Evaluations:

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

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

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

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

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

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

b. Conduct the Plan

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

c. Reporting

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

d. Compliance Date

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

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

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

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

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

G. TOXIC ORGANIC POLLUTANT MANAGEMENT PLAN

In order to use the Certification Statement for Total Toxic Organics on Page 6 of this permit, the Permittee is required to submit a management plan for toxic organic pollutants. The Toxic Organic Pollutant Management Plan is to be submitted to the Compliance Data Section of the Office of Water Quality within ninety (90) days of the effective date of this permit, and is to include a listing of toxic organic compounds used, the method of disposal, and procedure for ensuring that these compounds do not routinely spill or leak into the process wastewater, noncontact cooling water, groundwater, stormwater, or other surface waters.

## H. 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 a WQBEL below the LOQ for TRC.

- a. The goal of the pollutant minimization program shall be to maintain the effluent at or below the WQBEL. The pollutant minimization program shall include, but is not limited to, the following:
  - (1) Submit a control strategy designed to proceed toward the goal within 180 days of the effective date of this permit.
  - (2) Implementation of appropriate cost-effective control measures, consistent with the control strategy within 365 days of the effective date of this permit.
  - (3) Monitor as necessary to record the progress toward the goal. Potential sources of the pollutant shall be monitored on a semi-annual basis. Quarterly monitoring of the influent of the wastewater treatment system is also required. The permittee may request a reduction in this monitoring requirement after four quarters of monitoring data.
  - (4) Submit an annual status to the Commissioner at the address listed in Part I.C.3.g. to the attention of the Office of Water Quality, Compliance Data Section, by January 31 of each year that includes the following information:
    - (i) All minimization program monitoring results for the previous year.
    - (ii) A list of potential sources of the pollutant.
    - (iii) A summary of all actions taken to reduce or eliminate the identified sources of the pollutant.
  - (5) A pollution minimization program may include the submittal of pollution prevention strategies that use changes in production process technology, materials, processes, operations, or procedures to reduce or eliminate the source of the pollutant.
- b. No pollution minimization program is required if the permittee demonstrates that the discharge of a pollutant with a WQBEL below the LOQ is reasonably expected to be in compliance with the WQBEL at the point of discharge into the receiving water. This demonstration may include, but is not limited to, the following:

- (1) Treatment information, including information derived from modeling the destruction of 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.

#### I. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for Hexavalent Chromium and Free Cyanide at Outfall 001 in accordance with the following schedule:
  - a. The permittee shall submit a written progress report to the Compliance Data Section of the Office of Water Quality (OWQ) nine (9) months from the effective date of this permit. The progress report shall include a description of the method(s) selected for meeting the newly imposed limitation for hexavalent chromium and free cyanide, in addition to any other relevant information. The progress report shall also include a specific time line specifying when each of the steps will be taken. The new effluent limits for hexavalent chromium and free cyanide are deferred for the term of this compliance schedule, unless the new effluent limits can be met at an earlier date. The permittee shall notify the Compliance Data Section of OWQ as soon as the newly imposed effluent limits for hexavalent chromium and free cyanide can be met. Upon receipt of such notification by OWQ, the final limits for hexavalent chromium and free cyanide will become effective, but no later than thirty-six (36) months from the effective date of this permit. Monitoring and reporting of the effluent for these parameters is required during the interim period.
  - b. The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than eighteen (18) months from the effective date of this permit. This report shall include detailed

information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the time line set out in the initial progress report.

- c. The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than twenty-seven (27) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the time line set out in the initial progress report.
  - d. Within thirty (30) days of completion of construction, 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.
  - e. The permittee shall comply with the final effluent limitations for hexavalent chromium and free cyanide no later than thirty-six (36) months from the effective date of this permit.
2. 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 Compliance Data Section of the OWQ stating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final effluent limitations.

#### J. REOPENING CLAUSES

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

1. to comply with any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
  - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - b. controls any pollutant not limited in the permit.
2. to incorporate any of the reopening clause provisions cited at 327 IAC 5-2-16.
3. to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study

indicate that such limitations are necessary to meet Indiana Water Quality Standards.

4. to include a case-specific Limit of Detection (LOD) and/or Limit of Quantitation (LOQ). The permittee must demonstrate that such action is warranted in accordance with the procedures specified under Appendix B, 40 CFR Part 136, using the most sensitive analytical methods approved by EPA under 40 CFR Part 136, or approved by the Commissioner.
5. this permit may be modified or revoked and reissued after public notice and opportunity for hearing to revise or remove the requirements of the pollutant minimization program, if supported by information generated as a result of the program.
6. to specify the use of a different analytical method if a more sensitive analytical method has been specified in or approved under 40 CFR 136 or approved by the Commissioner to monitor for the presence and amount in the effluent of the pollutant for which the WQBEL is established. The permit shall specify, in accordance with 327 IAC 5-2-11.6(h)(2)(B), the LOD and LOQ that can be achieved by use of the specified analytical method.
7. to review the monitoring requirements pursuant to 40 CFR 122.44(a)(2). The permittee may request, in writing, a review of categorical monitoring requirements. Upon review by IDEM, the permit may be modified, to reduce or delete the monitoring requirements.

## PART II

### STANDARD CONDITIONS FOR NPDES PERMITS

#### A. GENERAL CONDITIONS

##### 1. Duty to Comply

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

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

##### 2. Duty to Mitigate

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

##### 3. Duty to Reapply

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

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

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

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

#### 4. Permit Transfers

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

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

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

#### 5. Permit Actions

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

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

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

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

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

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

## 6. Property Rights

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

## 7. Severability

In accordance with 327 IAC 1-1-3, the provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any person or circumstance is held invalid, the invalidity shall not affect any other

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

8. Oil and Hazardous Substance Liability

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

9. State Laws

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

10. Penalties for Violation of Permit Conditions

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

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

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

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

11. Penalties for Tampering or Falsification

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

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

12. Toxic Pollutants

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

13. Wastewater treatment plant and certified operators

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

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

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

14. Construction Permit

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

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

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

15. Inspection and Entry

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

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

16. New or Increased Discharge of Pollutants

This permit prohibits the permittee from undertaking any action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless one of the following is completed prior to the commencement of the action:

- a. Information is submitted to the Commissioner demonstrating that the proposed new or increased discharges will not cause a significant lowering of water quality as defined under 327 IAC 2-1.3-2(50). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.
- b. An antidegradation demonstration is submitted to and approved by the Commissioner in accordance with 327 IAC 2-1.3-5 and 327 IAC 2-1.3-6.

## B. MANAGEMENT REQUIREMENTS

### 1. Proper Operation and Maintenance

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

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

### 2. Bypass of Treatment Facilities

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

- a. Terms as defined in 327 IAC 5-2-8(12)(A):
  - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
  - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. The permittee may allow a bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it is also for

essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.c., e, and f of this permit.

- c. Bypasses, as defined in (a) above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless the following occur:
  - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Part II.B.2.e; or
  - (4) The condition under Part II.B.2.b above is met.
- d. Bypasses that result in death or acute injury or illness to animals or humans must be reported in accordance with the "Spill Response and Reporting Requirements" in 327 IAC 2-6.1, including calling 888/233-7745 as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the bypass are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.
- e. The permittee must provide the Commissioner with the following notice:
  - (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
  - (2) The permittee shall orally report an unanticipated bypass that exceeds any effluent limitations in the permit within 24 hours of becoming aware of the bypass noncompliance. The permittee must also provide a written report within five (5) days of the time the permittee becomes aware of the bypass event. The

written report must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; if the cause of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the bypass event. If a complete fax or e-mail submittal is provided within 24 hours of the time that the permittee became aware of the unanticipated bypass event, then that report will satisfy both the oral and written reporting requirement. E-mails should be sent to [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov).

- f. The Commissioner may approve an anticipated bypass, after considering its adverse effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.c. The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.

### 3. Upset Conditions

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

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this section, are met.
- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
  - (1) An upset occurred and the permittee has identified the specific cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee complied with any remedial measures required under Part II.A.2; and

(4) The permittee submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

d. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof pursuant to 40 CFR 122.41(n)(4).

4. Removed Substances

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

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

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

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

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

2. Monitoring Reports

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

3. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(11)(C), the permittee shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time permittee becomes aware of such noncompliance. If the noncompliance meets the requirements of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made within those prescribed time frames. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge that is in noncompliance are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any noncompliance which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the noncomplying circumstances;
- c. Any upset (as defined in Part II.B.3 above) that causes an exceedance of any effluent limitation in the permit;
- d. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: Mercury, Free Cyanide, Total Cyanide, Hexavalent Chromium, Zinc, Nickel, and Copper.

The permittee can make the oral reports by calling (317)232-8670 during regular business hours or by calling (317) 233-7745 ((888)233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a “Bypass/Overflow Report” (State Form 48373) or a “Noncompliance 24-Hour Notification Report” (State Form 54215), whichever

is appropriate, to IDEM at (317) 232-8637 or [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov). If a complete fax or e-mail submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

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

4. Other Compliance/Noncompliance Reporting

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

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

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

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

5. Other Information

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

6. Signatory Requirements

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

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

(1) The manager of one (1) or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty to

make major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a Federal, State, or local government body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.
- (4) Under the proposed Federal E-Reporting Rule, a method will be developed for submittal of all affected reports and documents using electronic signatures that is compliant with the Cross-Media Electronic Reporting Regulation (CROMERR). Enrollment and use of NetDMR currently provides for CROMERR-compliant report submittal.

b. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above.
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The authorization is submitted to the Commissioner.

c. Electronic Signatures. If documents described in this section are submitted electronically by or on behalf of the NPDES-regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this section, and shall ensure that all of the relevant requirements of 40 CFR part 3 (including, in all cases, subpart D to part 3) (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

- d. Certification. Any person signing a document identified under Part II.C.6. shall make the following certification:

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

7. Availability of Reports

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

8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(15) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance, shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

9. Changes in Discharge of Toxic Substances

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

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any pollutant identified as toxic pursuant to Section 307(a) of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels.”

(1) One hundred micrograms per liter (100µg/l);

- (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1mg/l) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - (4) A notification level established by the Commissioner on a case-by-case basis, either at his own initiative or upon a petition by the permittee. This notification level may exceed the level specified in subdivisions (1), (2), or (3) but may not exceed the level which can be achieved by the technology-based treatment requirements applicable to the permittee under the CWA (see 327 IAC 5-5-2).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
- (1) Five hundred micrograms per liter (500 µg/l);
  - (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Sec. 122.21(g)(7).
  - (4) A notification level established by the Commissioner on a case-by-case basis, either at his own initiative or upon a petition by the permittee. This notification level may exceed the level specified in subdivisions (1), (2), or (3) but may not exceed the level which can be achieved by the technology-based treatment requirements applicable to the permittee under the CWA (see 327 IAC 5-5-2).
- c. That it has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant which was not reported in the permit application under 40 CFR 122.21(g)(9).

PART III  
Other Requirements

A. Thermal Effluent Requirements

The thermal discharge shall be calculated for Outfall 001. Such discharge shall be limited and monitored by the permittee as specified below.

DISCHARGE LIMITATIONS

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
Temperature[1]								
Intake	----	----	----	Report	Report	°F	2 X Week	Grab
Outfall	----	----	----	Report	Report	°F	2 X Week	Grab

[1] Temperature at Outfall 001 shall be sampled. On days when temperature is sampled at the outfall, temperature shall also be sampled at the intake supplying the most significant source of water to the outfall. As an alternative to direct grab measurements during this time period the facility may install a more permanent temperature measuring device that will retain the highest temperature value during any given 24 hour period.

B. Biocides Concentration

The permittee must receive written permission from the IDEM if they desire to use any biocide or molluscicide other than chlorine. ArcelorMittal currently uses Sodium Hypochlorite (bleach/chlorine) for the control of zebra mussels. ArcelorMittal removes chlorine prior to discharge by using Sodium Bisulfate. Total Residual Chlorine (TRC) is limited at each of the affected final outfalls during periods of chlorination. The use of any biocide containing tributyl tin oxide in any closed or open cooling system is prohibited.

C. Polychlorinated Biphenyls

There shall be no discharge of polychlorinated biphenyl (PCB) compounds attributable to facility operations such as those historically used in transformer fluids. In order to determine compliance with the PCB discharge prohibition, the permittee shall provide the following PCB data with the next NPDES permit renewal application for at least one sample taken from each final outfall. The corresponding facility water intakes shall be monitored at the same time as the final outfalls.

<u>Pollutant</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
PCBs*	EPA 608	0.1 ug/L	0.3 ug/L

\*PCB 1242, 1254, 1221, 1232, 1248, 1260, 1016



**National Pollutant Discharge Elimination System  
 FACT SHEET for  
 ArcelorMittal Indiana Harbor LLC-Central Wastewater  
 Treatment Plant  
 Draft: April 2017  
 Final: July 2017**

**Indiana Department of Environmental Management**

100 North Senate Avenue  
 Indianapolis, Indiana 46204  
 (317) 232-8603  
 Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

<b>Permittee:</b>	ArcelorMittal Indiana Harbor LLC 3001 Dickey Road East Chicago, Indiana 46312
<b>Existing Permit Information:</b>	Permit Number: IN0063711 Expiration Date: 11/30/2016
<b>Facility Contact:</b>	Thomas Barnett (219)399-2380 or <a href="mailto:Thomas.Barnett@arcelormittal.com">Thomas.Barnett@arcelormittal.com</a>
<b>Facility Location:</b>	ArcelorMittal Indiana Harbor LLC – Central Wastewater Treatment Plant 3001 Dickey Road East Chicago, Indiana Lake County
<b>Receiving Stream:</b>	Indiana Harbor Ship Canal
<b>GLI/Non-GLI:</b>	GLI
<b>Proposed Permit Action:</b>	Renew
<b>Date Application Received:</b>	6/3/16
<b>Source Category</b>	NPDES Major – Industrial
<b>Permit Writer:</b>	Richard Hamblin (317)232-8696 or <a href="mailto:rhamblin@idem.in.gov">rhamblin@idem.in.gov</a>

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## **1.0 INTRODUCTION**

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The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from the permittee on June 3, 2016. The current five year permit was issued with an effective date of December 01, 2011 in accordance with 327 IAC 5-2-6(a). The permit was subsequently modified on November 26, 2014 to resolve a permit appeal. A five year permit is proposed in accordance with 327 IAC 5-2-6(a).

The Federal Water Pollution Control Act of 1972 and subsequent amendments require a NPDES permit for the discharge of wastewater to surface waters. Furthermore, Indiana Code (IC) 13-15-1-2 requires a permit to control or limit the discharge of any contaminants into state waters or into a publicly owned treatment works. This proposed permit action by IDEM complies with both federal and state requirements.

In accordance with Title 40 of the Code of Federal Regulations (CFR) Sections 124.8 and 124.56, as well as Indiana Administrative Code (IAC) 327 Article 5, development of a Fact Sheet is required for NPDES permits. This document fulfills the requirements established in those regulations.

This Fact Sheet was prepared in order to document the factors considered in the development of NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, receiving water conditions, and wasteload allocations to meet Indiana Water Quality Standards. Decisions to award variances to Water Quality Standards or promulgated effluent guidelines are justified in the Fact Sheet where necessary.

## **2.0 FACILITY DESCRIPTION**

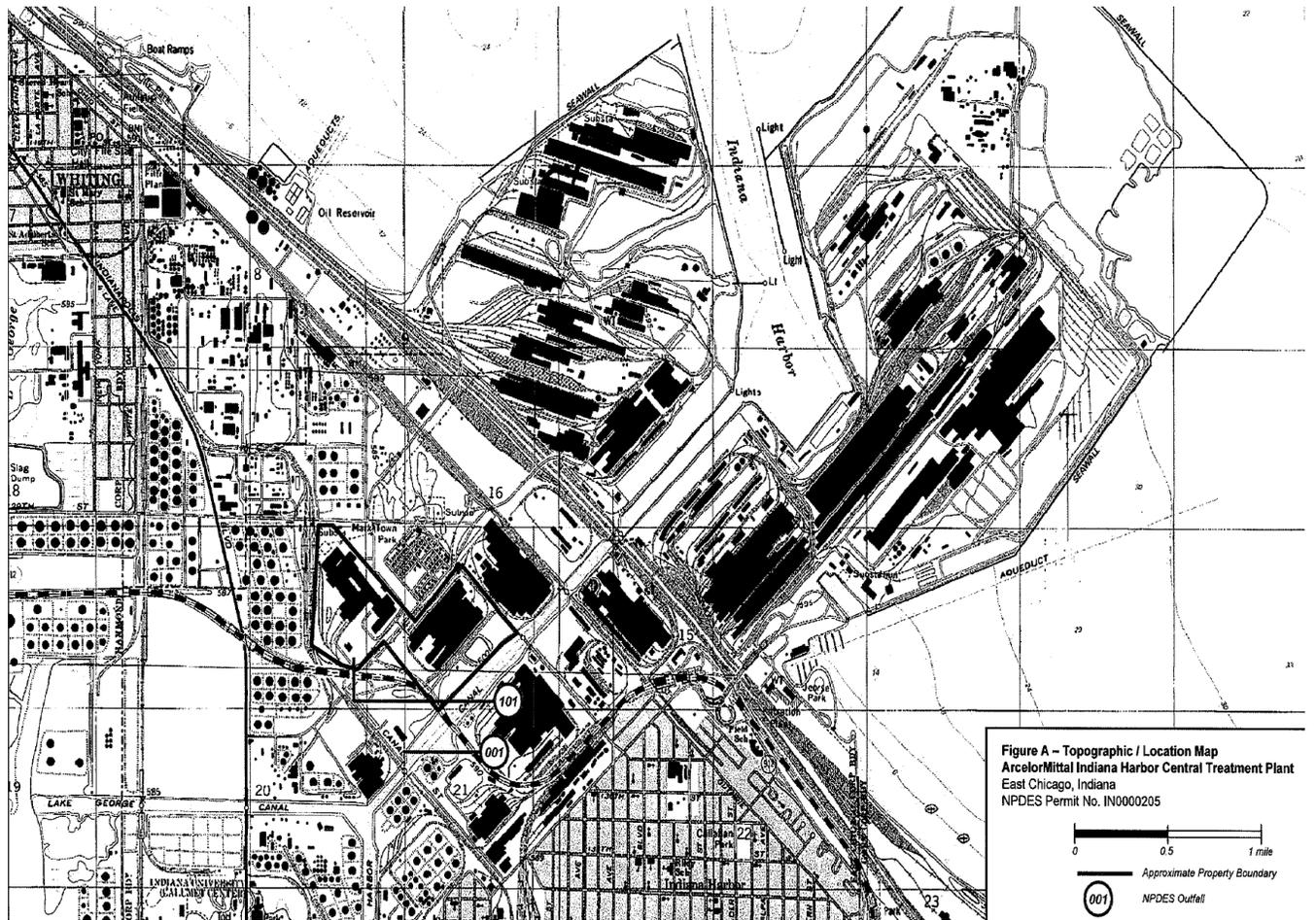
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### **2.1 General**

ArcelorMittal Indiana Harbor LLC is classified under Standard Industrial Classification (SIC) Code 3312 – Steel Mill. The permittee is a steel mill that produces molten iron in blast furnaces, crude steel in basic oxygen furnaces, and cast steel slabs. The cast steel slabs are processed into strip steel at other ArcelorMittal steel mills. Those operations are regulated under NPDES Permit No. IN0000205 (Indiana Harbor West). ArcelorMittal Indiana Harbor LLC also produces hot-dipped galvanized steel strip. The galvanizing operations and the adjacent U.S. Steel East Chicago Tin Operations are regulated under this separate NPDES Permit for the ArcelorMittal Central Wastewater Treatment Plant, NPDES Permit No. IN0063711. The U.S. Steel East Chicago Tin Operations contribute more than 95% of the process wastewater flow at the Central Wastewater Treatment Plant.

A map showing the location of the facility has been included as Figure 1.

**Figure 1: Facility Location**



**2.2 Outfall Locations**

Outfall 001	Latitude: 41° 38' 55"
	Longitude: 87° 23' 05"
Outfall 101	Latitude: 41° 39' 16"
	Longitude: 87° 28' 20"

**2.3 Wastewater Treatment**

The current discharge from Outfall 001 consists of wastestreams from Internal Outfall 101, non-contact cooling water, site storm water, and groundwater. The discharge from Outfall 001 has an average discharge of approximately 8.8 MGD.

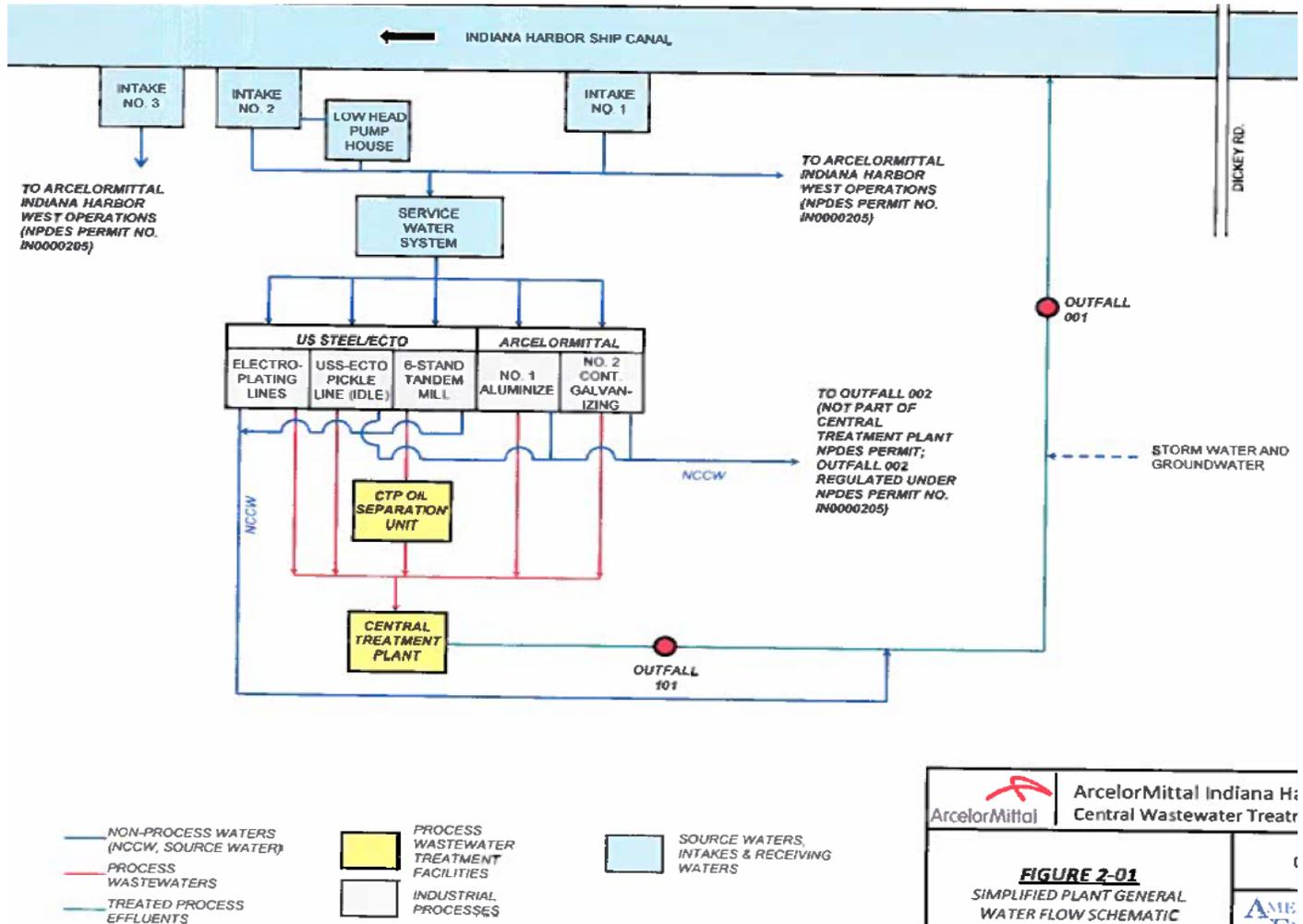
The discharge from Internal Outfall 101 is from the on-site Central Wastewater Treatment Plant (CWTP) and currently consists of wastewaters from: U.S. Steel (USS) No. 2 Pickler (idle as of January 2015); cold rollers in the USS 6-Stand and 2-Stand Mills and ArcelorMittal No. 2 Galvanizing Temper Mill; USS alkaline cleaning operations; hot-dip galvanizing operations from ArcelorMittal No.1 (idle as of 4<sup>th</sup> quarter 2015) and No. 2 galvanizing lines and; USS tin and chromium line electroplating operations.

Discharges from the U. S. Steel / ECTO No. 2 6-Stand Tandem Cold Rolling Mill are treated in an oil separator unit prior to discharge to the Central Wastewater Treatment Plant. Cold rolling wastewaters are sent through an API separator unit, coagulant mix tank (coagulant and ferric chloride addition), and a dissolved air flotation unit (DAF). Oil removed by the API separator and skimmings and sludge removed by the DAF is re-used on site.

Treated oily wastewaters from the cold rolling mill and wastewaters from other ArcelorMittal and U.S. Steel/ ECTO operations discharge to a wet well and are sent through primary mix tanks, scalping tanks, secondary mix tanks, and the No. 1 and No. 2 clarifiers. Sludge from the clarifiers is thickened and dewatered for off-site disposal.

The discharge from Internal Outfall 101 has an average discharge of approximately 5.1 MGD. A Flow Diagram has been included as Figure 2.

**Figure 2: Flow Diagram**



Outfall 001: The average daily discharge from Outfall 001 to the Indiana Harbor Ship Canal is 8.8 MGD and based on the most recent 2 years of data. This flow was used in the updated WLA included as an attachment to this Fact Sheet.

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

## **2.4 Changes in Operation**

- The permit renewal application proposes the following: The No.1 Aluminize Line (ArcelorMittal operation) was idled in the 4<sup>th</sup> quarter of 2015, and is expected to resume operations as market conditions improve. The technology-based effluent limits (TBELs) provided in attachment 2 to the application included mass allowances for the No. 1 aluminize line.
- The No.2 Acid Pickling Line (U.S. Steel/ECTO operation) was idled in January 2015. It is assumed operations would resume as market conditions improve. The TBELs provided in Attachment 2 of the renewal application include mass allowances for the No. 2 Pickle Line.
- Note, IDEM has determined to fulfill this request and maintain the likelihood that these processes will eventually come back on line during this next permit cycle.
- ArcelorMittal requested that the monitoring waivers for total recoverable cadmium, total recoverable lead, total recoverable silver, naphthalene and tetrachloroethylene at Outfall 101 be continued in the renewed NPDES permit.

## **2.5 Facility Storm Water**

Site storm water is discharged via Outfall 001 without treatment. Storm water monitoring requirements can be found in Section 5.7 of this Fact Sheet.

## **3.0 PERMIT HISTORY**

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### **3.1 Compliance history**

A review of this facility's discharge monitoring data was conducted for compliance verification and shows one permit limitation violation for whole effluent toxicity test [11/13] at Outfall 001 between October 2013 and October 2016. One limitation violation for oil and grease [12/14] was found at Internal Outfall 101.

There are no pending or current enforcement actions regarding this NPDES permit.

## **4.0 RECEIVING WATER**

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The receiving stream for Outfall 001 is the Indiana Harbor Ship Canal. The  $Q_{7,10}$  low flow value of the Indiana Harbor Ship Canal is 358 cfs and shall be capable of supporting a

well-balanced warm water aquatic community and full body contact recreation in accordance with 327 IAC 2-1.5-5.

The permittee discharges to a waterbody that has been identified as a water of the state within the Great Lakes system. Therefore, in addition to OSRW antidegradation implementation procedures, it is subject to other NPDES requirements specific to Great Lakes system dischargers under 327 IAC 2-1.5 and 327 IAC 5-2-11.2, and 327 IAC 5-2-11.4-6. These rules address water quality standards applicable to dischargers within the Great Lakes system and reasonable potential to exceed water quality standards procedures.

In accordance with 327 IAC 2-1.3, language in this renewed permit specifically prohibits the permittee from undertaking deliberate actions that would result in new or increased discharges of BCC's or new or increased permit limits for non-BCC's, or from allowing a new or increased discharge of a BCC from an existing or proposed industrial user, without first proving that the new or increased discharge would not result in a significant lowering of water quality, or by submission and approval of an antidegradation demonstration to the IDEM.

#### **4.1 Receiving Stream Water Quality**

Section 303(d) of the Clean Water Act requires states to identify waters, through their Section 305(b) water quality assessments, that do not or are not expected to meet applicable water quality standards with federal technology based standards alone. States are also required to develop a priority ranking for these waters taking into account the severity of the pollution and the designated uses of the waters. Once this listing and ranking of impaired waters is completed, the states are required to develop Total Maximum Daily Loads (TMDLs) for these waters in order to achieve compliance with the water quality standards. Indiana's 2014 303(d) List of Impaired Waters was developed in accordance with Indiana's Water Quality Assessment and 303(d) Listing Methodology for Waterbody Impairments and Total Maximum Daily Load Development for the 2014 Cycle.

The Indiana Harbor Ship Canal is listed on Indiana's 2014 303(d) List of Impaired Waters for *E. coli*, oil and grease, impaired biotic communities, and PCB's in fish tissue. The Lake Michigan shoreline east and west of the Indiana Harbor Canal is listed for mercury and PCB's in fish tissue. A TMDL report has not been completed for the Indiana Harbor Ship Canal.

## **5.0 PERMIT LIMITATIONS**

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Two categories of effluent limitations exist for NPDES permits: Technology-Based Effluent Limits (TBELs) and; Water Quality-Based Effluent Limits (WQBELs).

TBELs are developed by applying the National Effluent Limitation Guidelines (ELGs) established by USEPA for specific industrial categories. TBELs are the primary mechanism of control and enforcement of water pollution under the Clean Water Act (CWA). Technology based treatment requirements under section 301(b) of the CWA

represent the minimum level of control/treatment using available technology that must be imposed in a section 402 permit (40 CFR 125.3(a)).

In the absence of ELGs, effluent limits can also be based upon Best Professional Judgment (BPJ). Accordingly, every individual member of a discharge class or category is required to operate their water pollution control technologies according to industry-wide standards and accepted engineering practices. This means that TBELs based upon a BPJ determination are applied at end-of-pipe and mixing zones are not allowed (40 CFR 125.3(a)). Similarly, since the statutory deadlines best practicable technology (BPT), best available technology economically achievable (BAT) and best conventional control technology (BCT) have all passed; compliance schedules for these TBELs are also not allowed.

WQBELs are designed to be protective of the beneficial uses of the receiving water and are independent of the available treatment technology. The WQBELs for this facility are based on water quality criteria in 327 IAC 2-1.5-8 or under the procedures described in 327 IAC 2-1.5-11 through 327 IAC 2-1.5-16 and implementation procedures in 327 IAC 5. Limitations and/or monitoring are required for parameters identified by applications of the reasonable potential to exceed WQBEL under 327 IAC 5-2-11.5.

According to 40 CFR 122.44 and 327 IAC 5, NPDES permit limits are based on either TBELs, where applicable, BPJ, or WQBELs, whichever is most stringent. The decision to limit or monitor the parameters contained in this permit is based on information contained in the permittee's NPDES application. In addition, when performing a permit renewal, existing permit limits must be considered. These may be TBELs, WQBELs, or limits based on BPJ. When renewing a permit, the antibacksliding provisions identified in 327 IAC 5-2-10(11) are taken into consideration.

## 5.1 Existing Permit Limits

Outfall 001

### DISCHARGE LIMITATIONS

Table 1

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>		<u>Units</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>			
Flow	Report	Report	MGD	-----	-----	-----	Daily	24 Hour Total
O + G	Report	Report	lbs/day	10	15	mg/l	2 X Weekly	2 Grabs/24-Hr.
TSS	Report	Report	lbs/day	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
TRC	0.87	2.1	lbs/day	0.016	0.038	mg/l	5 X Weekly	Grab
Mercury								
Interim	Report	Report	lbs/day	Report	Report	ng/l	6 X Yearly	Grab
Final	0.000071	0.00017	lbs/day	1.3	3.2	ng/l	6 X Yearly	Grab
Free Cyanide	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	Grab
Total Cyanide	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	Grab
Fluoride	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Hexavalent Chromium	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	Grab
Temperature								

Intake	-----	-----	-----	Report	Report	°F	2 X Weekly	Grab
Outfall	-----	-----	-----	Report	Report	°F	2 X Weekly	Grab

Whole Effluent Toxicity Tests

Table 2

<u>Parameter</u>	Quality or Concentration		<u>Units</u>	Monitoring Measurement	Requirements Sample
	Daily <u>Minimum</u>	Daily <u>Maximum</u>			
pH	6.0	9.0	s.u.	2 X Weekly	Grab

Internal Outfall 101

DISCHARGE LIMITATIONS

<u>Parameter</u>	Quantity or Loading		Quality or Concentration		Monitoring Requirements	
	Monthly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Daily <u>Maximum</u>	Measurement <u>Frequency</u>	Sample <u>Type</u>
Flow	Report	Report	MGD	-----	-----	Daily 24 Hour Total
O + G	542	813	lbs/day	Report	Report	mg/l 2 X Weekly 2 Grabs/24-Hr.
TSS	1,198	2,604	lbs/day	Report	Report	mg/l 2 X Weekly 24-Hr. Comp.
Cadmium	3.8	10	lbs/day	Report	Report	mg/l [&]
Zinc	8.8	17	lbs/day	Report	Report	ug/l 2 X Weekly 24-Hr. Comp.
T. Chromium	24.7	40.0	lbs/day	Report	Report	mg/l 2 X Weekly 24-Hr. Comp.
Hex. Chromium	Report	Report	lbs/day	Report	Report	mg/l 2 X Monthly Grab
Lead	3.8	7.5	lbs/day	Report	Report	ug/l [&]
Nickel	34.3	57.4	lbs/day	Report	Report	mg/l 2 X Weekly 24-Hr. Comp.
Copper	1.3	2.2	lbs/day	Report	Report	mg/l 2 X Weekly 24-Hr. Comp.
Silver	0.018	0.03	lbs/day	Report	Report	mg/l [&]
T. Cyanide	9.4	17.3	lbs/day	Report	Report	mg/l 2 X Weekly Grab
Naphthalene	Report	0.158	lbs/day	Report	Report	mg/l [&]
TCE	Report	0.236	lbs/day	Report	Report	mg/l [&]
TTO	-----	30.7	lbs/day	-----	Report	mg/l 1 X Quarterly

[&] Monitoring waiver granted

**5.2 Technology-Based Effluent Limits (TBEL)**

The applicable technology based standards for the wastestreams contributing to the discharge from Outfall 001 and Internal Outfall 101 are contained in 40 CFR 420 – Iron and Steel Manufacturing Point Source Category. In addition, technology based standards contained in 40 CFR 433 – Metal Finishing Point Source Category are applicable to the discharge associated with the electroplating lines. The following table identifies the applicable standards and production values submitted in the facility’s NPDES application.

This permit covers production related discharges from both ArcelorMittal and the U.S. Steel facilities. For Arcelor Mittal the following guideline production based requirements apply:

**Applicable ELGs and Production Values**

<b>Subpart</b>	<b>Description</b>	<b>Average Daily Production</b>
40 CFR 420.90 Subpart I – Acid Pickling Subcategory	Discharges from sulfuric acid, hydrochloric acid, or combination acid pickling operations	1,712 tons/day
40 CFR 420.100 Subpart J – Cold Forming Subcategory	Discharges from cold rolling in which unheated steel is passed through rolls or otherwise processed	1,712 tons/day
40 CFR 420.110 Subpart K – Alkaline Cleaning Subcategory	Discharges in which steel products are immersed in alkaline cleaning baths to remove mineral and animal fats or oils	770 tons/day
40 CFR 420.120 Subpart L – Hot Coating Subcategory	Discharges from operations in which steel is coated by the hot dip process	2,641 tons/day
40 CFR 433.10 Metal Finishing Point Source Category	Discharges from any of the following six metal finishing operations on any basis material: Electroplating, Electroless Plating, Anodizing, Coating, Chemical Etching and Milling, and Printed Circuit Board Manufacture	1.73 MGD

The following tables contain the applicable ELGs, by parameter, from the federal regulations identified above and the calculated technology-based limits (TBELs). Typically, TBELs are established for the discharge from each individual wastestream. However, many steel mills have centralized wastewater treatment facilities designed to treat any combination of wastewaters. 40 CFR 420.01(b)(1) identifies specific steel mills and their associated centralized treatment facilities where alternative effluent limitations may be established. ArcelorMittal West (formerly J&L Steel, East Chicago), NPDES Permit No. IN0000205, is identified in 40 CFR 420.01(b)(1) and the alternative effluent limitations from the central treatment facility are applicable. The technology based effluent limitations for Internal Outfall 101 are established by adding all applicable pollutant loads for each wastestream, by parameter, contained in 40 CFR Part 420 and 40 CFR 433.

<b>Total Suspended Solids</b>					
<b>40 CFR</b>	<b>Production</b>	<b>Monthly Average</b>		<b>Daily Maximum</b>	
		<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>	<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>
420.92(b)(2) (BPT)	1,712 Tons/Day	0.0350 lbs/1000lbs	120[1]	0.0818 lbs/1000lbs	280
420.93(b)(2) (BAT)		-----	-----	-----	-----
420.92(b)(4) (BPT)	1 Scrubber	2.45 kg/day	5.40[2]	5.72 kg/day	12.6
420.93(b)(4) (BAT)		-----	-----	-----	-----
420.102(a)(2) (BPT)	1,712 Tons/Day	0.00313 lbs/1000lbs	10.7	0.00626 lbs/1000lbs	21.4
420.103(a)(2) (BAT)		-----	-----	-----	-----
420.112(b) (BPT)	770 Tons/Day	0.0438 lbs/1000lbs	67.5	0.102 lbs/1000lbs	157
420.113 (BAT)		-----	-----	-----	-----
420.122(a)(1) (BPT)	2,641 Tons/Day	0.0751 lbs/1000lbs	397	0.175 lbs/1000lbs	924
420.123(a)(1) (BAT)		-----	-----	-----	-----
420.122(c) (BPT)	2 Scrubbers	16.3 kg/day	71.7	38.1 kg/day	168

420.123(c) (BAT)		-----	-----	-----	-----
433.13(a) (BPT)	1.73 MGD	31 mg/l	447[3]	60 mg/l	866
433.14(a) (BAT)		-----	-----	-----	-----
Total TSS Limitation		1,119 lbs/day		2,429 lbs/day	

[1] Below is an example TSS calculation for Hydrochloric Acid Pickling; Strip, Sheet, & Plate:

$$\text{TSS Average Monthly Limit} = 1,712 \frac{\text{tons}}{\text{day}} \times 2000 \frac{\text{lb}}{\text{ton}} \times 0.035 \frac{\text{lb}}{1000\text{lb}} = 120 \frac{\text{lb}}{\text{day}}$$

[2] Below is an example TSS calculation for Hydrochloric Acid Pickling; Fume Scrubbers:

$$\text{TSS Average Monthly Limit} = 2.45 \frac{\text{kg}}{\text{day}} \times 2.20 \frac{\text{lb}}{\text{kg}} \times 1 \text{ Scrubber} = 5.40 \frac{\text{lb}}{\text{day}}$$

[3] Below is an example TSS calculation for Metal Finishing:

$$\text{TSS Average Monthly Limit} = 31 \frac{\text{mg}}{\text{l}} \times 8.34 \frac{(\text{lb}/\text{MG})}{(\text{mg}/\text{l})} \times 1.73 \frac{\text{MG}}{\text{day}} = 447 \frac{\text{lb}}{\text{day}}$$

Oil and Grease					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	1,712	0.0117 lbs/1000lbs	40.1	0.0350 lbs/1000lbs	120
420.93(b)(2) (BAT)	Tons/Day	-----	-----	-----	-----
420.92(b)(4) (BPT)	1 Scrubber	0.819 kg/day	1.80	2.45 kg/day	5.39
420.93(b)(4) (BAT)		-----	-----	-----	-----
420.102(a)(2) (BPT)	1,712	0.00104 lbs/1000lbs	3.56	0.00261 lbs/1000lbs	8.94
420.103(a)(2) (BAT)	Tons/Day	-----	-----	-----	-----
420.112(b) (BPT)	770 Tons/Day	0.0146 lbs/1000lbs	22.5	0.0438 lbs/1000lbs	67.5
420.113 (BAT)		-----	-----	-----	-----
420.122(a)(1) (BPT)	2,641 Tons/Day	0.0250 lbs/1000lbs	132	0.0751 lbs/1000lbs	397
420.123(a)(1) (BAT)		-----	-----	-----	-----
420.122(c) (BPT)	2 Scrubbers	5.45 kg/day	24.0	16.3 kg/day	71.7
420.123(c) (BAT)		-----	-----	-----	-----
433.13(a) (BPT)	1.73 MGD	26 mg/l	375	52 mg/l	750
433.14(a) (BAT)		-----	-----	-----	-----
Total O+G Limitation		599 lbs/day		1,421 lbs/day	

<b>Lead</b>					
<b>40 CFR</b>	<b>Production</b>	<b>Monthly Average</b>		<b>Daily Maximum</b>	
		<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>	<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>
420.92(b)(2) (BPT)	1,712 Tons/Day	0.000175 lbs/1000lbs	0.599	0.000526 lbs/1000lbs	1.80
420.93(b)(2) (BAT)		0.000175 lbs/1000lbs	0.599	0.000526 lbs/1000lbs	1.80
420.92(b)(4) (BPT)	1 Scrubber	0.0123 kg/day	0.0271	0.0368 kg/day	0.0810
420.93(b)(4) (BAT)		0.0123 kg/day	0.0271	0.0368 kg/day	0.0810
420.102(a)(2) (BPT)	1,712 Tons/Day	0.0000156 lbs/1000lbs	0.0534	0.0000469 lbs/1000lbs	0.161
420.103(a)(2) (BAT)		0.0000156 lbs/1000lbs	0.0534	0.0000469 lbs/1000lbs	0.161
420.112(b) (BPT)	770 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)		PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.122(a)(1) (BPT)	2,641 Tons/Day	0.000376 lbs/1000lbs	1.99	0.00113 lbs/1000lbs	5.97
420.123(a)(1) (BAT)		0.000376 lbs/1000lbs	1.99	0.00113 lbs/1000lbs	5.97
420.122(c) (BPT)	2 Scrubbers	0.0819 kg/day	0.360	0.245 kg/day	1.08
420.123(c) (BAT)		0.0123 kg/day	0.0541	0.0368 kg/day	0.162
433.13(a) (BPT)	1.73 MGD	0.43 mg/l	6.20	0.69 mg/l	9.96
433.14(a) (BAT)		0.43 mg/l	6.20	0.69 mg/l	9.96
<b>Total Lead Limitation</b>		<b>8.92 lbs/day</b>		<b>18.1 lbs/day</b>	

<b>Zinc</b>					
<b>40 CFR</b>	<b>Production</b>	<b>Monthly Average</b>		<b>Daily Maximum</b>	
		<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>	<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>
420.92(b)(2) (BPT)	1,712 Tons/Day	0.000234 lbs/1000lbs	0.801	0.000701 lbs/1000lbs	2.40
420.93(b)(2) (BAT)		0.000234 lbs/1000lbs	0.801	0.000701 lbs/1000lbs	2.40
420.92(b)(4) (BPT)	1 Scrubber	0.0164 kg/day	0.0361	0.0491 kg/day	0.108
420.93(b)(4) (BAT)		0.0164 kg/day	0.0361	0.0491 kg/day	0.108
420.102(a)(2) (BPT)	1,712 Tons/Day	0.0000104 lbs/1000lbs	0.0356	0.0000313 lbs/1000lbs	0.107
420.103(a)(2) (BAT)		0.0000104 lbs/1000lbs	0.0356	0.0000313 lbs/1000lbs	0.107
420.112(b) (BPT)	770 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)		PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.122(a)(1) (BPT)	2,641 Tons/Day	0.000500 lbs/1000lbs	2.64	0.00150 lbs/1000lbs	7.92
420.123(a)(1) (BAT)		0.000500 lbs/1000lbs	2.64	0.00150 lbs/1000lbs	7.92
420.122(c) (BPT)	2 Scrubbers	0.109 kg/day	0.480	0.327 kg/day	1.44
420.123(c) (BAT)		0.0164 kg/day	0.0722	0.0491 kg/day	0.216
433.13(a) (BPT)	1.73 MGD	1.48 mg/l	21.4	2.61 mg/l	37.7
433.14(a) (BAT)		1.48 mg/l	21.4	2.61 mg/l	37.7

Total Zinc Limitation	25.0 lbs/day	48.5 lbs/day
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<b>Chromium</b>					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	1,712 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	1,712 Tons/Day	COLD ROLLING WASTEWATERS ARE NOT TREATED WITH DESCALING OR COMBINATION ACID PICKLING WASTEWATERS. THEREFORE, CHROMIUM LIMITATIONS ARE NOT APPLICABLE FROM THIS CATEGORY.			
420.103(a)(2) (BAT)					
420.112(b) (BPT)	770 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,641 Tons/Day	FACILITY DOES NOT DISCHARGE CHROMATE RINSE FROM GALVANIZING OPERATIONS. THEREFORE, HEXAVALENT CHROMIUM LIMITATIONS ARE NOT APPLICABLE			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	FACILITY DOES NOT DISCHARGE CHROMATE RINSE FROM GALVANIZING OPERATIONS. THEREFORE, HEXAVALENT CHROMIUM LIMITATIONS ARE NOT APPLICABLE			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	1.71 mg/l	24.7	2.77 mg/l	40.0
433.14(a) (BAT)		1.71 mg/l	24.7	2.77 mg/l	40.0
Total Chromium Limitation		24.7 lbs/day		40.0 lbs/day	

<b>Nickel</b>					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	COLD ROLLING WASTEWATERS ARE NOT TREATED WITH DESCALING OR COMBINATION ACID PICKLING WASTEWATERS. THEREFORE, CHROMIUM LIMITATIONS ARE NOT APPLICABLE FROM THIS CATEGORY.			
420.103(a)(2) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	2.38 mg/l	34.3	3.98 mg/l	57.4
433.14(a) (BAT)		2.38 mg/l	34.3	3.98 mg/l	57.4

Total Nickel Limitation	34.3 lbs/day	57.4 lbs/day
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<b>Naphthalene</b>					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	1,712 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	1,712 Tons/Day	-----	-----	0.0000104 lbs/1000lbs	0.0356
420.103(a)(2) (BAT)		-----	-----	0.0000104 lbs/1000lbs	0.0356
420.112(b) (BPT)	770 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,641 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
433.14(a) (BAT)					
Total Naphthalene Limitation		Report lbs/day		0.0356 lbs/day	

<b>Tetrachloroethylene</b>					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	1,712 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	1,712 Tons/Day	-----	-----	0.0000156 lbs/1000lbs	0.0534
420.103(a)(2) (BAT)		-----	-----	0.0000156 lbs/1000lbs	0.0534
420.112(b) (BPT)	770 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,641 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
433.14(a) (BAT)					
Total Tetrachloroethylene Limitation		Report lbs/day		0.0534 lbs/day	

<b>Cadmium</b>					
<b>40 CFR</b>	<b>Production</b>	<b>Monthly Average</b>		<b>Daily Maximum</b>	
		<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>	<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(2) (BAT)					
420.102(a)(4) (BPT)	1,042 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(4) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	0.26 mg/l	3.8	0.69 mg/l	10
433.14(a) (BAT)		0.26 mg/l	3.8	0.69 mg/l	10
<b>Total Cadmium Limitation</b>		<b>3.8 lbs/day</b>		<b>10 lbs/day</b>	

<b>Copper</b>					
<b>40 CFR</b>	<b>Production</b>	<b>Monthly Average</b>		<b>Daily Maximum</b>	
		<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>	<b>Categorical Limitation</b>	<b>Subtotal (lbs/day)</b>
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(2) (BAT)					
420.102(a)(4) (BPT)	1,042 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(4) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	2.07 mg/l	29.9	3.38 mg/l	48.8
433.14(a) (BAT)		2.07 mg/l	29.9	3.38 mg/l	48.8
<b>Total Copper Limitation</b>		<b>29.9 lbs/day</b>		<b>48.8 lbs/day</b>	

Silver					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(2) (BAT)					
420.102(a)(4) (BPT)	1,042 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(4) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	0.24 mg/l	3.5	0.43 mg/l	6.2
433.14(a) (BAT)		0.24 mg/l	3.5	0.43 mg/l	6.2
Total Silver Limitation		3.5 lbs/day		6.2 lbs/day	

Total Cyanide					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(2) (BAT)					
420.102(a)(4) (BPT)	1,042 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(4) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	0.65 mg/l	9.4	1.20 mg/l	17.3
433.14(a) (BAT)		0.65 mg/l	9.4	1.20 mg/l	17.3
Total Cyanide Limitation		9.4 lbs/day		17.3 lbs/day	

Total Toxic Organics					
40 CFR	Production	Monthly Average		Daily Maximum	
		Categorical Limitation	Subtotal (lbs/day)	Categorical Limitation	Subtotal (lbs/day)
420.92(b)(2) (BPT)	2,520 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(2) (BAT)					
420.92(b)(4) (BPT)	1 Scrubber	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.93(b)(4) (BAT)					
420.102(a)(2) (BPT)	3,828 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(2) (BAT)					
420.102(a)(4) (BPT)	1,042 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.103(a)(4) (BAT)					
420.112(b) (BPT)	645 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.113 (BAT)					
420.122(a)(1) (BPT)	2,625 Tons/Day	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(a)(1) (BAT)					
420.122(c) (BPT)	2 Scrubbers	PARAMETER NOT IDENTIFIED IN THIS CATEGORY			
420.123(c) (BAT)					
433.13(a) (BPT)	1.73 MGD	-----	-----	2.13 mg/l	30.7
433.14(a) (BAT)		-----	-----	2.13 mg/l	30.7
Total Toxic Organics Limitation		-----		30.7 lbs/day	

The following TBELs are included in this NPDES permit and are included at Internal Outfall 101:

Total Suspended Solids (TSS), Total Cyanide, Total Toxic Organics (TTO), Total Chromium, and Nickel

The above mentioned parameters have TBELs that are more stringent than the Water Quality-Based Effluent Limitations (WQBELs). Therefore, the TBELs for monthly average and daily maximums, identified in the table above, are included at Internal Outfall 101.

Oil and Grease (O+G), Copper, and Zinc

The calculated TBELs for the parameters identified above are included at Internal Outfall 101. The WQBELs for these parameters are more stringent than the calculated TBELs. The TBELs are included at the internal outfall while the WQBELs are applied at the final outfall. This approach is consistent with other similarly issued permits.

Cadmium, Silver, Lead, Naphthalene, and Tetrachloroethylene (TCE)

In the previous permit, the facility requested a monitoring waiver for these pollutants at Outfall 101 pursuant to 40 CFR 122.44(a)(2). A monitoring waiver for these pollutants was granted in the previous permit. A monitoring waiver may be granted for any guideline-based parameter if the discharger demonstrates through sampling that the pollutant is not present or is present only at background levels

from intake water and without any increase due to the activities of the discharger. Based on a review of significant recent data for the above parameters, this agency has determined that the requirements of 40 CFR 122.44(a)(2) have been met. IDEM shall be notified if any changes occur at this facility that would require the conditions that this waiver was granted to be reviewed.

#### Hexavalent Chromium

Hexavalent Chromium, or Chromium-VI, monitoring was added to the previous permit. The reporting requirements are carried over to this permit.

### **5.3 Water Quality-Based Effluent Limits**

The water quality-based effluent limitations for this facility are based on water quality criteria in 327 IAC 2-1.5-8 or under the procedures described in 327 IAC 2-1.5-11 through 327 IAC 2-1.5-16 and implementation procedures in 327 IAC 5.

#### Narrative Water Quality Based Limits

The narrative water quality contained under 327 IAC 2-1.5-8(b)(1) (A)-(E) have been included in this permit to ensure that the narrative water quality criteria are met.

#### Numeric Water Quality Based Limits

The numeric water quality criteria and values contained in this permit have been calculated using the tables of water quality criteria under 327 IAC 2-1.5-8(b) & (c).

#### Flow

The permittee's flow is to be monitored in accordance with 327 IAC 5-2-13(a)2.

#### pH

Limitations for pH in the proposed permit are taken from 327 IAC 2-1.5-8(c)(2).

#### Oil and Grease (O & G)

O & G limitations are 15.0 mg/l Daily Maximum and 10.0 mg/l Monthly Average. These limits are considered sufficient to ensure compliance with narrative water quality criteria in 327 IAC 2-1.5-8(b)(1)(C) which prohibits oil or other substances in amounts sufficient to produce color, visible sheen, odor, or other conditions in such a degree to create a nuisance.

#### Hexavalent Chromium

Hexavalent Chromium, or Chromium-VI, monitoring was added to the previous permit. Based on a review of the data, the discharge shows an RPE. Therefore, effluent limitations calculated in the WLA have been included in this permit. The limitations are 1.2 lbs/day (0.016 mg/l) monthly average and 2.4 lbs/day (0.032 mg/l) daily maximum.

#### Temperature

Based on the results of instream sampling and a multi-discharger thermal model, the discharges do not have a reasonable potential to exceed a water quality

criterion for temperature. However, in accordance with 327 IAC 5-2-11.5(e), the commissioner may require monitoring for a pollutant of concern even if it is determined that a WQBEL is not required based on a reasonable potential determination. Therefore, monitoring for temperature is included at this outfall.

#### Total Residual Chlorine (TRC)

The TRC effluent limit was calculated in the WLA and is 1.2 lbs/day (0.016 mg/l) for monthly average and 2.8 lbs/day (0.038 mg/l) for the daily maximum. The limit is included because the facility chlorinates/dechlorinates water. The daily maximum WQBEL for TRC is greater than the Level of Detection (LOD) but less than the Level of Quantization (LOQ). Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ (0.06 mg/l). Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 4.4 lbs/day. Monitoring for TRC shall be performed, at a minimum, during Zebra or Quagga mussel intake chlorination, and continue for three additional days after Zebra or Quagga mussel treatment has been completed.

#### Mercury

Mercury was included in the previous permit because it showed a Reasonable Potential to Exceed (RPE) Indiana's Water Quality Criteria. Therefore, WQBELs for mercury were calculated in the WLA report and identify the monthly average as 0.00010 lbs/day (1.3 ng/l) and the daily maximum as 0.00024 lbs/day (3.2 ng/l).

#### Total Suspended Solids and Total Cyanide

Reporting requirements for the above mentioned parameters were included in the previous permit. The reporting requirements are carried over to this permit.

#### Free Cyanide

Reporting requirements for free cyanide was included in the previous permit. As part of this permit renewal, a Wasteload Analysis (WLA) report was completed and free cyanide was evaluated for reasonable potential to exceed (RPE) a water quality criterion. The results of the RPE analysis show that free cyanide has reasonable potential to exceed; therefore, water quality based effluent limitations are required and have been included in the permit. The limitations are 1.7 lbs/day (0.022 mg/l) monthly average and 3.5 lbs/day (0.044 mg/l) daily maximum.

#### Fluoride

Fluoride monitoring was included in the previous permit to determine if a Reasonable Potential to Exceed (RPE) Indiana WQBELs exists. Based on a review of the previous permit cycle's data, it was determined that a RPE for this parameter does not exist. Therefore, this parameter has been removed from this permit.

#### Copper, Lead, and Zinc

For each pollutant receiving TBELs at an internal outfall, and for which water quality criteria or values exist or can be developed, concentration and

corresponding mass-based WQBELs were calculated at the final outfall. The mass-based WQBELs at the final outfall were compared to the mass-based TBELs. Since the facility is authorized to discharge up to the mass-based TBELs, if the mass-based TBELs exceed the mass-based WQBELs at the final outfall, the pollutant may be discharged at a level that will cause an excursion above a numeric water quality criterion or value under 2-1.5 and WQBELs are required for the pollutant at the final outfall. WQBELs for the above identified parameters are included at the final outfall because the calculated TBELs for these parameters that are less stringent are included at Internal Outfall 101.

#### **5.4 Whole Effluent Toxicity Testing (WETT)**

Per 327 IAC 5-2-11.5(c)(2), the commissioner may include, in the NPDES permit, WETT requirements to generate the data needed to adequately characterized the toxicity of the effluent to aquatic life.

In accordance with 327 IAC 2-1.5-8, at all times the discharge from any and all point sources specified within this permit shall not cause receiving waters including the mixing zone, to contain substances, materials, floating debris, oil, scum, or other pollutants: 1) which are in amounts sufficient to be acutely toxic to or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; and 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.

A discharge shall not cause acute toxicity, as measured by whole effluent toxicity tests (WETT), at any point in the waterbody. To assure protection of aquatic life, a discharge shall not cause chronic toxicity, as measured by whole effluent toxicity tests, outside of the applicable mixing zone.

Therefore, the permittee is required to continue to conduct WETT to determine the toxicity of the final effluent. This does not preclude the requirement to submit WTA application(s) and/or worksheet(s) for the replacement or new additives/chemicals proposed for use at the site.

#### **5.5 Antibacksliding**

None of the limits included in this permit conflict with antibacksliding regulations found in 327 IAC 5-2-10(11), therefore, backsliding is not an issue.

#### **5.6 Antidegradation**

327 IAC 2-1.3 outlines the state's Antidegradation Standards and Implementation procedures. The Tier 1 antidegradation standard found in 327 IAC 2-1.3-3(a) applies to all surface waters of the state regardless of their existing water quality. Based on this standard, for all surface waters of the state, the existing uses and level of water quality necessary to protect those existing uses shall be maintained and protected. IDEM implements the Tier 1 antidegradation standard by requiring NPDES permits to contain effluent limits and best management practices (BMPs) for regulated pollutants that ensure

the narrative and numeric water quality criteria applicable to each of the designated uses are achieved in the water and any designated uses of the downstream water are maintained and protected.

The Tier 2 antidegradation standard found in 327 IAC 2-1.3-3(b) applies to surface waters of the state where the existing quality for a parameter is better than the water quality criterion for that parameter established in 327 IAC 2-1-6 or 327 IAC 2-1.5. These surface waters are considered high quality for the parameter and this high quality shall be maintained and protected unless the commissioner finds that allowing a significant lowering of water quality is necessary and accommodates important social or economic development in the area in which the waters are located. IDEM implements the Tier 2 antidegradation standard for regulated pollutants with numeric water quality criteria quality adopted in or developed pursuant to 327 IAC 2-1-6 or 327 IAC 2-1.5 and utilizes the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6.

According to 327 IAC 2-1.3-1(b), the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6 apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act (CWA), including a change in process or operation that will result in a significant lowering of water quality.

This permit includes new permit limitations for free cyanide and hexavalent chromium. In accordance with 327 IAC 2-1.3-1(b), the new permit limitations are not subject to the Antidegradation Implementation Procedures in 327 IAC 2-1.3-5 and 2-1.3-6 as the new permit limitations are not the result of a deliberate activity taken by the permittee. The new permit limitations are a result of monitoring data showing that these parameters have a reasonable potential to exceed Indiana water quality standards.

The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless information is submitted to the commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality, or an antidegradation demonstration submitted and approved in accordance 327 IAC 2-1.3.

## **5.7 Storm Water**

According to 40 CFR 122.26(b)(14)(ii) and 327 IAC 5-4-6(b)(1) facilities classified under Industrial Classification (SIC) Code 3312, are considered to be engaging in "industrial activity" for purposes of 40 CFR 122.26(b). Therefore, the permittee is required to have all storm water discharges associated with industrial activity permitted. Treatment for storm water discharges associated with industrial activities is required to meet, at a minimum, best available technology economically achievable/best conventional pollutant control technology (BAT/BCT) requirements. EPA has determined that non-numeric technology-based effluent limits have been determined to be equal to the best practicable technology (BPT) or BAT/BCT for storm water associated with industrial activity.

Storm water associated with industrial activity must be assessed to determine compliance with all water quality standards. The non-numeric storm water conditions and effluent limits contain the technology-based effluent limitations. Effluent limitations, as defined in the CWA, are restrictions on quantities, rates, and concentrations of constituents which are discharged. Effective implementation of these requirements should meet the applicable water quality based effluent limitations. Violation of any of these effluent limitations constitutes a violation of the permit.

Additionally, IDEM has determined that with the appropriate implementation of the required control measures and Best Management Practices (BMPs) found in Part I.D. of the permit, the discharge of storm water associated with industrial activity from this facility will meet applicable water quality standards and will not cause a significant lowering of water quality. Therefore, the storm water discharge is in compliance with Antidegradation Standards and Implementation Procedures found in 327 IAC 2-1.3 and an Antidegradation Demonstration is not required.

The TBELs require the permittee to minimize exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. In doing so, the permittee is required, to the extent technologically available and economically achievable, to either locate industrial materials and activities inside or to protect them with storm resistant coverings. In addition, the permittee is required to: (1) use good housekeeping practices to keep exposed areas clean, (2) regularly inspect, test, maintain and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharges, (3) minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur, (4) stabilize exposed area and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants, (5) divert, infiltrate, reuse, contain or otherwise reduce storm water runoff, to minimize pollutants in the permitted facility discharges, (6) 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, (7) train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team, (8) ensure that waste, garbage and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged, and (9) minimize generation of dust and off-site tracking of raw, final or waste materials.

To meet the non-numeric effluent limitations in Part I.D.4, the permit requires the facility to select control measures (including BMPs) to address the selection and design considerations in Part I.D.3.

The permittee must control its discharge as necessary to meet applicable water quality standards. It is expected that compliance with the non-numeric effluent limitations and other terms and conditions in this permit will meet this effluent limitation. However, if at any time the permittee, or IDEM, determines that the discharge causes or contributes to

an exceedance of applicable water quality standards, the permittee must take corrective actions, and conduct follow-up monitoring.

### **“Terms and Conditions” to Provide Information in a Storm Water Pollution Prevention Plan (SWPPP)**

Distinct from the effluent limitation provisions in the permit, the permit requires the discharger to prepare a SWPPP for the permitted facility. The SWPPP is intended to document the selection, design, installation, and implementation (including inspection, maintenance, monitoring, and corrective action) of control measures being used to comply with the effluent limits set forth in Part I.D. of the permit. In general, the SWPPP must be kept up-to-date, and modified when necessary, to reflect any changes in control measures that were found to be necessary to meet the effluent limitations in the permit.

The requirement to prepare a SWPPP is not an effluent limitation, rather it documents what practices the discharger is implementing to meet the effluent limitations in Part I.D. of the permit. The SWPPP is not an effluent limitation because it does not restrict quantities, rates, and concentrations of constituents which are discharged. Instead, the requirement to develop a SWPPP is a permit “term or condition” authorized under sections 402(a)(2) and 308 of the Act. Section 402(a)(2) states, “[t]he Administrator shall prescribe conditions for [NPDES] permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate.” The SWPPP requirements set forth in this permit are terms or conditions under the CWA because the discharger is documenting information on how it intends to comply with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit. Thus, the requirement to develop a SWPPP and keep it up-to-date is no different than other information collection conditions, as authorized by section 402(a)(2).

It should be noted that EPA has developed a guidance document, “Developing your Storm Water Pollution Prevention Plan – A guide for Industrial Operators (EPA 833-B09-002), February 2009, to assist facilities in developing a SWPPP. The guidance contains worksheets, checklists, and model forms that should assist a facility in developing a SWPPP.

### **Public availability of documents**

Part I.E.2.d(2) of the permit requires that the permittee retain a copy of the current SWPPP at the facility and it must be immediately available, at the time of an onsite inspection or upon request, to IDEM. Additionally, interested persons can request a copy of the SWPPP through IDEM. By requiring members of the public to request a copy of the SWPPP through IDEM, the Agency is able to provide the permittees with assurance that any Confidential Business Information contained within the permitted facility’s SWPPP is not released to the public.

## 5.8 Water Treatment Additives

In the event that changes are to be made in the use of water treatment additives that could significantly change the nature of, or increase the discharge concentration of any of the additives contributing to Outfall 001, the permittee shall notify the IDEM as required in Part II.C.1 of the permit. The use of any new or changed water treatment additives/chemicals 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. The following is a list of water treatment additives currently approved for use at the facility: Bleach, Sulfuric Acid, Ferric Chloride, NalClear 7763, Nalco Ultrion 8157, Caustic, Hydrated Lime, and Nalco 7408.

## 6.0 PERMIT DRAFT DISCUSSION

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### 6.1 Discharge Limitations

The proposed final effluent limitations are based on the more stringent of the Indiana WQBELs, TBELs, or approved TMDLs and NPDES regulations as appropriate for each regulated outfall. Sections 5.2 and 5.3 of this document explain the rationale for the effluent limitations at each Outfall.

Outfall 001:

Parameter	Monthly Average	Daily Maximum	Units	Source of Limitation
Flow	Report	Report	MGD	IAC
Oil and Grease	Report 10	Report 15	lbs/d mg/l	BPJ/WQBEL
TSS	Report	Report	lbs/d & mg/l	WQBEL
TRC	1.2 0.016	2.8 0.038	lbs/d mg/l	WQBEL
Mercury	0.00010 1.3	0.00024 3.2	lbs/d ng/l	WQBEL
Free Cyanide Interim Final	Report 1.7 / 0.022	Report 3.5 / 0.044	lbs/d mg/l	WQBEL
Total Cyanide	Report	Report	lbs/d & mg/l	WQBEL
Hexavalent Chromium Interim Final	Report 1.2 / 0.016	Report 2.4 / 0.032	lbs/d mg/l	WQBEL
Temperature	Report	Report	°F	WQBEL
Copper	1.8 0.025	3.7 0.050	lbs/d mg/l	WQBEL
Lead	4.8 0.066	9.5 0.130	lbs/d mg/l	WQBEL
Zinc	15	29	lbs/d	WQBEL

	0.200	0.400	mg/l	
Whole Effluent Toxicity	7.6	1.0	TUc TUa	WQBEL

Parameter	Daily Minimum	Daily Maximum	Units	Source of Limitation
pH	6.0	9.0	Std Units	WQBEL

Internal Outfall 101:

Parameter	Monthly Average	Daily Maximum	Units	Source of Limitation
Flow	Report	Report	MGD	IAC
Oil and Grease	599 Report	1421 Report	lbs/d mg/l	BPJ/WQBEL
TSS	1119 Report	2429 Report	lbs/d mg/l	TBEL
Cadmium	3.8 Report	10 Report	lbs/d mg/l	TBEL
Zinc	25.0 Report	48.5 Report	lbs/d mg/l	WQBEL
Total Chromium	24.7 Report	40.0 Report	lbs/d mg/l	TBEL
Hexavalent Chromium	Report	Report	lbs/d & mg/l	WQBEL
Lead	8.92 Report	18.1 Report	lbs/d mg/l	WQBEL
Nickel	34.3 Report	57.4 Report	lbs/d mg/l	TBEL
Copper	29.9 Report	48.8 Report	lbs/d mg/l	WQBEL
Silver	3.5 Report	6.2 Report	lbs/d mg/l	WQBEL
T. Cyanide	9.4 Report	17.3 Report	lbs/d mg/l	TBEL
Naphthalene	Report Report	0.0356 Report	lbs/d mg/l	TBEL
Tetrachloroethylene	Report Report	0.0534 Report	lbs/d mg/l	TBEL
TTO	----- -----	30.7 Report	lbs/d mg/l	TBEL

## 6.2 Monitoring Conditions and Rationale

Analytical and sampling methods used shall conform to the version of 40 CFR 136 as referenced in 327 IAC 5-2-13(d)(1).

Outfall 001

Parameter	Minimum Frequency	Sample Type
Flow	1 X Daily	24 Hr. Total
Oil and Grease	2 X Weekly	2 Grabs/24-Hr.
TSS	2 X Weekly	24-Hr. Comp.
TRC	5 X Weekly	Grab
Mercury	6 X Yearly	Grab
Free Cyanide	2 X Monthly	Grab
Total Cyanide	2 X Monthly	Grab
Hexavalent Chromium	2 X Monthly	Grab
Temperature	2 X Weekly	Grab
Copper	2 X Monthly	24-Hr. Comp.
Lead	2 X Monthly	24-Hr. Comp.
Zinc	2 X Monthly	24-Hr. Comp.
Whole Effluent Toxicity	See Part I.F of the Permit	
pH	2 X Weekly	Grab

Internal Outfall 101

Parameter	Minimum Frequency	Sample Type
Flow	1 X Daily	24 Hr. Total
Oil and Grease	2 X Weekly	2 Grabs/24-Hr.
TSS	2 X Weekly	24-Hr. Comp.
Cadmium	[&]	24-Hr. Comp.
Zinc	2 X Weekly	24-Hr. Comp.
Total Chromium	2 X Weekly	24-Hr. Comp.
Hexavalent Chromium	2 X Monthly	Grab
Lead	[&]	24-Hr. Comp.
Nickel	2 X Weekly	24-Hr. Comp.
Copper	2 X Weekly	24-Hr. Comp.
Silver	[&]	24-Hr. Comp.
T. Cyanide	2 X Weekly	Grab
Naphthalene	[&]	Grab
Tetrachloroethylene	[&]	Grab
TTO	1 X Quarterly	Grab

[&] Monitoring Waiver Granted

### 6.3 Schedule of Compliance

The draft permit contained new effluent limits for Hex Chromium and Free Cyanide. 40 CFR 122.47(a), 40 CFR 123.25(a)(18), and 327 IAC 5-2-12 allow a schedule of compliance in a NPDES permit when requested and justified by the permittee, but only when appropriate and when the schedule of compliance requires achievement of compliance “as soon as possible” and meets other specified conditions. Based on

information submitted by the permittee, IDEM has granted a 3-year schedule of compliance for hexavalent chromium and free cyanide.

## 6.4 Special Conditions and Other Permit Requirements

### 6.4.1 Thermal Effluent Limitations

Based on the results of instream sampling and a multi-discharger thermal model, the discharge from Outfall 001 does not have a reasonable potential to exceed the water quality criterion for temperature. Under 5-2-11.5(e), the commissioner may require monitoring for a pollutant of concern even if it is determined that a WQBEL is not required based on a reasonable potential determination. Thermal effluent requirements are being included in this permit to maintain compliance with Indiana Water Quality Standards.

Temperature shall be monitored as follows at Outfall 001:

#### DISCHARGE LIMITATIONS

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring Requirements</u>	<u>Sample</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Frequency</u>	<u>Type</u>
Temperature[1]								
Intake	---	---	---	Report	Report	°F	2 X Week	Grab
Outfall	---	---	---	Report	Report	°F	2 X Week	Grab

[1] Temperature at Outfall 001 shall be sampled. On days when temperature is sampled at the outfall, temperature shall also be sampled at the intake supplying the most significant source of water to the outfall. As an alternative to direct grab measurements during this time period the facility may install a more permanent temperature measuring device that will retain the highest temperature value during any given 24 hour period.

### 6.4.2 Clean Water Act Section 316(b) Cooling Water Intake Structure(s) (CWIS)

Section 316(b) of the federal Clean Water Act requires that facilities minimize adverse environmental impact resulting from the operation of cooling water intake structures (CWISs) by using the “best technology available” (BTA). The ArcelorMittal Indiana Harbor West facility supplies the source water received by the ArcelorMittal Indiana Harbor Central Wastewater Treatment Plant. The CWISs associated with this permit and ArcelorMittal Indiana Harbor West’s permit (IN0000205) are regulated under ArcelorMittal Indiana Harbor West’s NPDES Permit (IN0000205). NPDES Permit IN0000205 contains IDEM’s BTA determination. For further information and requirements pertaining to CWISs, please refer to NPDES Permit IN0000205.

### 6.4.3 Polychlorinated Biphenyl (PCB)

There shall be no discharge of polychlorinated biphenyl (PCB) compounds attributable to facility operations such as those historically used in transformer fluids. In order to determine compliance with the PCB discharge prohibition, the permittee shall provide the following PCB data with the next NPDES permit renewal application for at least one

sample taken from each final outfall. The corresponding facility water intakes shall be monitored at the same time as the final outfalls.

Pollutant	Test Method	LOD	LOQ
PCBs*	EPA 608	0.1 ug/L	0.3 ug/L

\*PCB 1242, 1254, 1221, 1232, 1248, 1260, 1016

### **6.5 Spill Response and Reporting Requirement**

Reporting requirements associated with the Spill Reporting, Containment, and Response requirements of 327 IAC 2-6.1 are included in Part II.B.2.(d), Part II.B.3.(c), and Part II.C.3. of the NPDES permit. Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

### **6.6 Post Public Notice Addendum**

The draft NPDES permit for the facility was made available for public comment from April 12, 2017, through May 29, 2017, as part of Public Notice No. 2017-4C-RD. During this comment period, a comment letter dated May 26, 2017, from Kevin Doyle, Environmental Manager, was received. The comments submitted by Mr. Doyle is included as Attachment B of this Fact Sheet. This Office's corresponding responses are summarized in Attachment C. Any changes to the permit and/or fact sheet are so noted in Attachment C.

## Attachment A Water Quality Assessment

### Use Classifications

The Indiana Harbor Canal and Indiana Harbor are designated for full-body contact recreation and shall be capable of supporting a well-balanced, warm water aquatic community. The Indiana Harbor is designated as an industrial water supply. The Indiana portion of the open waters of Lake Michigan is designated for full-body contact recreation; shall be capable of supporting a well-balanced, warm water aquatic community; is designated as salmonid waters and shall be capable of supporting a salmonid fishery; is designated as a public water supply; is designated as an industrial water supply; and, is classified as an outstanding state resource water. These waterbodies are identified as waters of the state within the Great Lakes system. As such, they are subject to the water quality standards and associated implementation procedures specific to Great Lakes system dischargers as found in 327 IAC 2-1.5, 327 IAC 5-1.5, and 327 IAC 5-2.

Section 303(d) of the Clean Water Act requires states to identify waters, through their Section 305(b) water quality assessments, that do not or are not expected to meet applicable water quality standards with federal technology-based standards alone. States are also required to develop a priority ranking for these waters taking into account the severity of the pollution and the designated uses of the waters. Once this listing and ranking of impaired waters is completed, the states are required to develop [Total Maximum Daily Loads \(TMDLs\)](#) for these waters in order to achieve compliance with the water quality standards. Indiana's 2014 303(d) List of Impaired Waters was developed in accordance with Indiana's Water Quality Assessment and 303(d) Listing Methodology for Waterbody Impairments and Total Maximum Daily Load Development for the 2014 Cycle. As of the 2014 303(d) List of Impaired Waters, the following impairments were listed for waters to which the permittee discharges:

**Table 1**

<b>Assessment Unit</b>	<b>Waterbody</b>	<b>Impairments</b>	<b>ArcelorMittal Central WWTP Outfall</b>
INC0163_T1001	Indiana Harbor Canal	Impaired Biotic Communities, Oil and Grease, <i>E. coli</i> and PCBs in Fish Tissue	001
INC0163G_G1078	Indiana Harbor	Free Cyanide, Mercury in Fish Tissue and PCBs in Fish Tissue	None
INM00G1000_00	Lake Michigan	Mercury in Fish Tissue and PCBs in Fish Tissue	None

## **Water Quality-based Effluent Limitations**

The water quality-based effluent limitations included in the 2011 permit and documented in the Fact Sheet were developed as part of a wasteload allocation analysis for the Indiana Harbor Canal presented in the report “Supplemental Information for the Wasteload Allocation Analysis for the ArcelorMittal Indiana Harbor 2011 Draft Permits” dated August 19, 2011. The wasteload allocation included a multi-discharger model that was limited to the Indiana Harbor Canal/Lake George Canal/Indiana Harbor subwatershed. Pollutants selected for the multi-discharger model were based on water quality concerns and the application of technology-based effluent limitations at multiple outfalls. Water quality-based effluent limitations (WQBELs) for lead, zinc and total residual chlorine were calculated for ArcelorMittal Central WWTP Outfall 001 as part of the multi-discharger model. The 2011 wasteload allocation (WLA) also included WQBELs for specific pollutants calculated on an individual outfall basis.

The 2011 WLA was developed using Indiana water quality regulations for discharges to waters within the Great Lakes system that include water quality criteria and methodologies for developing water quality criteria (327 IAC 2-1.5), procedures for calculating WLAs (327 IAC 5-2-11.4), making reasonable potential to exceed determinations (5-2-11.5) and developing WQBELs (5-2-11.6). These regulations are applicable to individual pollutants and to whole effluent toxicity (WET). These regulations are still applicable and were used in the current WLA analysis for the Indiana Harbor Canal presented in the report “Supplemental Information for the Wasteload Allocation Analysis for the ArcelorMittal Indiana Harbor 2017 Permits” dated June 23, 2017. The application of WET requirements to ArcelorMittal is included in a later section.

The current subwatershed model for the Indiana Harbor Canal/Lake George Canal/Indiana Harbor included the ArcelorMittal Central WWTP which has one active outfall to the Indiana Harbor Canal. This outfall is the first ArcelorMittal outfall in the subwatershed. The other major dischargers included in the subwatershed model are as follows in relation to the ArcelorMittal Central WWTP: ArcelorMittal Indiana Harbor – Indiana Harbor West (IN0000205) has three active outfalls downstream to the Indiana Harbor Canal, one active outfall downstream to the Indiana Harbor, and one water intake in the Indiana Harbor near the mouth of the Indiana Harbor Canal; and, ArcelorMittal USA – Indiana Harbor East (IN0000094) has three active outfalls downstream to the Indiana Harbor. The discharges from these two facilities were taken into consideration in determining the need for and establishing WQBELs for the discharge from ArcelorMittal Central WWTP Outfall 001.

A review of the 2014 303(d) list shows that there is only one pollutant on the list that has the potential to impact wasteload allocation analyses conducted for the renewal of NPDES permits for dischargers in the Indiana Harbor Canal/Lake George Canal/Indiana Harbor subwatershed. The Indiana Harbor was first listed for free cyanide on the 2010 303(d) list. The listing was based on free cyanide data collected during the years 2000 and 2001 at IDEM fixed station IHC-0 in the Indiana Harbor. This station is located just upstream of ArcelorMittal West Outfall 011 and, due to the potential for reverse flows in the Indiana Harbor, could be impacted by the outfall. It is also located downstream of ArcelorMittal East Outfalls 011, 014 and 018. The aquatic life criteria for cyanide were changed from total cyanide to free cyanide in the 1997 Great Lakes rulemaking. It is IDEM current practice to monitor for total cyanide at fixed stations and analyze samples for free cyanide only when total cyanide data show a reportable concentration ( $\geq 5$  ug/l). After 2001, data

collected at fixed station IHC-0 no longer showed any reportable values for total cyanide so free cyanide data have not been collected. ArcelorMittal West has also installed additional treatment and redirected cyanide containing process wastewater away from Outfall 011.

The Indiana Harbor Canal has not been included on the 303(d) list for free cyanide due to the two IDEM fixed stations in the Indiana Harbor Canal (located upstream of fixed station IHC-0 at Columbus Avenue (IHC-3S) and Dickey Road (IHC-2)) not showing impairment for free cyanide. There has not been a value for total cyanide above 5 ug/l reported at IHC-3S since February 2007 and at IHC-2 since January 2005. Prior to the 2011 permit renewal, total cyanide had been reported at many of the ArcelorMittal outfalls due to technology-based limits for this parameter, but little data for free cyanide was available. Therefore, in the 2011 permit renewal, monitoring was required for free cyanide at ArcelorMittal outfalls that have process wastewater for use in an assessment of reasonable potential.

A TMDL is not currently planned for the subwatershed, and, based on current IDEM monitoring data, may not be required. Therefore, as was done in the 2011 WLA, the procedures for calculating WLAs under 5-2-11.4 were used to develop preliminary WLAs and WLAs in the absence of a TMDL. Wasteload allocations in the absence of TMDLs are developed to establish water quality-based effluent limitations under 5-2-11.6 and preliminary wasteload allocations are developed to make reasonable potential determinations under 5-2-11.5. The reasonable potential procedures under 5-2-11.5 include provisions for making reasonable potential determinations using best professional judgment (5-2-11.5(a)) and using a statistical procedure (5-2-11.5(b)). The statistical procedure is a screening process in which a projected effluent quality (PEQ) based on effluent data is calculated and compared to a preliminary effluent limitation (PEL) based on the preliminary wasteload allocation. Both the best professional judgment and statistical procedures were used to establish the need for WQBELs to protect the designated uses of the Indiana Harbor Canal, Indiana Harbor, and Lake Michigan.

To develop WLAs and conduct reasonable potential to exceed analyses, IDEM utilized the following effluent data collected and submitted by ArcelorMittal for the Central WWTP: data collected during the period December 2011 through June 2016 in accordance with the 2011 permit renewal and 2014 permit modification and reported on monthly monitoring reports (MMRs); data for ammonia-N collected in 1999 as part of the Grand Calumet River TMDL study and data for ammonia-N collected for the 2009 permit renewal application update; and, additional data collected for the 2016 permit renewal application. To develop WLAs, IDEM utilized the following sources of water quality data for the Indiana Harbor Canal and Indiana Harbor: IDEM fixed water quality monitoring station IHC-3S at Columbus Drive (Indiana Harbor Canal upstream of Lake George Canal and all ArcelorMittal outfalls); IDEM fixed station IHC-2 at Dickey Road (Indiana Harbor Canal); and, IDEM fixed station IHC-0 at the mouth of the Indiana Harbor. To develop WLAs, IDEM utilized the following sources of data for Lake Michigan: IDEM fixed station LM-H at the public water supply intake for the City of Hammond and IDEM fixed station LM-DSP at Dunes State Park. After a review of effluent and in-stream data, it was decided to conduct a multi-discharger WLA for ammonia-N, free cyanide, fluoride, lead, zinc and total residual chlorine. Other pollutants of concern, including mercury, were considered on an outfall by outfall basis.

In the 2011 multi-discharger model, the Indiana Harbor Canal was divided into sixteen complete mix segments and the Indiana Harbor into five complete mix segments. The Lake George Canal

was incorporated as an input to the Indiana Harbor Canal. The intrusion of lake water was accounted for in the model by adding a portion of the total lake intrusion flow to the surface layer of each of nine affected segments in the Indiana Harbor and Indiana Harbor Canal. A total lake intrusion flow of 138 cfs was used based on a measurement made by the USGS in October 2002 during a normal lake level condition. The procedures in 5-2-11.4 require the more stringent of the FAV or the acute WLA calculated using up to a one-to-one dilution to be applied to individual outfalls. They also limit the dilution available for each outfall (the mixing zone) to twenty-five percent (25%) of the stream design flow. Because of the potential for overlapping mixing zones within a segment, the combined discharges in a segment were also limited collectively to twenty-five percent (25%) of the stream design flow. This was done in accordance with 5-2-11.4(b)(3)(D) which requires the combined effect of overlapping mixing zones to be evaluated to ensure that applicable criteria and values are met in the area where the mixing zones overlap.

Based on the reasonable potential statistical procedure at 5-2-11.5(b)(1)(iii) and (iv), the procedures under 5-2-11.4(c) are used as the basis for determining preliminary WLAs and the preliminary WLAs are then used to develop monthly and daily PELs in accordance with the procedure for converting WLAs into WQBELs under 5-2-11.6. Three critical inputs to the procedure under 5-2-11.4(c) include the background concentration, the effluent flow and the stream flow. The background concentration is determined under 5-2-11.4(a)(8). Under this rule, background concentrations can be determined using actual in-stream data or in-stream concentrations estimated using actual or projected pollutant loading data. In the multi-discharger WLA, in-stream data were used to establish the background concentration for the first segment of the model and then either actual or projected pollutant loading data were used. For pollutants not included in the multi-discharger WLA, in-stream data were used.

In the 2011 multi-discharger model, the flow assigned to each outfall was the long-term average flow using data from January 2006 through December 2007. This period was considered by ArcelorMittal to be the most representative of full operating conditions. Based on a review of flow data for the period January 2013 thru December 2015, it was determined that the flows used in the 2011 permit renewal are not representative of conditions expected during the term of the renewal permit. The termination of production at ArcelorMittal USA – Indiana Harbor Long Carbon (IN0063355) has resulted in the elimination of one significant discharge to the Indiana Harbor Canal. There has also been a significant reduction in the discharge flow from ArcelorMittal East Outfall 011. The flow assigned to the ArcelorMittal Central WWTP outfall and to ArcelorMittal West Outfalls 002 and 011 was the long-term average flow calculated using data from the period January 2013 through December 2014. This period represents production prior to the idling in 2015 of operations contributing flow to ArcelorMittal Central WWTP and ArcelorMittal West. Based on improved flow monitoring, the period September 2016 through May 2017 was used for ArcelorMittal West Outfalls 009 and 010. The flow assigned to each outfall for ArcelorMittal East was the long-term average flow calculated using data from the period January 2014 through December 2015. This period represents production after the permanent shutdown of the Nos. 5 and 6 blast furnaces in June 2013.

The stream design flow used to develop wasteload allocations is determined under 5-2-11.4(b)(3). For the pollutants considered in this analysis, the aquatic life criteria are limiting and the stream design flow for chronic aquatic life criteria is the Q<sub>7,10</sub>. As was done in the 2011 WLA, since the Q<sub>7,10</sub> is the appropriate flow for the water quality criteria being considered, the Q<sub>7,10</sub> was used as

the upstream flow for the Indiana Harbor Canal/Lake George Canal/Indiana Harbor WLA. Therefore, the stream design flow was set equal to the Q7,10 flow in the first segment of the multi-discharger model and then the long-term average flow of each discharger was added to become the stream design flow for downstream dischargers. The lake intrusion flow was added to the stream design flow at the end of each applicable segment. The Q7,10 was calculated using data from USGS gauging station 04092750 which is located in the Indiana Harbor Canal at Canal Street. The data used in the calculation consisted of continuous daily mean flow data approved by the USGS for the period 10-1-1994 through 3-31-2012. The Q7,10 based on the climatic year (April 1 through March 31) is 358 cfs.

At each applicable outfall, PELs were calculated for each pollutant of concern using an outfall specific spreadsheet that calculates PELs using the procedures under 5-2-11.4(c) to calculate WLAs and the procedures under 5-2-11.6 to convert WLAs into PELs. The spreadsheet considers all water quality criteria (acute and chronic aquatic life, human health and wildlife) and associated stream design flows and mixing zones. The stream design flow for each water quality criterion was set equal to the same value in the outfall specific spreadsheet. This value was the Q7,10 flow plus the accumulation of long-term average effluent flow and any lake intrusion flow, minus any intake flow. For Mercury, which is a bioaccumulative chemical of concern (BCC), a mixing zone was not allowed in the development of PELs for any outfall in accordance with 5-2-11.4(b)(1). For those pollutants included in a multi-discharger WLA, the multi-discharger model was used to ensure that the most stringent water quality criterion is met at the edge of the mixing zone for each segment. This was the 4-day average chronic criterion. The multi-discharger model was also used to ensure that Lake Michigan criteria are met at the end of the last segment in the Indiana Harbor. The preliminary WLA was included as an input in the multi-discharger model and PELs were calculated from the preliminary WLA.

In the multi-discharger model, preliminary WLAs for each outfall were established, if possible, so that the monthly and daily PEQs did not exceed the PELs calculated from the preliminary WLAs. If TBELs were included for the parameter at a final outfall or an internal outfall, then the preliminary WLA was increased to the extent possible to allow the mass-based PELs to exceed the TBELs. The preliminary WLAs were adjusted as necessary so that the calculated PELs did not exceed the PELs calculated using the outfall specific spreadsheets and so that the water quality criterion was not exceeded at the edge of the mixing zone for each segment as determined using the multi-discharger model. For some outfalls, the discharge of one or more pollutants for which a multi-discharger WLA was conducted was not considered significant, so a preliminary WLA was established based on the reported effluent concentration, or if sufficient data were available, reported effluent loading data, but PELs were not calculated as allowed under 5-2-11.5(b)(1).

After assigning a preliminary WLA to each outfall in a segment and entering the WLA into the multi-discharger model, the model calculates the PELs for each outfall, the concentration at the edge of the mixing zone for the segment and the concentration at the end of each segment after complete mixing. The concentration after complete mixing then becomes the background concentration for the next segment. To calculate PELs using the outfall specific spreadsheets, the background concentration for each outfall was calculated assuming complete mixing between outfalls. This was done by entering the WLAs for each outfall into a separate spreadsheet that calculated the background concentration upstream of each outfall. By conducting a multi-discharger WLA in this manner, the background concentration for each outfall was based on the

accumulated WLAs for the prior outfalls. Since the WLAs were based in some cases on projected effluent quality, the background concentrations were based on projected loading data. This provided a conservative means of determining the cumulative impact of the outfalls. For those pollutants not included in a multi-discharger WLA, the background concentration for each outfall was based on in-stream data.

The results of the reasonable potential statistical procedure are included in Table 2. The results show that the discharge from ArcelorMittal Central WWTP Outfall 001 has a reasonable potential to exceed a water quality criterion for free cyanide and hexavalent chromium.

In addition to establishing WQBELs based on the reasonable potential statistical procedure, IDEM is also required to establish WQBELs under 5-2-11.5(a) "If the commissioner determines that a pollutant or pollutant parameter (either conventional, nonconventional, a toxic substance, or whole effluent toxicity (WET)) is or may be discharged into the Great Lakes system at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable narrative criterion or numeric water quality criterion or value under 327 IAC 2-1.5". Chlorine is added to the intake water for zebra and quagga mussel control at concentrations exceeding water quality criteria. Outfall 001 receives noncontact cooling water. Therefore, chlorine may be discharged from Outfall 001 at a level that will cause an excursion above the numeric water quality criterion for total residual chlorine under 2-1.5 and WQBELs for total residual chlorine are required at Outfall 001.

For each pollutant receiving TBELs at an internal outfall, and for which water quality criteria or values exist or can be developed, concentration and corresponding mass-based WQBELs were calculated at the final outfall. The WQBELs were set equal to the applicable PELs from the multi-discharger model or the outfall specific spreadsheet. This was done for ArcelorMittal Central WWTP Outfall 001 (cadmium, total chromium, copper, lead, nickel, silver, zinc, naphthalene and tetrachloroethylene at internal Outfall 101). The facility does not discharge wastewater from the chromate rinse step of their galvanizing operations so TBELs and subsequent WQBELs were not calculated for hexavalent chromium for this purpose. The mass-based WQBELs at the final outfall were compared to the mass-based TBELs. Since the facility is authorized to discharge up to the mass-based TBELs, if the mass-based TBELs exceed the mass-based WQBELs at the final outfall, the pollutant may be discharged at a level that will cause an excursion above a numeric water quality criterion or value under 2-1.5 and WQBELs are required for the pollutant at the final outfall. This was the case for cadmium, copper, lead, silver and zinc. Therefore, WQBELs are required for these pollutants regardless of the results of the reasonable potential statistical procedure.

Once a determination is made using the reasonable potential provisions under 5-2-11.5 that WQBELs must be included in the permit, the WQBELs are calculated in accordance with 5-2-11.5(d). Under this provision, in the absence of an EPA-approved TMDL, WLAs are calculated for the protection of acute and chronic aquatic life, wildlife, and human health in accordance with the WLA provisions under 5-2-11.4. The WLAs are then converted into WQBELs in accordance with the WQBEL provisions under 5-2-11.6. The WQBELs are included in Table 4 and were set equal to the PELs calculated for each pollutant.

## Whole Effluent Toxicity Testing Requirements

The 1997 Indiana Great Lakes regulations included narrative criteria with numeric interpretations for acute (2-1.5-8(b)(1)(E)(ii)) and chronic (2-1.5-8(b)(2)(A)(iv)) whole effluent toxicity (WET) and a procedure for conducting reasonable potential for WET (5-2-11.5(c)(1)). U.S. EPA did not approve the reasonable potential procedure for WET so Indiana is now required by 40 CFR Part 132.6(c) to use the reasonable potential procedure in Paragraphs C.1 and D of Procedure 6 in Appendix F of 40 CFR Part 132. IDEM used this procedure in conducting the reasonable potential analysis for WET except that the equation was rearranged so that it is similar to the equation that IDEM uses for other pollutants and pollutant parameters.

The 2011 permit required ArcelorMittal to conduct monthly chronic toxicity testing for three months at Outfall 001 for *Ceriodaphnia dubia* and Fathead Minnow. Thereafter, testing was required quarterly for the most sensitive species. However, in January 2011, prior to permit renewal, the facility initiated a toxicity reduction evaluation (TRE) which was completed in December 2012. The facility conducted three confirmation tests beginning February 2013. No toxicity, as defined by the acute and chronic TRE triggers in the permit, was demonstrated in the confirmation tests. Toxicity testing for *Ceriodaphnia dubia*, as the most sensitive species, was then required quarterly for the duration of the permit. The representative dataset for the reasonable potential analysis was considered to begin with the February 2013 test. The results of the reasonable potential analysis are shown in Table 3. The results show that the discharge from Outfall 001 does not have a reasonable potential to exceed the numeric interpretation of the narrative criterion for acute or chronic WET.

The permittee will be required to conduct whole effluent toxicity testing of its effluent discharge from Outfall 001 using *Ceriodaphnia dubia*. The terms and conditions of the WET testing are contained in Part I.F. of the NPDES permit. Part I.F.1.c.(2) of the permit states that chemical analysis must accompany each effluent sample taken for bioassay test. The analysis detailed under Part I.A. should be conducted for each effluent sample. The effluent should be sampled using the sample type requirements specified in Part I.A. Questions regarding the WET testing procedures should be addressed to the Office of Water Quality, NPDES Permits Branch.

Chronic toxicity testing is required at Outfall 001. Acute toxicity is to be derived from chronic toxicity tests and toxicity is to be reported in terms of acute and chronic toxic units and compared to calculated TRE triggers. The TRE triggers are set equal to the acute and chronic WLAs for WET in accordance with 327 IAC 5-2-11.6(d). If either an acute or chronic TRE trigger is exceeded, another chronic WET test must be conducted within two weeks. If the results of any two consecutive tests exceed the applicable TRE trigger, ArcelorMittal must conduct a TRE. The TRE triggers are shown in Table 4.

## Thermal Requirements

The Indiana Harbor Canal and Indiana Harbor shall be capable of supporting a well-balanced, warm water aquatic community. The water quality criteria for temperature applicable to these waterbodies are included in 327 IAC 2-1.5-8(c). Indiana regulations state that the temperature criteria apply outside a mixing zone, but the allowable mixing zone is not established in the rules. IDEM current practice is to allow fifty percent (50%) of the stream flow for mixing to meet

temperature criteria. The implementation procedures under 327 IAC 5-2-11.4 for developing wasteload allocations for point source discharges address temperature under 5-2-11.4(d)(3). This provision states that temperature shall be addressed using a model, approved by the commissioner, that ensures compliance with the water quality criteria for temperature.

There is also no specific procedure in the rules for determining whether a discharger is required to have water quality-based effluent limits (WQBELs) for temperature. Therefore, the general provision for making reasonable potential determinations in 5-2-11.5(a) is applicable. This provision establishes that if the commissioner determines that a pollutant or pollutant parameter is or may be discharged into the Great Lakes system at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable narrative or numeric water quality criterion under 2-1.5, the commissioner shall incorporate WQBELs in an NPDES permit that will ensure compliance with the criterion. In making this determination, the commissioner shall exercise best professional judgment, taking into account the source and nature of the discharge, existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and, where appropriate, the dilution of the effluent in the receiving water. The commissioner shall use any valid, relevant, representative information pertaining to the discharge of the pollutant.

The multi-discharger model for the Indiana Harbor Canal/Lake George Canal/Indiana Harbor subwatershed discussed above included four active outfalls discharging to the Indiana Harbor Canal and four active outfalls discharging to the Indiana Harbor that contain a thermal component such as noncontact cooling water or boiler blowdown as a source of wastewater. ArcelorMittal Central WWTP Outfall 001 has a flow of 8.8 mgd with Internal Outfall 101 having a flow of 5.1 mgd and the remaining consisting mostly of noncontact cooling water. The ArcelorMittal Central WWTP 2011 permit includes temperature monitoring on the intake and outfall at a frequency of 2 times per week. The primary source of cooling water for Outfall 001 is the No. 2 intake at the end of the Lake Michigan intake channel. Monthly maximum temperature data reported for the period January 2012 through December 2015 for Outfall 001 were used in the analysis. The data follow a seasonal pattern with a maximum recorded temperature of 94.2 °F in August and September 2012.

The multi-discharger model accounted for the intrusion of lake water into the Indiana Harbor and Indiana Harbor Canal. The intrusion of lake water produces thermal stratification that ends at the railroad bridge about 0.7 miles upstream of the mouth of the Indiana Harbor Canal. The outfalls that discharge upstream of the railroad bridge are ArcelorMittal Central WWTP Outfall 001 and ArcelorMittal West Outfall 002 on the west side of the canal. ArcelorMittal West Outfalls 009 and 010, which are two large sources of non-contact cooling water, are the first two discharges downstream of the railroad bridge. A review of historical instream temperature data at IDEM fixed stations on the Indiana Harbor Canal and Indiana Harbor from January 1990 through December 2015 and IDEM fixed station LM-DSP on Lake Michigan at Dunes State Park from January 1997 through December 2015 shows that the maximum temperature values were recorded in July 1999 and July 2012. The average stream flow during the July 1999 and July 2012 temperature monitoring as recorded at USGS gaging station 04092750 in the Indiana Harbor Canal at Canal Street was 485 cfs in July 1999 and 521 cfs in July 2012 which are greater than the Q7,10 of 358 cfs, but less than the harmonic mean flow of 548 cfs.

In addition to the instream sampling, a multi-discharger model was used to assist in the reasonable potential analysis. The multi-discharger model for toxics discussed above was modified to account for temperature. The mixing zone was set at fifty percent (50%) of the stream flow to be consistent with current IDEM practice for mixing zones for temperature. The model does not account for heat dissipation so it represents a conservative, dilution only analysis. A Q7,10 flow of 358 cfs, long-term average effluent flows and background temperatures from fixed station IHC-3S were used in the multi-discharger thermal model as were used in the multi-discharger toxics model. The effluent temperature input to the model was set equal to the maximum temperature reported for the month during the period of representative data collection. For the ArcelorMittal Central WWTP outfall and ArcelorMittal West outfalls, this period was January 2012 through December 2015 since temperature monitoring was reinstated in their 2011 permits. For ArcelorMittal East Outfall 011, the representative period was also January 2012 through December 2015. For ArcelorMittal East Outfall 014, the period was January 1998 through December 2015 and for ArcelorMittal East Outfall 018 the period was June 1999 through December 2015 if it was considered representative data. The critical peak temperature months of June through September were included as one period since the same maximum criterion of 90°F applies each month.

The results of the conservative, dilution only modeling show that the discharge from ArcelorMittal Central WWTP Outfall 001 does not have a reasonable potential to cause or contribute to an excursion of the water quality criterion for temperature in the Indiana Harbor Canal from January through December. Based on the results of the instream sampling and multi-discharger thermal model, the discharge from ArcelorMittal Central WWTP Outfall 001 does not have a reasonable potential to exceed a water quality criterion for temperature. Under 5-2-11.5(e), the commissioner may require monitoring for a pollutant of concern even if it is determined that a WQBEL is not required based on a reasonable potential determination. Monitoring for temperature was continued in the renewal permit.

## Attachment B

### ArcelorMittal Comment Letter and Appendicies

ArcelorMittal Comments on Draft Fact Sheet and NPDES Permit ArcelorMittal  
Indiana Harbor LLC  
Central Wastewater Treatment Plant NPDES  
Permit Number IN0063711  
Public Notice No. 2017-4C-RD, April 12, 2017

1. Outfalls 101/001 – Technology Based Effluent Limits & WQBELs for Oil & Grease  
NPDES Permit (pages 2 to 7), Fact Sheet (pages 9 to 20)

The proposed NPDES effluent permit limits for oil & grease at Outfall 101 are not appropriate. IDEM and ArcelorMittal both calculated TBELs for oil & grease based upon the applicable ELGs at 599 lbs/day monthly average and 1,421 lbs/day daily maximum. However, the draft permit contains proposed oil & grease effluent limits at Outfall 101 of 426 lbs/day monthly average and 638 lbs/day daily maximum. These proposed effluent limits are based upon 10 mg/l monthly average and 15 mg/l daily maximum and the Outfall 101 flow rate of 5.1 mgd. IDEM's justification for the more stringent proposed effluent limits is "Best Professional Judgement" under Section 402 of the Clean Water Act to "ensure compliance with Indiana Water Quality Criteria for oil & grease". The proposed permit limits are not appropriate for the following reasons:

- o The proposed permit limits are contrary the NPDES permitting regulations. BPJ effluent limits are to be developed when no categorical ELGs are applicable. See 40 CFR Part 125.3(c)(2). In this case, ELGs from 40 CFR Parts 420 and 433 are applicable. Therefore, BPJ oil & grease effluent limits for Outfall 101 are not warranted.
- o The draft permit contains proposed effluent limits for oil & grease of 10 mg/l monthly average and 15 mg/l daily maximum at Outfall 001 to ensure compliance with Indiana water quality standards, thus making mass limits at Outfall 101 based upon these concentrations duplicative and unnecessary.

The final NPDES permit effluent limits at Outfall 101 for oil & grease should be the TBELs at 599 lbs/day monthly average and 1,421 lbs/day daily maximum. For Outfall 001, the oil & grease effluent limits should be 10 mg/L monthly average and 15 mg/L daily maximum to protect water quality.

2. Outfalls 101/001 – Technology Based Effluent Limits and WQBELs for Copper, Lead and Zinc  
NPDES Permit (pages 2 to 7), Fact Sheet (pages 9 to 20)

Proposed mass WQBELs for copper, lead and zinc were applied in the draft NPDES permit at Outfall 101 instead of at Outfall 001 as was done in the 2011 NPDES permit. However, the proposed mass effluent limits at Outfall 101 appear to have been calculated based on the preliminary Outfall 001 concentration-based WQBELs and the Outfall 101 flow rate of 5.1 mgd. See the statement on p. 18 of Fact Sheet: "The mass limitations are calculated by multiplying the flow from internal Outfall 101 of 5.1 mgd by ...".

Under this approach, the proposed mass effluent limits for these pollutants are more stringent than the Outfall 001 WQBELs reported in IDEM's November 2016 wasteload allocation report for the ArcelorMittal NPDES permits. The effluent limits shown below for Outfall 001 for lead and zinc are based on the average Outfall 001 discharge flow of 9.5 mgd reported in the draft Fact Sheet, and the preliminary WQBELs concentrations reported in IDEM's November 2016 wasteload allocation. The following Outfall 001 mass effluent limits should be applied at Outfall 101 in the renewal NPDES permit. We request these effluent limits be applied in the renewal NPDES permit for lead and zinc at Outfall 101.

Outfall 001 WQBELs (Nov. 2016)	Monthly Average (ug/L)	Daily Maximum (ug/L)	Monthly Average (lbs/day)	Daily Maximum (lbs/day)
Copper	25	50	1.98	3.96
Lead	62	120	4.92	9.51
Zinc	200	400	15.86	31.71

3. Storm Water  
NPDES Permit (pages 13 to 30), Fact Sheet (pages 22 to 24)

The sections of the draft NPDES permit regarding storm water (Part I.D Storm Water Monitoring and Non-Numeric Effluent Limits, Part I.E. Storm Water Pollution Prevention Plan) are not reasonable for large industrial facilities such as the ArcelorMittal Indiana Harbor steel mills where there are no outfalls that discharge only storm water. These sections need to be reworked to make the storm water provisions reasonable and practical for a large steel mill site such as the Indiana Harbor Central Wastewater Treatment Plant facility. In many instances, ArcelorMittal believes the highly prescriptive requirements can be replaced with references to other permits (e.g., Title V) and contingency plans already in effect (e.g., SPCC, RCRA). Appendix A-1 presents our proposed mark-up of these sections. We would like the opportunity to discuss the storm water requirements in a meeting with IDEM.

4. Outfall 001 – Footnote [2] Water Treatment Additives  
NPDES Permit (pages 2, 3), Fact Sheet (page 24)

Please delete the phrase “or increase the discharge concentration of the additive contributing to this Outfall”. This is already accounted for in the phrase “including dosage rates beyond the previously approved max dosage rates”.

We will advise IDEM of any planned changes in the use of water treatment additives as they may occur on an as-needed basis.

5. Schedule of Compliance

In the event the final NPDES permit contains new final WQBELs for hexavalent chromium and free cyanide, ArcelorMittal requests a three-year compliance schedule for each such effluent limit. This should provide sufficient time to assess possible process modifications and process wastewater treatment upgrades that may be necessary.

If necessary, ArcelorMittal requests the following compliance schedule for each such effluent limit:

The permittee shall achieve compliance with the effluent limitations at Outfall 001 as soon as possible but no later than thirty-six (36) months from the effective date of this permit in accordance with the following schedule:

- The permittee shall submit a written progress report to the Compliance Data Section of the Office of Water Quality (OWQ) nine (9) months from the effective date of this permit. The progress report shall include a description of the proposed method(s) selected for meeting the newly imposed limitation, in addition to any other relevant information. The progress report shall also include a specific time line specifying when each of the steps will be taken. The new effluent limits are deferred for the term of this compliance schedule, unless the permittee has determined the new effluent limits can be met at an earlier date. The permittee shall notify the Compliance Data Section of OWQ as soon as the newly imposed effluent limits can be met. Upon receipt of such notification by OWQ, the final limits will become effective, but no later than thirty-six (36) months from the effective date of this permit. Monitoring and reporting of the effluent for this parameter is required during the interim period.
- The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than eighteen (18) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the time line set out in the initial progress report.
- The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than twenty-seven (27) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the time line set out in the initial progress report.
- Within thirty (30) days of completion of possible construction, 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.
- 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 report to the Compliance Data Section of the OWQ stating the cause of the delay, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final effluent limitations.
- The permittee shall comply with the final effluent limitations no later than thirty-six (36) months from the effective date of this permit.

6. Thermal Effluent Requirements  
NPDES Permit (page 54), Fact Sheet (page 27)

IDEM has determined that thermal discharges from the Indiana Harbor Central Wastewater Treatment Plant facility do not pose a *reasonable potential to exceed* Indiana water quality standards for temperature. Accordingly, we request that paragraph A on page 54 of the NPDES permit be replaced with a simple requirement that intake and outfall measurements for temperature be conducted on the same day by grab sample, with no restriction on the time when temperature measurements can be made.

7. Outfall 001 – Mercury Effluent Limits  
NPDES Permit (page 2 to 4), Fact Sheet (pages 19, 20)

ArcelorMittal submitted an SMV application for Outfall 001 in April 2016. By letter dated May 19, 2016, the Department denied the SMV based on “data collected over the most recent two-year period”, which showed the proposed mercury WQBELs of 1.3 ng/L (monthly average) and 3.2 ng/L (daily maximum) would have been achieved.

Data collected as part of the compliance schedule set out in the current NPDES permit and summarized in annual progress reports and in the 2014 Final Plan for Compliance indicate mercury discharges from Outfall 001 are most likely due to mercury in water withdrawn through Indiana Harbor West Intake No. 1 and Intake No. 2.

Mercury in the intake waters is beyond the control of ArcelorMittal. Considering the Department’s rules do not permit “net” effluent limits for bioaccumulative chemicals of concern (BCCs), which include mercury, ArcelorMittal believes an SMV should be granted for Outfall 001 on the basis that the source of mercury is the intake water. Furthermore, ArcelorMittal believes granting an SMV at Outfall 001 is consistent with the Final Water Quality Guidance for the Great Lakes System (FR 15366-15425, March 23, 1995), which includes the following statements:

**Intake Credits:** Great Lakes States and Tribes may consider the presence of intake water pollutants in establishing water quality-based effluent limits (WQBELs) in accordance with Procedure 5 of Appendix F.

**Pass Through:** A permitting authority is allowed to determine that the return of an identified intake water pollutant to the same body of water under specified circumstances does not cause, have the reasonable potential to cause, or contribute to an excursion above water quality standards, and therefore, that a WQBEL would not be required for that pollutant. Under the proposal, this “pass through” of intake water pollutants would be allowed if the facility returns the intake water containing the pollutant of concern to the same waterbody; does not contribute additional mass of pollutant; does not increase the concentration of the intake water pollutant; and does not discharge at a time or location, or alter the pollutant in a manner which would cause adverse impacts to occur that would not occur if the pollutant were left in-stream.

In summary, any possible future exceedance of total recoverable mercury effluent limits at Outfall 001 would be the result of ambient mercury levels in the intake water. ArcelorMittal has conducted studies

and found there are no appreciable sources of mercury within the facility. Also, it has been demonstrated that the intake water may contain significant amounts of mercury from time to time. Therefore, it is not reasonable to apply mercury WQBELs at Outfall 001. A better approach would be to include a monitor-only requirement at the Outfall 001 and the respective Indiana Harbor West intakes to track mercury levels in the intake waters and Outfall 001.

Reference is made to Appendix A-2 which presents a summary of IH CWTP Outfall 001 mercury data for the period February 24, 2014 to February 16, 2017. Following the SMV data assessment protocol and using the latest two years of data (April 13, 2015 to February 16, 2016), we calculated predicted effluent quality (PEQ) values using IDEM protocols [327 IAC-5-2-11.5(b)(1)(B)], as follows:

PEQ Monthly Average	PEQ Daily Maximum
1.79 ng/L	1.70 ng/L

This analysis shows the monthly average PEQ of 1.79 ng/L is greater than the proposed monthly average NPDES effluent limit of 1.3 ng/L. Given this circumstance, an SMV is warranted.

In the event IDEM does not agree with our request above for monitor-only conditions for mercury at IH CWTP Outfall 001, we request an SMV with a 12-month rolling average effluent limit of 2.0 ng/L. Based on available data for Outfall 001, this should account for a reasonable range of variability of mercury in the intake water.

8. Outfall 001 – Footnote [4] Oil & Grease Reporting  
NPDES Permit (page 3)

We request the following modification following the second sentence of footnote [4] to clarify the manner in which oil & grease data are handled for compliance determinations:

*... Each sample shall be analyzed individually, and the arithmetic mean of the concentrations shall be reported as the value for the twenty-four (24) hour period. That value shall be used to assess compliance with the daily maximum effluent limitation, and the arithmetic average of all daily values determined each month shall be used to assess compliance with the monthly average effluent limit.*

9. Outfall 001 – Footnote [6], [7], [8] LOD/LOQ Reporting  
NPDES Permit (pages 3, 4)

These footnotes provide that daily maximum mass loads for purposes of determining compliance are calculated based on the LOQ of total residual chlorine. This is because the associated WQBELs are below the level of quantitation. ArcelorMittal requests that these footnotes be revised to include:

- a) Allow averaging of separate grab sample results collected during one day when calculating mass loadings and using values of "0" for the purpose of determining compliance when less than LOQ values are reported. For example: one grab sample at 10:00 results in < 0.06 mg/l of TRC, second grab sample at 17:00 results in < 0.06 mg/l of TRC, because the level of chlorine was consistently below the level of quantitation a mass value of "0" may be assigned, or;

- b) If one sample results in a TRC < LOD, then a value of 0 may be used for the purposes of determining compliance.

These alternative methods of calculating mass loadings may also serve to minimize possible confusion when reporting electronically via IDEM's netDMR system.

10. Outfall 101 – Footnote [3] Monitoring Waiver for Lead  
NPDES Permit (page 5)

The draft Fact Sheet at p. 9 reports that a monitoring waiver has been granted for lead. Footnote [3] at p. 5 should be included in the Monitoring Measurement Frequency column for lead as it has for other pollutants for which monitoring waivers have been granted.

11. Outfall 101 – Footnote [2] Oil and Grease Reporting  
NPDES Permit (page 5)

We request the following modification following the second sentence of footnote [2] to clarify the manner in which oil & grease data are handled for compliance determinations:

*... Each sample shall be analyzed individually, and the arithmetic mean of the concentrations shall be reported as the value for the twenty-four (24) hour period. That value shall be used to assess compliance with the daily maximum effluent limitation, and the arithmetic average of all daily values determined each month shall be used to assess compliance with the monthly average effluent limit.*

12. Outfall 101 – Footnote [6] Initial GC/MS Scan for Total Toxics Organics  
NPDES Permit (page 6)

The draft NPDES permit states that a GC/MS scan was not completed for Outfall 101. This is not correct. A GC/MS analysis was completed for Outfall 101 as part of the IH CWTP renewal NPDES application, and there have been no notable process changes or additions since that application was filed. Thus, the data are representative of current. Please remove the requirement to conduct an initial GC/MS scan for Total Toxic Organics at Outfall 101.

13. Part I.C.2.f – DMR Due Date  
NPDES Permit (page 9)

The first sentence of the last paragraph in this part states: *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 submitted no later than the 28th day of the month following each completed monitoring period.*

The following change is recommended to address reporting of results where the monitoring frequency is different than monthly (e.g., quarterly): *The permittee shall submit federal and state discharge*

monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous monitoring period which shall be submitted no later than the 28<sup>th</sup> day of the month following each completed monitoring period. [emphasis added].

14. Part I.C.5.c – Reporting Times of Analyses  
NPDES Permit (page 12)

We request that the requirement to report times of analyses be removed from the NPDES permit. We believe reporting the dates of analyses are sufficient to document whether sample holding times were met.

15. Part I.C.6 – Reporting Additional Data  
NPDES Permit (pages 12, 13)

This section of the permit boilerplate language should be updated to address reporting of additional data under IDEM’s netDMR system. Additional data can be reported and indicated in the MMR, but there may be issues with the DMR because required monitoring frequency codes may not agree. Therefore, we request that the sentence “Such increased frequency shall also be indicated”. The additional data will be used in the calculations and will also be shown in the MMR.

Under this approach, the proposed mass effluent limits for these pollutants are more stringent than the Outfall 001 WQBELs reported in IDEM’s November 2016 wasteload allocation report for the ArcelorMittal NPDES permits. The effluent limits shown below for Outfall 001 for lead and zinc are based on the average Outfall 001 discharge flow of 9.5 mgd reported in the draft Fact Sheet, and the preliminary WQBELs concentrations reported in IDEM’s November 2016 wasteload allocation. The following Outfall 001 mass effluent limits should be applied at Outfall 101 in the renewal NPDES permit. We request these effluent limits be applied in the renewal NPDES permit for lead and zinc at Outfall 101.

Outfall 001 WQBELs (Nov. 2016)	Monthly Average (ug/L)	Daily Maximum (ug/L)	Monthly Average (lbs/day)	Daily Maximum (lbs/day)
Copper	25	50	1.98	3.96
Lead	62	120	4.92	9.51
Zinc	200	400	15.86	31.71

## Appendix A-1

### ArcelorMittal Comments on Draft NPDES Permit Conditions for Storm Water

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

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

To the extent other facility contingency plans prepared outside the scope of the NPDES permit (e.g., SPCC, RCRA) address either directly or indirectly storm water pollution prevention measures, those plans are incorporated by reference and may be cited by the permittee as means to comply with the provisions of this section.

##### 1. Control Measures and Effluent Limits

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

##### 2. Control Measures

Select, design, install, and implement control measures (including best management practices) to minimize pollutant discharges that address the selection and design considerations in Part D.3 to meet the non-numeric effluent limits in Part D.4. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. Any deviation from the manufacturer’s specifications shall be documented. If the control measures are not achieving their intended effect in minimizing pollutant discharges, the control measures must be modified as in accordance with the corrective action requirements in Part I.D.6. Regulated storm water discharges from the facility include storm water run-on that commingles with storm water discharges associated with industrial activity at the facility.

##### 3. Control Measure Selection and Design Considerations

When selecting and designing control measures consider the following:

- a. preventing storm water from coming into contact with polluting materials is generally more effective, and cost-effective, than trying to remove pollutants from storm water;
- b. use of control measures in combination may be more effective than use of control measures in isolation for minimizing pollutants in storm water discharge;
- c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- d. minimizing impervious areas at the 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 to reduce in-stream impacts of erosive flow;
- f. conservation and/or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and
- g. use of treatment interceptors (e.g. swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

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

- a. Minimize Exposure  
Minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. To the extent technologically available and economically practicable and achievable, either locate industrial materials and activities inside or protect them with storm resistant coverings in order to minimize exposure to rain, snow, snowmelt, and runoff (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, pay particular attention to the following areas:

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

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

Note: Industrial materials do not need to be enclosed or covered if storm water runoff from affected areas will not be discharged to receiving waters.

b. Good Housekeeping

Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, store materials in appropriate containers, identify and control all on-site sources of dust to minimize storm water contamination from the deposition of dust on areas exposed to precipitation, ~~keep all dumpsters under cover or fit with a lid that must remain closed when not in use,~~ and ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

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

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

- i. 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;
- ii. Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
  - iii. 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 the storm water pollution prevention team;
  - iv. 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; and
  - v. A procedure for documenting all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance.

e. Erosion and Sediment Controls

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

[http://www.in.gov/idem/storm\\_water/2363.htm](http://www.in.gov/idem/storm_water/2363.htm)

and

[http://water.epa.gov/polwaste/npdes/storm\\_water/Storm\\_water-Pollution-Prevention-Plans-for-Construction-Activities.cfm](http://water.epa.gov/polwaste/npdes/storm_water/Storm_water-Pollution-Prevention-Plans-for-Construction-Activities.cfm)

f. Management of Runoff

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

g. Salt Storage Piles or Piles Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. 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. Employee Training

Train ~~all~~ employees with responsibility for environmental management within each department who work in areas where industrial material or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team.

The following personnel must understand the requirements of Part I.D. and Part I.E. of this permit and their specific responsibilities with respect to those requirements: Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures); personnel responsible for the storage and handling of chemicals and materials that could become contaminants in storm water discharges; personnel who are responsible for conducting and documenting monitoring and inspections related to storm water; and personnel who are responsible for taking and documenting corrective actions as required in Part I.D.6.

Personnel must be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections): an overview of what is in the SWPPP; spill response procedures, good housekeeping, maintenance requirements, and material management practices; the location of all controls on the site required by this permit, and how they are to be maintained; the proper procedures to follow with respect to the permit's pollution prevention requirements; and when and how to conduct inspections, record applicable findings, and take corrective actions.

i. Non-Storm water Discharges

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

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

Discharges from fire-fighting activities;

Fire Hydrant flushings;

Potable water, including water line flushings;

~~Uncontaminated c~~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 g~~Ground water or spring water;

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

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

Vehicle wash-waters where ~~uncontaminated water without~~ detergents or solvents ~~are notis-~~utilized.

j. Dust Generation and Vehicle Tracking of Industrial Materials

Minimize generation of dust and off-site tracking of raw, final, or waste materials.

5. Annual Review

At least once every 12 months, ~~submit-prepare~~ an Annual Report to ~~the Industrial NPDES Permit Section~~ which includes the following: the results or a summary of the past year's routine facility inspection documentation

and quarterly visual assessment documentation; information copied or summarized from the corrective action documentation required (if applicable). If corrective action is not yet completed at the time of ~~preparationsubmission~~ of this Annual Report, describe the status of any outstanding corrective action(s); and any incidents of noncompliance observed or, if there is no noncompliance, a certification signed by a responsible corporate officer, general partner or the proprietor, executive officer or ranking elected official, stating the facility is in compliance with this permit.

6. Corrective Actions – Conditions Requiring Review

- a. If any of the following conditions occur, review the SWPPP to determine if and where revisions may need to be made to eliminate the condition and prevent its reoccurrence:
  - i. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this NPDES permit) occurs at the facility;
  - ii. Control measures are not stringent enough for the discharge to meet applicable water quality standards;
  - iii. A required control measure was never installed, was installed incorrectly, or is not being properly operated or maintained;
  - iv. Visual assessments indicate obvious signs of storm water pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam); or
- b. If construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in storm water from the facility, or significantly increases the quantity of pollutants discharge the permittee must review and revise the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the effluent limits in this permit.

7. Corrective Action Deadlines

If additional changes are necessary, a new or modified control must be installed and made operational, or a repair completed, before the next storm event if possible, ~~otherwise as soon as is reasonably practicable given the scope of the correction action. The reasons for any schedule for a corrective action requiring more than 90 days to complete shall be documented and within 14 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 14 calendar days,~~

~~the reason(s) must be documented. A schedule for completing the work must also be identified, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery.~~

Where corrective actions result in changes to any of the controls or procedures documented in the SWPPP, the SWPPP must be modified accordingly within ~~30~~14 calendar days of completing corrective action work.

These time intervals are not grace periods, but are schedules considered reasonable for documenting the findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

#### 8. Corrective Action Report

The existence of any of the conditions listed in Part I.D.6 must be documented within 24 hours of becoming aware of such condition. The following information must be included in the documentation:

- a. Identification and description of the condition triggering the need for corrective action review. For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of U.S., through storm water or otherwise;
- b. Date the condition was identified; and
- c. A discussion of whether the triggering condition requires corrective action. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases.

Document the corrective actions taken that occurred as a result of the conditions listed in Part I.D.6. within ~~30~~14 days from the time of discovery of any of those conditions. Provide the dates when each corrective action was initiated and completed (or is expected to be completed). If applicable, document why it is infeasible to complete necessary installations or repairs within the ~~30~~14-day timeframe and document the schedule for installing the controls and making them operational as soon as practicable after the ~~30~~14-day timeframe.

## 9. Inspections

### a. Routine Facility Inspections

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

- i. Areas where industrial materials or activities are exposed to storm water;
- ii. Areas identified in the SWPPP and those that are potential pollutant sources;
- iii. Areas where spills and leaks have occurred in the past 3 years.
- iv. Discharge points; and
- v. Control measures used to comply with the effluent limits contained in this permit.

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

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

During the inspection examine or look out for the following:

- vi. Industrial materials, residue or trash that may have or could come into contact with storm water;
- vii. Leaks or spills from industrial equipment, drums, tanks and other containers;
- viii. Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- ix. Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas; and
- x. Control measures needing replacement, maintenance or repair.

During an inspection occurring during a storm water discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. Discharge outfalls must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

~~As part of conducting the routine facility inspections at least quarterly, address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts.~~

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

b. Routine Facility Inspection Documentation

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

- i. The inspection date and time;
- ii. The name(s) and signature(s) of the inspector(s);
- iii. Weather information;
- iv. All observations relating to the implementation of control measures at the facility, including:
  - (1) A description of any discharges occurring at the time of the inspection;
  - (2) Any previously unidentified discharges and/or pollutants from the site;
  - (3) Any evidence of, or the potential for, pollutants entering the drainage system;
  - (4) Observations regarding the physical condition of and around all outfalls including any flow dissipation

- devices, and evidence of pollutants in discharges and/or the receiving water;
- (5) Any control measures needing maintenance, repairs, or replacement;
- v. Any additional control measures needed to comply with the permit requirements; and
- vi. Any incidents of noncompliance observed.

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

If the discharge was visual assessed, as required in Part I.D.9.c., during the facility inspection, include the results of the assessment with the report required in Part I.D.9.a., as long as all components of both types of inspections are included in the report.

c. Quarterly Visual Assessment Procedures

Once each quarter for the entire permit term, collect a storm water sample from each outfall and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. Guidance on monitoring is available at:

[http://water.epa.gov/polwaste/npdes/storm water/EPA-Multi-Sector-General-Permit-MSGP.cfm](http://water.epa.gov/polwaste/npdes/storm%20water/EPA-Multi-Sector-General-Permit-MSGP.cfm)

The visual assessment must be made:

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

a 72-hour (3-day) interval is representative for local storm events during the sampling period.

Visually inspect or observe the sample for the following water quality characteristics:

- iv. Color;
- v. Odor;
- vi. Clarity (diminished);
- vii. Floating solids;
- viii. Settled solids;
- ix. Suspended solids;
- x. Foam;
- xi. Oil sheen; and
- xii. Other obvious indicators of storm water pollution.

Whenever the visual assessment shows obvious signs of storm water pollution, initiate the corrective action procedures in Part I.D.6.

d. Quarterly Visual Assessment Documentation

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

- i. Sample location(s);
- ii. Sample collection date and time, and visual assessment date and time for each sample;
- iii. Personnel collecting the sample and performing visual assessment, and their signatures;
- iv. Nature of the discharge (i.e., runoff or snowmelt);
- v. Results of observations of the storm water discharge;
- vi. Probable sources of any observed storm water contamination; and
- vii. If applicable, why it was not possible to take samples within the first 30 minutes.

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

e. Exceptions to Quarterly Visual Assessments

- i. Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, take a substitute sample during the next qualifying

storm event. Documentation of the rationale for no visual assessment for the quarter must be included with the SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as extended frozen conditions.

- ii. Snow: In areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge, taking into account the exception described above for climates with irregular storm water runoff.
- iii. For outfalls that discharge non-contact cooling water and/or process water where the dry weather discharge flow is substantially greater than typical storm water contributions to the overall discharge flow, quarterly visual assessments are not required.

#### E. STORM WATER POLLUTION PREVENTION PLAN

To the extent other facility contingency plans prepared outside the scope of the NPDES permit (e.g., SPCC, RCRA) address either directly or indirectly storm water pollution prevention measures, those plans are incorporated by reference and may be cited by the permittee as means to comply with the provisions of this section.

##### 1. Development of Plan

Within ~~18~~12 months from the effective date of this permit, the permittee is required to revise and update the current Storm Water Pollution Prevention Plan (SWPPP) to ensure the SWPPP is appropriate for the permitted facility. The SWPPP does not contain effluent limitations. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the additional documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

##### i. Contents

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

- a. Pollution Prevention Team – The SWPPP must identify the staff members (by name or title) that comprise the facility's storm water pollution prevention team as well as their individual responsibilities.

The storm water pollution prevention team is responsible for overseeing development of the SWPPP, any later modifications to it, and for compliance with permit Parts I.D. and I.E. of this permit. Each member of the storm water pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP, other relevant documents or information that must be kept with the SWPPP.

- b. Site Description – As a minimum, the plan shall contain the following:
- i. *Activities at the Facility*. Provide a description of the nature of the industrial activities at the facility.
  - ii. *General location map*. Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters for the storm water discharges.
  - iii. *Site map*. Provide a map showing:
    - (A) Boundaries of the property and the size of the property in acres;
    - (B) Location and extent of significant structures and impervious surfaces;
    - (C) Directions of storm water flow (use arrows);
    - (D) Locations of all storm water control measures;
    - (E) Locations of all receiving waters, including wetlands, in the immediate vicinity of the facility. Indicate which waterbodies are listed as impaired and which are identified by the State of Indiana or EPA as Tier 2 or Tier 2.5 waters;
    - (F) Locations of all storm water conveyances including ditches, pipes, and swales;
    - (G) Locations of potential pollutant sources identified;
    - (H) Locations where significant spills or leaks identified have occurred;
    - (I) Locations of all storm water monitoring points;
    - (J) Locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2), indicating if you are treating one or more outfalls as “substantially identical”, and an approximate outline of the areas draining to each outfall;
    - (K) If applicable, municipal separate storm sewer systems and where the storm water discharges to them;

- (L) Areas of federally-listed critical habitat for endangered or threatened species, if applicable.
- (M) Locations of the following activities where such activities are exposed to precipitation:
  - (a) fueling stations;
  - (b) vehicle and equipment maintenance and/or cleaning areas;
  - (c) loading/unloading areas;
  - (d) locations used for the treatment, storage, or disposal of wastes;
  - (e) liquid storage tanks;
  - (f) processing and storage areas;
  - (g) immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
  - (h) transfer areas for substances in bulk;  
and **machinery**
  - (i) locations and sources of run-on to the site from adjacent property that contains significant quantities of pollutants.
- (N) Identify in the SWPPP where any of the following activities are exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants in storm water.

c. Potential Pollutant Sources:

The SWPPP must document areas at the facility where industrial materials or activities are exposed to storm water or from which allowable non-storm water discharges may be released. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage,

loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For structures located in areas of industrial activity, be aware that the structures themselves are potential sources of pollutants. This could occur, for example, when metals such as aluminum or copper are leached from the structures as a result of acid rain.

For each area identified, the description must include:

- i. *Activities in the Area.* A list of the industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).
- ii. *Pollutants.* A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity, which could be exposed to rainfall or snowmelt and could be discharged from the facility. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the date the SWPPP is prepared or amended.
- iii. *Spills and Leaks.* The SWPPP must document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The SWPPP must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance, in the three years prior to the date the SWPPP is prepared or amended.
- iv. *Non-Storm water Discharges* – The SWPPP must document that you have evaluated for the presence of non-storm water discharges not authorized by an NPDES permit. Any non-storm water discharges have either been eliminated or incorporated into this permit. Documentation of non-storm water discharges shall include:

A written non-storm water assessment, including the following:

- (1) The date of the evaluation;
- (2) A description of the evaluation criteria used;
- (3) A list of the outfalls or onsite drainage points that were directly observed during the evaluation; and
- (4) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), or

documentation that a separate NPDES permit was obtained. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.

- v. Salt Storage - The location of any storage piles containing salt used for deicing or other commercial or industrial purposes must be documented in the SWPPP.
- vi. Sampling Data - All storm water discharge sampling data collected at the facility during the previous permit term must be summarized in the SWPPP.
- vii. Description of Control Measures to Meet Technology-Based Effluent Limits - The location and type of control measures you have specifically chosen and/or designed to comply with Permit Part I.D. must be documented in the SWPPP. Regarding the control measures, the following must be documented as appropriate:

- (a) How the selection and design considerations of control measures were addressed.

- (b) How the control measures address the pollutant sources identified.

d. Schedules and Procedures

The following must be documented in the SWPPP:

- i. Good Housekeeping – Any schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;
- ii. Maintenance – Preventative maintenance procedures, including regular inspections, testing, maintenance and repair of all control measures to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the storm water requirements.
- iii. Spill Prevention and Response Procedures – Procedures for preventing and responding to spills and leaks, including notification procedures. For preventing spills, include in the SWPPP the control measures for material handling and storage, and the procedures for preventing spills that can contaminate storm water. Also specify cleanup equipment, procedures and spill logs, as appropriate, in the event of

spills. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review;

- iv. Erosion and Sediment Control – If you use polymers and/or other chemical treatments as part of the controls, identify the polymers and/or chemicals used and the purpose; and
- v. Employee Training – The elements of the employee training plan shall include all, but not be limited to, the requirements set forth in Permit Part.I.D., and also the following:
  - (1) The content of the training;
  - (2) The frequency/schedule of training for employees within each department with responsibility for environmental management~~who have duties in areas of industrial activities subject to this permit;~~
  - (3) A log of the dates on which designated specific employees received training.

e. Pertaining to Inspections

Document in the SWPPP the procedures for performing, as appropriate, the types of inspections specified by this permit, including:

- i. Routine facility inspections and;
- ii. Quarterly visual assessment of storm water discharges.

For each type of inspection performed, the SWPPP must identify:

- iii. Person(s) or positions of person(s) responsible for inspection;
- iv. Schedules for conducting inspections, including tentative schedule for irregular storm water runoff discharges; and
- v. Specific items to be covered by the inspection, including schedules for specific outfalls.

f. Pertaining to Monitoring

~~Document in the SWPPP the procedures for conducting the five types of analytical monitoring specified by this permit, where applicable to the facility, including Benchmark monitoring;~~

For each type of monitoring, the SWPPP must document:

- i. Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- ii. Parameters for sampling and the frequency of sampling for each parameter;
- iii. Schedules for monitoring at the facility, including schedule for alternate monitoring periods for climates with irregular storm water runoff;
- iv. Any numeric control values (effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
- v. Procedures (e.g., responsible staff, logistics, laboratory to be used) for gathering storm event data.

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

- i. The SWPPP shall be prepared in accordance with good engineering practices and to industry standards. The SWPPP may be developed by either a person on the staff or a third party, and it shall be certified in accordance with the signature requirements, under Part II.C.6.
- ii. Retain a complete copy of the current SWPPP required by this permit at the facility in any accessible format. A complete SWPPP includes any documents incorporated by reference and all documentation supporting parts I.D. and I.E. of this permit, as well as the signed and dated certification page. Regardless of the format, the SWPPP must be immediately available to facility employees, EPA, a state or tribe, the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection. The current SWPPP or certain information from the current SWPPP must also be made available to the public (except any confidential business information (CBI) or restricted information, but clearly identify those portions of the SWPPP that are being withheld from public access.
- iii. Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS), copies of the relevant portions of those documents must be kept with the SWPPP.

ArcelorMittal Indiana Harbor LLC  
Central Wastewater Treatment Plant  
NPDES Permit No. IN0063711

APPENDIX A-2  
Revised SMV Limit Calculation

OUTFALL 001 (ng/L)					
Date	Result	Qual.	1/2 RL <sup>2</sup>	U.S. EPA Method	Analytical Laboratory
02/24/14	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
04/21/14	0.530		0.25	EPA 1631E	Microbac (Merrillville, IN)
06/20/14	0.741		0.25	EPA 1631E	Microbac (Merrillville, IN)
08/15/14	0.870		0.25	EPA 1631E	Microbac (Merrillville, IN)
10/23/14	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
12/29/14	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
02/12/15	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
02/12/15 (DUP) <sup>1</sup>		U	0.25	EPA 1631E	Microbac (Merrillville, IN)
04/13/15	0.538		0.25	EPA 1631E	Microbac (Merrillville, IN)
06/23/15	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
08/10/15	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
10/09/15	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
12/10/15	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
02/11/16	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
02/11/16 (DUP) <sup>1</sup>		U	0.25	EPA 1631E	Microbac (Merrillville, IN)
04/05/16	0.529		0.25	EPA 1631E	Microbac (Merrillville, IN)
06/06/16	1.040		0.25	EPA 1631E	Microbac (Merrillville, IN)
06/07/16	0.645		0.25	EPA 1631E	Microbac (Merrillville, IN)
08/08/16	0.616		0.25	EPA 1631E	Microbac (Merrillville, IN)
10/09/16	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
10/11/16	0.981		0.25	EPA 1631E	Microbac (Merrillville, IN)
10/11/16 (DUP) <sup>1</sup>			0.25	EPA 1631E	Microbac (Merrillville, IN)
<b>10/13/16</b>	<b>1.190</b>		0.25	EPA 1631E	Microbac (Merrillville, IN)
12/14/16	ND	U	0.25	EPA 1631E	Microbac (Merrillville, IN)
02/16/17	1.060		0.25	EPA 1631E	Microbac (Merrillville, IN)

Maximum Value 1.190  
(Mar 2015 - Feb 2017)

Calculation of Projected Effluent Quality (PEQ) <sup>3</sup>	Daily Maximum	Monthly Average
Number of Data Points	15	12
Maximum Value	1.190	1.060
Mean	0.557	0.491
Standard Deviation	0.349	0.288
Coefficient of Variation	0.627	0.587
<i>Reasonable Potential</i> Multiplying Factor	1.5	1.6
<b>PEQ</b>	<b>1.785</b>	<b>1.696</b>

NOTES

<sup>1</sup> Average of sample value and duplicate sample value

<sup>2</sup> Non-detect values counted as one-half the reporting limit of 0.5 ng/L

<sup>3</sup> PEQs calculated using most recent 24-months of data (data shaded in blue)

## Attachment C

### IDEM Response to Comments

1. Outfalls 101/001 – Technology Based Effluent Limits & WQBELs for Oil & Grease NPDES Permit (pages 2 to 7), Fact Sheet (pages 9 to 20)

The above requested change has been made. The calculated TBELs are included at Outfall 101, and the concentration limits protective of the narrative water quality is included at Outfall 001.

2. Outfalls 101/001 – Technology Based Effluent Limits and WQBELs for Copper, Lead and Zinc NPDES Permit (pages 2 to 7), Fact Sheet (pages 9 to 20)

IDEM has reviewed the above request and the change identified in the previous permit renewal. Since the facility previously had accepted the more stringent WQBELs at the internal outfall, the same principle was applied in this renewal. However, it would not be appropriate to include the full allowance of the WQBELs at the internal outfall. Therefore, IDEM is reverting back to including the calculated TBELs at the internal outfall, and the updated WQBELs at the final outfall to ensure protection of Indiana Water Quality Standards.

3. Storm Water  
NPDES Permit (pages 13 to 30), Fact Sheet (pages 22 to 24)

In response to the above comment, most of the suggested changes have been made. The first additional paragraph in Part I.D was not added, but was included as suggested in Part I.E. Also, the second paragraph in Part I.D.4.i. was not added. The permittee is required to document when the listed allowable non-storm water discharges occur.

4. Outfall 001 – Footnote [2] Water Treatment Additives NPDES Permit (pages 2, 3), Fact Sheet (page 24)

The above referenced footnotes have been changed to read:

In the event that changes are to be made in the use of water treatment additives ~~including dosage rates beyond the previously approved estimated maximum dosage rates, or changes~~ that could significantly change the nature of, or increase the discharge concentration of the additive to Outfall 002, 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 *increased* 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.

5. Schedule of Compliance

IDEM has reviewed the request and incorporated a thirty-six (36) month schedule of compliance as Part I.I of the permit.

6. Thermal Effluent Requirements  
NPDES Permit (page 54), Fact Sheet (page 27)

The above requested change has been made. Footnotes [1] and [2] in Part III.A have been combined and adjusted to read:

[1] Temperature at Outfall 001 shall be sampled. On days when temperature is sampled at the outfall, temperature shall also be sampled at the intake supplying the most significant source of water to the outfall. As an alternative to direct grab measurements during this time period the facility may install a more permanent temperature measuring device that will retain the highest temperature value during any given 24 hour period.

7. Outfall 001 – Mercury Effluent Limits  
NPDES Permit (page 2 to 4), Fact Sheet (pages 19, 20)

IDEM does not believe the data justifies removing the mercury limits at this time. No changes have been made in response to this comment.

8. Outfall 001 – Footnote [4] Oil & Grease Reporting NPDES  
Permit (page 3)

The above requested addition has been made.

9. Outfall 001 – Footnote [6], [7], [8] LOD/LOQ Reporting NPDES  
Permit (pages 3, 4)

The above requested change is not incorporated into the final permit. In accordance with 327 IAC 5-2-11.6(h)(3)(C), a value of zero is not appropriate to assign daily values when calculating compliance with the daily maximum mass limitation.

10. Outfall 101 – Footnote [3] Monitoring Waiver for Lead NPDES  
Permit (page 5)

The above requested change has been made.

11. Outfall 101 – Footnote [2] Oil and Grease Reporting NPDES  
Permit (page 5)

The above requested addition has been made.

12. Outfall 101 – Footnote [6] Initial GC/MS Scan for Total Toxics Organics NPDES Permit (page 6)

The above requested change has been made and the Initial GC/MS Scan for Total Toxic Organics has been removed.

13. Part I.C.2.f – DMR Due Date NPDES Permit (page 9)

The above requested change has been made.

14. Part I.C.5.c – Reporting Times of Analyses NPDES Permit (page 12)

This is a condition of all similarly issued NPDES permits. No changes are made in response to this comment.

15. Part I.C.6 – Reporting Additional Data NPDES Permit (pages 12, 13)

This is a condition of all similarly issued NPDES permits. No changes are made in response to this comment. If the permittee has NetDMR or MMR questions, please contact IDEM's Office of Water Quality Compliance and Data Section.

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
PUBLIC NOTICE NO: 2017 – 7B – F  
DATE OF NOTICE: JULY 21, 2017

The Office of Water Quality issues the following NPDES FINAL PERMIT.

**MAJOR – RENEWAL**

**ARCELORMITTAL IN HARBOR CENTRAL TREATMENT PLANT**, Permit No. IN0063711, LAKE COUNTY, 3001 Dickey Rd, East Chicago, IN. This major industrial facility discharges 9.5 million gallons daily of storm water, process & non-process wastewater into IN Harbor Ship Canal. Permit Manager: Richard Hamblin, 317/232-8696, [Rhamblin@idem.in.gov](mailto:Rhamblin@idem.in.gov).

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**Notice of Right to Administrative Review [Permits]**

If you wish to challenge this Permit, you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA), and serve a copy of the Petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM. Addresses are:

Director  
Office of Environmental Adjudication  
Indiana Government Center North  
100 North Senate Avenue - Room N103  
Indianapolis, Indiana 46204

Commissioner  
Indiana Department of Environmental Management  
Indiana Government Center North  
100 North Senate Avenue - Room 1301  
Indianapolis, Indiana 46204

The Petition must contain the following information:

1. The name, address and telephone number of each petitioner.
2. A description of each petitioner's interest in the Permit.
3. A statement of facts demonstrating that each petitioner is:
  - a. a person to whom the order is directed;
  - b. aggrieved or adversely affected by the Permit; or
  - c. entitled to administrative review under any law.
4. The reasons for the request for administrative review.
5. The particular legal issues proposed for review.
6. The alleged environmental concerns or technical deficiencies of the Permit.
7. The Permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
8. The identity of any persons represented by the petitioner.
9. The identity of the person against whom administrative review is sought.
10. A copy of the Permit that is the basis of the petition.
11. A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the Permit. Examples are:

1. Failure to file a Petition by the applicable deadline;
2. Failure to serve a copy of the Petition upon IDEM when it is filed; or
3. Failure to include the information required by law.

If you seek to have a Permit stayed during the Administrative Review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with Notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to Notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

If you have procedural or scheduling questions regarding your Petition for Administrative Review you may contact the Office of Environmental Adjudication at (317) 233-0850 or see OEA's website at <http://www.in.gov/oea>.