

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO. 20260717 – IN0000116 - D
DATE OF NOTICE: July 17, 2026
DATE RESPONSE DUE: August 17, 2026

The Office of Water Quality proposes the following DRAFT NPDES PERMIT RENEWAL and TENTATIVE VARIANCE APPROVAL:

MAJOR – RENEWAL

Northern Indiana Public Service Company LLC (NIPSCO) – Michigan City Generating Station, Permit No. IN0000116, LAPORTE COUNTY, 101 West Wabash Street, Michigan City, IN. The facility is an electric power generating facility that utilizes coal-fired boilers to convert water into high pressure steam which is then used to drive turbines to generate electricity via electrical generator. The facility discharges 11.79 MGD of non-process wastewater, process wastewater and stormwater via Outfall 001 to Lake Michigan and Outfall 002 to Trail Creek. On October 1, 2025, the permittee submitted a permit renewal application and requested renewal of its Streamlined Mercury Variance in accordance with 327 IAC 5-3.5.

Permitted outfall locations:

Outfall 001	Latitude: 41° 43' 21"
	Longitude: -86° 54' 44"
Outfall 002	Latitude: 41° 41' 29"
	Longitude: -87° 30' 50"

I. Streamlined Mercury Variance (SMV): The permittee has requested renewal of its Streamlined Mercury Variance (SMV) for its discharges via Outfall 001. IDEM is providing notice of receipt of this application and the agency's tentative decision to grant this request, in accordance with 327 IAC 5-3.5. The goal of the SMV is to reduce the effluent levels of mercury towards, and achieve as soon as practicable, compliance with the mercury WQBELs through implementation of a pollutant minimization program plan.

II. Contact Person: Jodi Wray, Office of Water Quality/Industrial NPDES Permits Section, 100 N Senate Ave., Indianapolis, IN 46204-2251; 317/234-9739, jwray@idem.in.gov.

PROCEDURES TO FILE A RESPONSE:

You are hereby notified of the availability of a 30-day public comment period regarding the referenced draft permit renewal and SMV renewal, in accordance with IC 13-15-5-1. The application and draft permit documents are available for inspection at IDEM, Office

of Water Quality, Indiana Government Center North, 100 N. Senate Ave, Indianapolis, IN 46204 from 9:00 a.m. until 4:00 p.m., Monday thru Friday, (copies 10¢ per page). The draft permit and related documents are posted online on the above-referenced IDEM public notice web page <https://www.in.gov/idem/public-notices/public-notices-northwest-indiana/#laporte> . A courtesy copy has also been sent via email to the local County Health Department. Please tell others whom you think would be interested in this matter. For more information about public participation including your rights & responsibilities, please see <https://www.in.gov/idem/public-notices/>. You may want to consult our online Citizens' Guide to IDEM: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>.

Comments: The proposed decision to issue a permit and renew the SMV are tentative. Interested persons are invited to submit written comments on the draft permit. All comments must be delivered to IDEM or postmarked no later than the Response Due Date noted to be considered in the decision to issue a final permit. Deliver or mail all requests or comments to the attention of the Permit Manager at the above address.

To Request a Public Hearing: Any person may request a public hearing. A written request must be submitted to the above address on or before the Response Due Date. The written request shall include: the name and address of the person making the request, the interest of the person making the request, persons represented by the person making the request, the reason for the request and the issues proposed for consideration at the hearing. The Department will determine whether to hold a public hearing based upon the comments and the rationale for the request. Public Notice of such a hearing will be published in accordance with the NPDES rules which will include, at a minimum, the posting of the public notice on IDEM's website at least 30 days prior to the hearing. Notice will also be provided to those persons who submit comments and/or on the mailing list.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 N. Senate Avenue • Indianapolis, IN 46204
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Mike Braun
Governor

Clint Woods
Commissioner

July 17, 2026

VIA ELECTRONIC MAIL

Rocky L. Pollard, II, Director Station Chemistry & Environmental Compliance
Northern Indiana Public Service Company (NIPSCO) LLC
Michigan City Generating Station
801 E. 86th Avenue
Merrillville, IN 46410

Dear Rocky L. Pollard, II:

Re: NPDES Permit No. IN0000116
Draft Permit
NIPSCO Michigan City Generating Station
Michigan City, IN – LaPorte County

Your application and supporting documents have been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is a copy of the draft NPDES Permit.

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at <https://www.in.gov/idem/public-notices/>. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. A 30-day comment period is available to solicit input from interested parties, including the public.

Please review this draft permit and associated documents carefully to become familiar with the proposed terms and conditions. Comments concerning the draft permit should be submitted in accordance with the procedure outlined in the enclosed public notice form. We suggest that you meet with us to discuss major concerns or objections you may have with the draft permit.

Questions concerning this draft permit may be addressed to Jodi Wray of my staff, at 317/234-9739 or jwray@idem.in.gov.

Sincerely,

Richard Hamblin, Chief
Industrial NPDES Permits Section
Office of Water Quality

Enclosures

cc: LaPorte County Health Department
Paul Frohnapple, Environmental Coordinator
Chief, Permits Section, U.S. EPA, Region 5
Miya Spratt, IDEM



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 "Clean Water Act" or "CWA"), and IDEM's authority under IC13-15,

NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC
MICHIGAN CITY GENERATING STATION

is authorized to discharge from a steam electric generating facility that is located at 101 West Wabash Street, Michigan City, Indiana, to receiving waters identified as Lake Michigan and Trail Creek in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, IV, and V hereof. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date: _____

Expiration Date: _____

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

Issued on _____ for the Indiana Department of Environmental Management.

Jerry Dittmer, Chief
Permits Branch
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, located at Latitude 41° 43' 21", Longitude -86° 54' 44". The discharge is limited to the discharges from Internal Outfalls 101, 201, 301, and 601, stormwater, 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 Lake Michigan. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][13][20]

Outfall 001

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	Daily	24-Hr. Total
TRC [8][10] Continuous [14] Intermittent [15]	1.29 ----	2.59 [9] ----	lbs/day ----	0.01 [6] ----	0.02 [7] 0.2	mg/l	Daily	Grab Grab
TRO [5]	----	----	----	----	0.06	mg/l	Daily	Grab
Chlorination/Bromination Frequency Duration	----	----	----	----	4 40	Times/day Min/dose	Daily Daily	Report Report
TSS	----	----	----	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Oil & Grease	----	----	----	10	15	mg/l	1 X Weekly	Grab
Copper [4]	2.2	3.75	lbs/day	17.0	29.0	ug/l	2 X Monthly	24-Hr. Comp.
Temperature [12]	----	----	----	Report	Report	°F	Daily	Grab
Mercury [4][10][18] WQBELs Interim (SMV) [17]	0.00017 ----	0.00041 ----	lbs/day ----	1.3 3.1 [16]	3.2 Report	ng/l ng/l	6 X Yearly[11] 6 X Yearly[11]	Grab Grab
Whole Effluent Toxicity[19] Acute Chronic	----	----	----	----	Report ----	TUa TUc	Variable Variable	24-Hr. Comp.

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [3]	6.0	----	9.0	s.u.	Daily	Grab

- [1] See Part I.B. of the permit for the minimum narrative limitations.
- [2] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including changes to dosage that would increase the discharge concentration of the additives, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: <https://www.in.gov/idem/forms/idem-forms-list/>
- [3] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.
- [4] The permittee shall measure and report the identified metal as total recoverable metal.
- [5] The monitoring requirements and effluent limitations for Total Residual Oxidants (TRO) will apply at any time bromine is used and may be in the discharge. Use the test methods for Total Residual Chlorine to determine Total Residual Oxidants. At present, two test methods are considered to be acceptable to IDEM, amperometric (4500-Cl-D,E) and DPD colorimetric method (4500-Cl-G), to determine TRO concentrations at the level of 0.06 mg/l. If another EPA test method is to be used, the method must first be approved by this Department.
- [6] The monthly average water quality based effluent limit (WQBEL) for Total Residual Chlorine is less than the limit of quantitation (LOQ) as specified below in footnote [10]. Compliance with the calculated monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. When calculating the monthly average effluent level, 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.

- [7] The daily maximum WQBEL for Total Residual Chlorine is greater than or equal to the LOD but less than the LOQ as specified below in footnote [10]. Compliance with the daily maximum limit will be demonstrated if the observed effluent concentrations are less than the LOQ.
- [8] The permittee is required to develop and conduct a pollutant minimization program (PMP) for each pollutant with a WQBEL below the LOQ as specified in footnote [10]. See Part I.G. of the permit for the Pollutant Minimization Program (PMP) requirements.
- [9] Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 7.76 lbs/day.
- [10] The following EPA approved test 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 and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.2 ng/l	0.5 ng/l
Chlorine, Total residual	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l

Case-Specific LOD/LOQ

The permittee may determine and use a case-specific LOD or LOQ using the analytical method specified above, or any other analytical method which is approved by the Commissioner, and EPA if applicable, prior to use. The LOD and LOQ shall be determined as established in 327 IAC 5-2-11.6(h)(2)(B).

- [11] Mercury monitoring shall be conducted 6 X annually 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.
- [12] The following temperature criteria shall apply to Lake Michigan:
- (a) In all receiving water, the points of measurement normally shall be in the first meter below the surface at such depths necessary to avoid thin layer surface warming due to extreme ambient air temperatures, but, where required to determine the true distribution of heated wastes and natural variations in water temperatures, measurements shall be at a greater depth and at several depths as a thermal profile.

(b) There shall be no abnormal temperature changes so as to be injurious to fish, wildlife, or other aquatic life, or the growth or propagation thereof. In addition, plume interaction with the bottom shall:

- (i) be minimized; and
- (ii) not injuriously affect fish, shellfish, and wildlife spawning or nursery areas.

(c) The normal daily and seasonal temperature fluctuations that existed before the addition of heat shall be maintained.

(d) The permittee is required to monitor temperature daily at Outfall 001. The permittee submitted a mixing zone study in 2012 that demonstrated the discharge was meeting water quality standards for temperature at the 1000' arc.

(e) The facilities described as follows that discharge into the open waters of Lake Michigan shall be limited to the amount essential for blowdown in the operation of a closed cycle cooling facility:

- (i) All facilities that have new waste heat discharges exceeding a daily average of five-tenths (0.5) billion British thermal units per hour. As used in this item, "new waste heat discharge" means a discharge that had not begun operations as of February 11, 1972.
- (ii) All facilities with existing waste heat discharges that increase the quantity of waste heat discharged by more than a daily average of five-tenths (0.5) billion British thermal units per hour.

(f) Water intakes shall be designed and located to minimize entrainment and damage to desirable organisms. Requirements may vary depending upon local conditions, but, in general, intakes shall:

- (i) have minimum water velocity; and
- (ii) not be located in spawning or nursery areas of important fishes.

Water velocity at screens and other exclusion devices shall also be at a minimum.

(g) Discharges other than those now in existence shall be such that the thermal plumes do not overlap or intersect.

(h) Facilities discharging more than a daily average of five-tenths (0.5) billion British thermal units of waste heat shall:

- (i) continuously record intake and discharge temperature and flow; and
- (ii) make those records available to the public or regulatory agencies upon request.

[13] The Stormwater Monitoring and Non Numeric Effluent Limits and the Stormwater Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E of this permit.

- [14] Continuous chlorination is considered as all occurrences that do not meet the definition of intermittent chlorination, as described in 327 IAC 2-1-6 Table 1, Footnote [a]. These water quality based effluent limits (WQBELs) are applicable any time that the discharge of chlorine does not meet this intermittent definition.
- [15] This daily maximum limit for total residual chlorine is only applicable if the discharge of chlorine is intermittent. As required by 327 IAC 2-1-6 Table 1, Footnote [a], to be considered an intermittent discharge, total residual chlorine shall not be detected in the discharge for a period of more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours. Simultaneous multi-unit chlorination is permitted.
- [16] The interim discharge limit is the annual average. Compliance with the interim discharge limit will be achieved when the annual average measured over the most recent (rolling) twelve-month period is less than the interim discharge limit.

Compliance with the interim discharge limit will demonstrate compliance with mercury discharge limitations of this permit for this outfall.

- [17] The permittee applied for, and received, a variance from the water quality criterion used to establish the referenced mercury WQBEL under 327 IAC 5-3.5. For the term of this permit, the permittee is subject to the interim discharge limit developed in accordance with 327 IAC 5-3.5-8.

The permittee shall report both a daily maximum concentration and an annual average concentration for total mercury. The annual average value shall be calculated as the average of the measured effluent daily values from the most recent twelve-month period.

Calculating and reporting of the annual average value for mercury is only required for the months when samples are taken for mercury.

- [18] See Part V of the permit for the Pollutant Minimization Program Plan (PMPP) requirements.
- [19] See Part I.F. of the permit for Whole Effluent Toxicity Testing requirements.
- [20] 40 CFR 423.13(d)(1) prohibits the discharge of the 126 priority pollutants (listed in Appendix A of the regulations) except chromium and zinc (which have specific numeric limits) in detectable amounts due to chemicals added for cooling tower maintenance. 40 CFR 423.13(d)(3) states that at the permitting authority's discretion, compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants (except chromium and zinc) are not detectable (due to the use of cooling tower chemicals) in the final discharge by the analytical methods in 40 CFR part 136.

As part of the permit renewal, the permittee submitted information that demonstrates the 126 priority pollutants (except chromium and zinc which have specific numeric limits) are not detectable at Outfall 201 due to the use of cooling tower chemicals.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 101. The discharge is limited to low volume wastewater and stormwater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with another wastestream. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS
Outfall 101

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	Daily	24-Hr. Total
TSS	----	----	----	26.3	87.8	mg/l	2 X Monthly	24-Hr. Comp.
Oil & Grease	----	----	----	13.2	17.6	mg/l	2 X Monthly	Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [1]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

3. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 201. The discharge is limited to cooling tower blowdown. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with another wastestream. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS
Outfall 201

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow [1]	Report	Report	MGD	----	----	----	Daily	24-Hr. Total
Free Available Chlorine [3]	----	----	----	0.2	0.5	mg/l	Daily	Grab
Chlorination/Bromination [3] Duration per Day	----	----	----	----	120	min/day	Daily	Report
Total Chromium [2]	----	----	----	0.2	0.2	mg/l	1 X Monthly	Grab
Total Zinc [2]	----	----	----	1.0	1.0	mg/l	1 X Monthly	Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [4]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] Flow is to be measured continuously using a flow measuring device.
- [2] The permittee shall measure and report the identified metal as total recoverable metal.
- [3] Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.

- [4] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

4. 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 301. The discharge is limited to low volume wastewater, coal pile runoff, stormwater from the cooling tower and coal handling areas, and groundwater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with another wastestream. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [3]
Outfall 301

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow [1]	Report	Report	MGD	----	----	----	Daily	24-Hr. Total
TSS	----	----	----	24.4	68.7	mg/l	2 X Monthly	Grab
Oil & Grease	----	----	----	8.4	11.2	mg/l	2 X Monthly	Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [2]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] Flow is to be measured continuously using a flow measuring device.
- [2] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.
- [3] There shall be no discharge of fly ash or bottom ash transport water.

5. 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 601. The discharge is limited to metal cleaning waste. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with another wastestream. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]
Outfall 601

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow [3]	Report	Report	MGD	----	----	----	Daily	24-Hr. Total
TSS	----	----	----	30.0	50.0	mg/l	2 X Monthly	24-Hr. Comp.
Oil & Grease	----	----	----	15.0	20.0	mg/l	2 X Monthly	Grab
Total Copper [2]	----	----	----	1.0	1.0	mg/l	Daily	24-Hr. Comp.
Total Iron [2]	----	----	----	1.0	1.0	mg/l	Daily	24-Hr. Comp.

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [4]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] These limitations and monitoring requirements apply only during discharge of metal cleaning wastes.
- [2] The permittee shall measure and report the identified metal at total recoverable metal.
- [3] Flow is to be measured continuously using a flow measuring device.
- [4] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

6. The permittee is authorized to discharge stormwater from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 002 located at Latitude 41° 43' 17", Longitude -86° 54' 25". Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Trail Creek. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][6]

<u>Parameter</u>	Outfall 002		<u>Monitoring Requirements</u>	
	<u>Daily Maximum</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	MGD	Semi-Annual [5]	Estimate Total
Total Suspended Solids	Report	mg/l	Semi-Annual [5]	Grab
pH	Report	s.u.	Semi-Annual [5]	Grab
Oil & Grease	Report	mg/l	Semi-Annual [5]	Grab
COD	Report	mg/l	Semi-Annual [5]	Grab
Mercury [3][4]	Report	ng/l	6 X Yearly	Grab

- [1] The Stormwater Monitoring and Non Numeric Effluent Limits and the Stormwater Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.

- [2] All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

For each sample taken, the permittee shall record the duration and total rainfall of the storm event, the number of hours between beginning of the storm measured and the end of the previous measurable rain event, and the outside temperature at the time of sampling.

A grab sample shall be taken during the first thirty (30) minutes of the discharge (or as soon thereafter as practicable).

- [3] The permittee shall measure and report the identified metal as total recoverable metal.

- [4] The following EPA approved test 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 and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.2 ng/l	0.5 ng/l

- [5] The first sampling event is to occur between January and June and the associated DMR / MMR submitted no later than July 28th. The second sampling event is to occur between July and December and the associated DMR / MMR submitted no later than January 28th.
- [6] See Part I.B. of the permit for the minimum narrative limitations.

B. MINIMUM NARRATIVE LIMITATIONS

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

1. including waters within the mixing zone, to contain substances, materials, floating debris, oil, scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:
 - a. will settle to form putrescent or otherwise objectionable deposits;
 - b. are in amounts sufficient to be unsightly or deleterious;
 - c. produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
 - d. are in amounts sufficient to be acutely toxic to , or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
 - e. 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 that 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 flow and shall be taken at times which reflect the full range and concentration of effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameter.

2. Monthly Reporting

The permittee shall submit accurate federal and state discharge monitoring reports to the Indiana Department of Environmental Management (IDEM) containing results obtained during the previous month and shall be submitted no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. 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. See Part II.C.10 of this permit for Future Electronic Reporting Requirements.

- 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), 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.
- 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, except the monthly average for *E. coli* shall be calculated as a geometric mean. Daily effluent values that are less than the LOQ, that are used to determine the monthly average effluent level shall be accommodated in calculation of the average using statistical methods that have been 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.

3. Definitions

- a. "Monthly Average" means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month.

The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.

- b. "Daily Discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that reasonably represents the calendar day for the purposes of sampling.
- c. "Daily Maximum" means the maximum allowable daily discharge for any calendar day.
- d. A "24-hour composite sample" means a sample consisting of at least 3 individual flow-proportioned samples of wastewater, taken by the grab sample method or by an automatic sampler, which are taken at approximately equally spaced time intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. A flow-proportioned composite sample may be obtained by:
- (1) recording the discharge flow rate at the time each individual sample is taken,
 - (2) adding together the discharge flow rates recorded from each individuals sampling time to formulate the "total flow" value,
 - (3) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value,
 - (4) then multiply the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.
- e. "Concentration" means 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 the minimum 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.
- i. "Limit of Quantitation" or "LOQ" means a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also sometimes called limit quantification or quantification level.
- j. "Method Detection Level" or "MDL" means the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by procedure set forth in 40 CFR 136, Appendix B. The method detection level or MDL is equivalent to the LOD.
- k. "Grab Sample" means a sample which is taken from a wastestream on a one-time basis without consideration of the flow rate of the wastestream and without considerations of time.

4. Test Procedures

The analytical and sampling methods used shall conform to the version of 40 CFR 136 incorporated by reference in 327 IAC 5. Different but equivalent methods are allowable if they receive the prior written approval of the Commissioner and the U.S. Environmental Protection Agency. When more than one test procedure is approved for the purposes of the NPDES program under 40 CFR 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv).

5. Recording of Results

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

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

6. Additional Monitoring by Permittee

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

7. Records Retention

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

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

D. STORMWATER MONITORING AND NON-NUMERIC EFFLUENT LIMITS

The permittee shall implement the non-numeric permit conditions in this Section of the permit for the entire site as it relates to stormwater associated with industrial activity regardless which outfall the stormwater is discharged from.

1. Control Measures and Effluent Limits

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

2. Control Measures

Select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part D.3 to meet the non-numeric effluent limits in Part D.4. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. Any deviation from the manufacturer’s specifications shall be documented. If the control measures are not achieving their intended effect in minimizing pollutant discharges, the control measures must be modified as expeditiously as practicable. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater 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 stormwater from coming into contact with polluting materials is generally more effective, and cost-effective, than trying to remove pollutants from stormwater;
- b. use of control measures in combination is more effective than use of control measures in isolation for minimizing pollutants in stormwater discharge;
- c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;

- d. minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches), can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid groundwater contamination;
- e. flow can be attenuated by use of open vegetated swales and natural depressions;
- f. conservation and/or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
- g. use of treatment interceptors (e.g. swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

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

Non-Numeric Effluent Limits:

a. Minimize Exposure

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

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

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

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

b. Good Housekeeping

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

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

c. Maintenance

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

d. Spill Prevention and Response Procedures

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

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

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

e. Erosion and Sediment Controls

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

<https://www.in.gov/idem/stormwater/resources/indiana-storm-water-quality-manual/>

and

<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>

f. Management of Runoff

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

g. Salt Storage Piles or Piles Containing Salt

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

h. Waste, Garbage, and Floatable Debris

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

i. Employee Training

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

j. Non-Stormwater Discharges

You must determine if any non-stormwater discharges not authorized by an NPDES permit exist. Any non-stormwater discharges discovered must either be eliminated or modified into this permit. The following non-stormwater discharges are authorized and must be documented in the Stormwater Pollution Prevention Plan:

Discharges from fire-fighting activities;
Fire Hydrant flushings;
Potable water, including water line flushings;
Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
Irrigation drainage;
Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

Pavement wash water where no detergents are used and no spills or leaks of toxic or hazardous material have occurred (unless all spilled material has been removed);
Routine external building washdown that does not use detergents;
Uncontaminated groundwater or spring water;
Foundation or footing drains where flows are not contaminated with process materials;
Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from cooling towers (e.g., "piped cooling tower blowdown or drains);
Vehicle wash- waters where uncontaminated water without detergents or solvents is utilized; and
Runoff from the use of dust suppressants approved for use by IDEM.

k. Dust Generation and Vehicle Tracking of Industrial Materials

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

l. Fugitive Dust Emission.

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

m. Delivery Vehicles

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

n. Fuel Oil Unloading Areas

Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

o. Chemical Loading and Unloading

Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.

p. Miscellaneous Loading and Unloading Areas

Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

q. Liquid Storage Tanks

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

r. Large Bulk Fuel Storage Tanks

Minimize contamination of surface runoff from large bulk fuel storage tanks. Consider containment berms (or their equivalent). You must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

s. Spill Reduction Measures

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

t. Oil-Bearing Equipment in Switchyards

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

u. Residue-Hauling Vehicles

Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

v. Ash Loading Areas

Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

w. Areas Adjacent to Disposal Ponds or Landfills

Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

x. Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites

Minimize the potential for contamination of runoff from these areas.

5. Annual Review

At least once every twelve (12) months, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limitations in this permit. You must document the results of your review in a report that shall be retained within the SWPPP. You must also submit the report to the Industrial NPDES Permit Section, as well as the Compliance Branch, on an annual basis. The report may be submitted by email to the Industrial NPDES Permit Section at OWQWWPER@idem.in.gov and to the Compliance Branch at wwReports@idem.in.gov. The email subject line should include the NPDES Permit # and the type of report being submitted (Annual Stormwater Report). The permittee's first annual review report will be due twelve (12) months from the effective date of the permit. All subsequent annual review reports will be due no later than the anniversary of the effective date of the permit.

6. Corrective Actions – Conditions Requiring Review

- a. If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated:
- (1) an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this NPDES permit) occurs at this facility;
 - (2) it is determined that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
 - (3) it is determined in your routine facility inspection, an inspection by EPA or IDEM, comprehensive site evaluation, or the Annual Review required in Part D.5 that modifications to the control measures are necessary to meet the effluent limits in this permit or that your control measures are not being properly operated and maintained; or
 - (4) Upon written notice by the Commissioner that the control measures prove to be ineffective in controlling pollutants in stormwater discharges exposed to industrial activity.

- b. If construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged, you must review and revise the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

7. Corrective Action Deadlines

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

8. Corrective Action Report

- a. Within 30 days of a discovery of any condition listed in Part I.D.6, you must document the following information:
 - (1) Brief description of the condition triggering corrective action;
 - (2) Date condition identified; and
 - (3) How deficiency identified.
- b. Within 120 days of discovery of any condition listed in Part I.D.6, you must document the following information:
 - (1) Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.D.6.b.(1), where you determine that corrective action is not necessary, the basis for this determination)
 - (2) Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;

(3) Date corrective action initiated; and

(4) Date corrective action completed or expected to be completed.

9. Inspections

The inspections in this Part must be conducted at this facility when the facility is operating. Any corrective action required as a result of an inspection or evaluation conducted under Part I.D.9. must be performed consistent with Part I.D.6 of this permit.

a. Monthly Site Compliance Inspection

The following areas shall be inspected monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

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

b. Quarterly Routine Facility Inspections

At least once during the calendar year, a routine facility inspection must be conducted while a discharge is occurring.

1. Routine Facility Inspection - At a minimum, quarterly routine inspections of the stormwater management measures and stormwater run-off conveyances. The routine inspections must be performed by qualified personnel with at least one member of your stormwater pollution prevention team.

2. Routine Facility Inspection Documentation – You must document the findings of each routine facility inspection performed and maintain this documentation within your SWPPP or have the on-site record keeping location referenced in the SWPPP. At a minimum, your documentation must include:
 - i. The inspection date and time;
 - ii. The name(s) and signature(s) of the inspectors;
 - iii. Weather information and a description of any discharges occurring at the time of the inspection;
 - iv. Any previously unidentified discharges of pollutants from the site;
 - v. Any control measures needing maintenance or repairs;
 - vi. Any failed control measures that need replacement;
 - vii. Any incidents of noncompliance observed; and
 - viii. Any additional control measures needed to comply with the permit requirements.

c. Annual Comprehensive Site Inspections

Comprehensive Site Inspection - Qualified personnel and at least one member of your Pollution Prevention Team shall conduct a comprehensive site inspection, at least once per calendar year, to confirm the accuracy of the description of potential pollution sources contained in the plan, determine the effectiveness of the plan, and assess compliance with the permit. Each Comprehensive Site Inspection shall include:

1. Each Comprehensive Site Inspection shall address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitator, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Considering monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for

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

2. Based on the results of the inspection, the description of potential pollutant sources identified in the SWPPP in accordance with Part I.E.2.b of this permit and pollution prevention measures and controls identified in the SWPPP in accordance with Part I.D.4. of this permit shall be revised as appropriate within the timeframes contained in Part I.D.7 of this permit.
3. A report summarizing the scope of the inspection, personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the stormwater pollution prevention plan, and actions taken in accordance with the above paragraph must be documented and either contained in, or have on-site record keeping location referenced in, the SWPPP at least 3 years after the date of the inspection. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the stormwater pollution prevention plan and this permit. The report shall be signed in accordance with the signatory requirements of Part II.C.6 of this permit.
4. Where the inspection schedules overlap under this section, the Comprehensive Site Inspection may be conducted in place of one such inspection.

E. STORMWATER POLLUTION PREVENTION PLAN

1. Development of Plan

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

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

ii. Contents

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

- a. Pollution Prevention Team -The plan shall list, by position title, the member or members of the facility organization as members of a Stormwater Pollution Prevention Team who are responsible for developing the stormwater pollution prevention plan (SWPPP) and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each stormwater pollution prevention team member. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.
- b. Description of Potential Pollutant Sources – The plan shall provide a description of areas at the site exposed to industrial activity and have a reasonable potential for stormwater to be exposed to pollutants. The plan shall identify all activities and significant materials (defined in 40 CFR 122.26(b)), which may potentially be significant pollutant sources. As a minimum, the plan shall contain the following:

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

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

(D) All known drinking water wells; and

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

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

(A) Type and typical quantity of materials present in the area.

(B) Methods of storage, including presence of any secondary containment measures.

(C) Any remedial actions undertaken in the area to eliminate pollutant sources or exposure of stormwater to those sources. If a corrective action plan was developed, the type of remedial action and plan date shall be referenced.

(D) Any significant release or spill history dating back a period of three (3) years from the effective date of this permit, in the identified area, for materials spilled outside of secondary containment structures and impervious surfaces in excess of their reportable quantity, including the following:

i. The date and type of material released or spilled.

ii. The estimated volume released or spilled.

iii. A description of the remedial actions undertaken, including disposal or treatment.

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

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

- (D) Describe areas that due to topography, activities, or other factors have a high potential for significant soil erosion.
 - (E) Document the location of any storage piles containing salt used for deicing.
 - (F) Information or other documentation required under Part I.E.2(d) of this permit.
- (6) The results of stormwater monitoring. The monitoring data must include completed field data sheets, chain-of-custody forms, and laboratory results. If the monitoring data are not placed into the facility's SWPPP, the on-site location for storage of the information must be reference in the SWPPP.
- (7) Drainage Area Site Map. Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).
- (8) Documentation of Good Housekeeping Measures. You must document in your SWPPP the good housekeeping measures implemented to meet the effluent limits in Part I.D.4 of this NPDES permit.
- c. Non-Stormwater Discharges – You must document that you have evaluated for the presence of non-stormwater discharges not authorized by an NPDES permit. Any non-stormwater discharges have either been eliminated or incorporated into this permit. Documentation of non-stormwater discharges shall include:
- (1) A written non-stormwater assessment, including the following:
 - (A) A certification letter stating that stormwater discharges entering a water of the state have been evaluated for the presence of illicit discharges and non-stormwater contributions.

- (B) Detergent or solvent-based washing of equipment or vehicles that would allow washwater additives to enter any stormwater only drainage system shall not be allowed at this facility unless appropriately permitted under this NPDES permit.
 - (C) All interior maintenance area floor drains with the potential for maintenance fluids or other materials to enter stormwater only storm sewers must be either sealed, connected to a sanitary sewer with prior authorization, or appropriately permitted under this NPDES permit. The sealing, sanitary sewer connecting, or permitting of drains under this item must be documented in the written non-stormwater assessment program.
 - (D) The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during the test.
- d. General Requirements – The SWPPP must meet the following general requirements:
- (1) The plan shall be certified by a qualified professional. The term qualified professional means an individual who is trained and experienced in water treatment techniques and related fields as may be demonstrated by state registration, professional certification, or completion of course work that enable the individual to make sound, professional judgments regarding stormwater control/treatment and monitoring, pollutant fate and transport, and drainage planning.
 - (2) The plan shall be retained at the facility and be available for review by a representative of the Commissioner upon request. IDEM may provide access to portions of your SWPPP to the public.
 - (3) The plan must be revised and updated as required. Revised and updated versions of the plan must be implemented on or before three hundred sixty-five (365) days from the effective date of this permit. The Commissioner may grant an extension of this time frame based on a request by the person showing reasonable cause.

- (4) If the permittee has other written plans, required under applicable federal or state law, such as operation and maintenance, spill prevention control and countermeasures (SPCC), or risk contingency plans, which fulfill certain requirements of an SWPPP, these plans may be referenced, at the permittee's discretion, in the appropriate sections of the SWPPP to meet those section requirements.
- (5) The permittee may combine the requirements of the SWPPP with another written plan if:
 - (A) The plan is retained at the facility and available for review;
 - (B) All the requirements of the SWPPP are contained within the plan; and
 - (C) A separate, labeled section is utilized in the plan for the SWPPP requirements.

F WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

To adequately assess the effects of the effluent on aquatic life, the permittee is required by this section of the permit to conduct chronic whole effluent toxicity (WET) testing. Part I.F.1. of this permit describes the testing procedures and Part I.F.2. describes the toxicity reduction evaluation (TRE) which is only required if the effluent demonstrates toxicity in two (2) consecutive toxicity tests as described in Part I.F.1.g.

1. Whole Effluent Toxicity (WET) Tests

The permittee must conduct the series of aquatic toxicity tests specified in Part I.F.1.d. using freshwater aquatic organisms as the test species to monitor the acute and chronic toxicity of the effluent discharged from Outfall 001.

If toxicity is demonstrated in two (2) consecutive toxicity tests, as described in Part I.F.1.g., with any test species during the term of the permit, the permittee is required to conduct a TRE under Part I.F.2.

a. Toxicity Test Procedures and Data Analysis

- (1) All test organisms, test procedures and quality assurance criteria used must be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, Section 11, Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test Method 1000.0, and Section 13, Daphnid (*Ceriodaphnia dubia*) Survival and Reproduction Test Method 1002.0, EPA 821-R-02-013, October 2002 (hereinafter "Chronic Toxicity Test Method"), or most recent update that conforms to the version of 40 CFR 136 incorporated by reference in 327 IAC 5. [References to specific portions of the Chronic Toxicity Test Method contained in this Part I.F. are provided for informational purposes. If the Chronic Toxicity Test Method is updated, the corresponding provisions of that updated method would be applicable.]
- (2) Any circumstances not covered by the above methods, or that require deviation from the specified methods must first be approved by the IDEM Office of Water Quality, Industrial NPDES Permits Section.
- (3) The determination of acute and chronic endpoints of toxicity (LC₅₀, NOEC and IC₂₅ values) must be made in accordance with the procedures in Section 9, "Chronic Toxicity Test Endpoints and Data Analysis" and the Data Analysis procedures as outlined in Section 11 for Fathead Minnow (Test Method 1000.0; see flowcharts in Figures 5, 6 and 9) and Section 13 for *Ceriodaphnia dubia* (Test Method 1002.0; see flowcharts in Figures 4 and 6) of the Chronic Toxicity Test Method. The IC₂₅ value together with 95% confidence intervals calculated by the Linear Interpolation and Bootstrap Methods in Appendix M of the Chronic Toxicity Test Method must be determined in addition to the NOEC value.

b. Types of Whole Effluent Toxicity Tests

- (1) Chronic toxicity tests include a 3-brood (7-day) definitive static-renewal daphnid (*Ceriodaphnia dubia*) survival and reproduction toxicity test and a 7-day definitive static-renewal Fathead Minnow (*Pimephales promelas*) larval survival and growth toxicity test.

- (2) All tests must be conducted using 24-hour composite samples of final effluent. For each test, three effluent samples are to be collected on alternate days (e.g., collected on days one, three and five). The first effluent sample will be used for test initiation and for test solution renewal on day 2. The second effluent sample will be used for test solution renewal on days 3 and 4. The third effluent sample will be used for test solution renewal on days 5, 6 and 7. If shipping problems are encountered with the second effluent sample after a test has been initiated, the test must be repeated. However, if shipping problems are encountered with the third effluent sample, the second effluent sample may continue to be used for test renewal on day 5. The third effluent sample will then be used for test solution renewal on days 6 and 7.
- (3) The whole effluent dilution series for the definitive test must include a control and at least five effluent concentrations with a minimum dilution factor of 0.5. The effluent concentrations selected must include and, if practicable, bracket the effluent concentrations associated with the determinations of acute and chronic toxicity provided in Part I.F.1.f. Guidance on selecting effluent test concentrations is included in Section 8.10 of the Chronic Toxicity Test Method. The use of an alternate procedure for selecting test concentrations must first be approved by the IDEM Office of Water Quality, Industrial NPDES Permits Section.
- (4) If, in any control, more than 10% of the test organisms die in the first 48 hours with a daphnid species or the first 96 hours with Fathead Minnow, or more than 20% of the test organisms die in 7 days, that test is considered invalid and the toxicity test must be repeated. In addition, if in the *Ceriodaphnia dubia* survival and reproduction test, the average number of young produced per surviving female in the control group is less than 15, or if 60% of surviving control females have less than three broods; and in the Fathead Minnow (*Pimephales promelas*) survival and growth test, if the mean dry weight of surviving fish in the control group is less than 0.25 mg, that test is considered invalid and must also be repeated. All other test conditions and test acceptability criteria for the Fathead Minnow (*Pimephales promelas*) and *Ceriodaphnia dubia* chronic toxicity tests must be in accordance with the test requirements in Section 11 (Test Method 1000.0), Table 1 and Section 13 (Test Method 1002.0), Table 3, respectively, of the Chronic Toxicity Test Method.

c. Effluent Sample Collection and Chemical Analysis

- (1) Whole effluent samples taken for the purposes of toxicity testing must be 24-hour composite samples collected at a point that is representative of the final effluent, but prior to discharge. Effluent sampling for the toxicity testing may be coordinated with other permit sampling requirements as appropriate to avoid duplication. First use of the whole effluent toxicity testing samples must not exceed 36 hours after termination of the 24-hour composite sample collection and must not be used for longer than 72 hours after first use. For discharges of less than 24 hours in duration, composite samples must be collected for the duration of the discharge within a 24-hour period (see "24-hour composite sample" definition in Part I.C.3. of this permit).
- (2) Chemical analysis must coincide with, and if test methods allow, be conducted on each effluent sample taken for toxicity testing, including each sample taken for the repeat testing as outlined in Part I.F.1.f.(3). The chemical analysis detailed in Part I.A.1 for TSS, Copper, and Mercury must be conducted for the effluent sample in accordance with Part I.C.4. of this permit. The results from these chemical analyses must be included with the full whole effluent toxicity (WET) test laboratory report submitted pursuant to Part I.F.1.e.(3).

d. Toxicity Testing Species, Frequency and Duration

Within 90 days of the effective date of the permit, the permittee must initiate chronic toxicity testing for *Ceriodaphnia dubia* and Fathead Minnow (*Pimephales promelas*). The testing, including any repeat tests required under Part I.F.f.(3), must be conducted monthly for an initial period of three (3) consecutive months.

If no toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.g., with either species during these three (3) months of testing, the permittee must then conduct chronic toxicity testing for *Ceriodaphnia dubia* and Fathead Minnow (*Pimephales promelas*) once quarterly, as calculated from six (6) months after the effective date of the permit, for the duration of the permit.

At any time following the initial period of testing, the permittee may request a reduction in the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. The permittee must submit this request to the IDEM Office of Water Quality, Compliance Data Section under Part I.F.1.e. IDEM will then make a determination on species sensitivity to effluent toxicity

and notify the permittee of its decision. If a reduction in species is approved, the Compliance Data Section will modify the toxicity testing requirements to reduce the number of species.

If a TRE is initiated during the term of the permit, after receiving notification under Part I.F.1.e, the Compliance Data Section will suspend the toxicity testing requirements above for the term of the TRE schedule described in Part I.F.2. After successful completion of the TRE, the toxicity tests established under Part I.F.2.c.(4) must be conducted once quarterly, as calculated from the first day of the first month following successful completion of the post-TRE toxicity tests (see Part I.F.2.c.(4)), for the remainder of the permit term.

e. Reporting

- (1) Requests to reduce the number of species tested to the one most sensitive to the toxicity in the effluent under Part I.F.1.d., or notifications of the failure of two (2) consecutive toxicity tests and the intent to begin the implementation of a toxicity reduction evaluation (TRE) under Part I.F.1.g. must be submitted in writing to the IDEM Office of Water Quality, Compliance Data Section.
- (2) Results of all toxicity tests, including invalid tests, must be reported to IDEM according to the general format and content recommended in the Chronic Toxicity Test Method, Section 10, "Report Preparation and Test Review". However, only the results of valid toxicity tests are to be reported on the discharge monitoring report (DMR). For the initial three (3) months of testing, the results of the toxicity tests and laboratory report are due by the 28th day of the month following the fourth, fifth and sixth months, as calculated from the effective date of the permit. Thereafter, the results of the toxicity tests and laboratory report are due by the earlier of 60 days after completion of the test or the 28th day of the month following the end of the testing period established in Part I.F.1.d.
- (3) The full whole effluent toxicity (WET) test laboratory report must be submitted electronically as an attachment to an e-mail to the IDEM Office of Water Quality, Compliance Data Section at wwreports@idem.IN.gov. The results must also be submitted via NetDMR.

- (4) For quality control and ongoing laboratory performance, the laboratory report must include results from appropriate standard reference toxicant tests. This will consist of acute (LC_{50} values), if available, and chronic (NOEC, LOEC and IC_{25} values) endpoints of toxicity obtained from reference toxicant tests conducted within 30 days of the most current effluent toxicity tests and from similarly obtained historical reference toxicant data with mean values and appropriate ranges for each species tested for at least three months to one year. Toxicity test laboratory reports must also include copies of chain-of-custody records and laboratory raw data sheets.
- (5) Statistical procedures used to analyze and interpret toxicity data (e.g., Fisher's Exact Test and Steel's Many-one Rank Test for 7-day survival of test organisms; tests of normality (e.g., Shapiro-Wilk's Test) and homogeneity of variance (e.g., Bartlett's Test); appropriate parametric (e.g., Dunnett's Test) and non-parametric (e.g., Steel's Many-one Rank Test) significance tests and point estimates (IC_{25}) of effluent toxicity, etc.; together with graphical presentation of survival, growth and reproduction of test organisms), including critical values, levels of significance and 95% confidence intervals, must be described and included as part of the toxicity test laboratory report.
- (6) For valid toxicity tests, the whole effluent toxicity (WET) test laboratory report must include a summary table of the results for each species tested as shown in the table presented below. This table will provide toxicity test results, reported in acute toxic units (TU_a) and chronic toxic units (TU_c), for evaluation under Part I.F.1.f. and reporting on the discharge monitoring report (DMR).

Test Organism [1]	Test Type	Endpoint [2]	Units	Result	Compliance Limit [6]	Pass/Fail [7]	Reporting
<i>Ceriodaphnia dubia</i>	3-brood (7-day) Definitive Static-Renewal Survival and Reproduction	48-hr. LC ₅₀	%	Report			Laboratory Report
			TU _a	Report			
		NOEC Survival	%	Report			
			TU _c	Report			
		NOEC Reproduction	%	Report			
			TU _c	Report			
		IC ₂₅ Reproduction	%	Report			
			TU _c	Report			
<i>Pimephales promelas</i>	7-day Definitive Static-Renewal Larval Survival and Growth	96-hr. LC ₅₀	%	Report			Laboratory Report
			TU _a	Report			
		NOEC Survival	%	Report			
			TU _c	Report			
		NOEC Growth	%	Report			
			TU _c	Report			
		IC ₂₅ Growth	%	Report			
			TU _c	Report			
		Toxicity (acute) [3]	TU _a	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61427)
		Toxicity (chronic) [4]	TU _c	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61428)

[1] For the whole effluent toxicity (WET) test laboratory report, eliminate from the table any species that was not tested.

[2] A separate acute test is not required. The endpoint of acute toxicity must be extrapolated from the chronic toxicity test.

[3] The toxicity (acute) endpoint for *Ceriodaphnia dubia* is the 48-hr. LC₅₀ result reported in acute toxic units (TU_a). The toxicity (acute) endpoint for *Pimephales promelas* is the 96-hr. LC₅₀ result reported in acute toxic units (TU_a).

[4] The toxicity (chronic) endpoint for *Ceriodaphnia dubia* is the higher of the NOEC Survival, NOEC Reproduction and IC₂₅ Reproduction values reported in chronic toxic units (TU_c). The

toxicity (chronic) endpoint for *Pimephales promelas* is the higher of the NOEC Survival, NOEC Growth and IC₂₅ Growth values reported in chronic toxic units (TU_c).

[5] Report the values for acute and chronic endpoints of toxicity determined in [3] and [4] for the corresponding species. These values are the ones that need to be reported on the discharge monitoring report (DMR).

[6] An exceedance of any of these values results in a demonstration of toxicity that requires the permittee to take the actions set forth in either Part I.F.1.f. or Part I.F.1.g., as applicable.

[7] If the toxicity result (in TUs) is less than or equal to the compliance limit, report "Pass". If the toxicity result (in TUs) exceeds the compliance limit, report "Fail".

f. Demonstration of Toxicity

- (1) Toxicity (acute) will be demonstrated if the effluent is observed to have exceeded 1.0 TU_a (acute toxic units) for *Ceriodaphnia dubia* in 48 hours or in 96 hours for *Pimephales promelas*. For this purpose, a separate acute toxicity test is not required. The results for the acute toxicity demonstration must be extrapolated from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.F.1.b.(3), the effluent concentration associated with acute toxicity is 100%.
- (2) Toxicity (chronic) will be demonstrated if the effluent is observed to have exceeded 1.0 TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas* from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.F.1.b.(3), the effluent concentration associated with chronic toxicity is 100%.
- (3) If toxicity (acute) or toxicity (chronic) is demonstrated in any of the chronic toxicity tests specified at (1) or (2), above, a repeat chronic toxicity test using the procedures in Part I.F.1. of this permit and the same test species must be initiated within two (2) weeks of test failure, or as soon thereafter as practicable. During the sampling for any repeat tests, the permittee must also collect and preserve sufficient effluent samples for use in any toxicity identification evaluation (TIE) and/or toxicity reduction evaluation (TRE), if necessary.

g. Requirement to Conduct a Toxicity Reduction Evaluation

If any two (2) consecutive chronic toxicity tests, including any and all repeat tests, demonstrate acute or chronic toxicity for the same or the other test species under Part I.F.1.f., the permittee must notify the IDEM Office of Water Quality, Compliance Data Section under Part I.F.1.e. within 30 days of the date of termination of the second test, and begin the implementation of a toxicity reduction evaluation (TRE) as described in Part I.F.2. After receiving notification from the permittee, the Compliance Data Section will suspend the whole effluent toxicity testing requirements in Part I.F.1. for the term of the TRE schedule.

h. Definitions

- (1) "Acute toxic unit" or "TU_a" is defined as $100/LC_{50}$ where the LC_{50} is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.
- (2) "Chronic toxic unit" or "TU_c" is defined as $100/NOEC$ or $100/IC_{25}$, where the NOEC or IC_{25} are expressed as a percent effluent in the test medium.
- (3) "Inhibition concentration 25" or "IC₂₅" means the toxicant (effluent) concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the test population. For example, the IC_{25} is the concentration of toxicant (effluent) that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.
- (4) "No observed effect concentration" or "NOEC" is the highest concentration of toxicant (effluent) to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant (effluent) in which the values for the observed responses are not statistically significantly different from the controls.

2. Toxicity Reduction Evaluation (TRE) Schedule

The development and implementation of a TRE is only required if toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.g. The post-TRE toxicity testing requirements in Part I.F.2.c. must also be completed as part of the TRE schedule.

Milestone Dates: See a. through e. below for more detail on the TRE milestone dates.

Requirement	Deadline
Development and Submittal of a TRE Plan	Within 90 days of the date of two (2) consecutive failed toxicity tests (i.e., the date of termination of the second test).
Initiate a TRE Study	Within 30 days of TRE Plan submittal.
Submit TRE Progress Reports	Every 90 days beginning six (6) months from the date of two (2) consecutive failed toxicity tests (i.e., the date of termination of the second test).
Post-TRE Toxicity Testing Requirements	Immediately upon completion of the TRE, conduct three (3) consecutive months of toxicity tests with both test species; if no acute or chronic toxicity is shown with any test species, reduce toxicity tests to once quarterly for the remainder of the permit term. If post-TRE toxicity testing demonstrates toxicity, continue the TRE study.
Submit Final TRE Report	Within 90 days of successfully completing the TRE (including the post-TRE toxicity testing requirements), not to exceed three (3) years from the date that toxicity is initially demonstrated in two (2) consecutive toxicity tests (i.e., the date of termination of the second test).

a. Development of TRE Plan

Within 90 days of the date of two (2) consecutive failed toxicity tests (i.e., the date of termination of the second test), the permittee must submit plans for an effluent TRE to the IDEM Office of Water Quality, Compliance Data Section. The TRE plan must include appropriate measures to reduce toxicity in the effluent discharge to levels that demonstrate no toxicity with any test species as described in Part I.F.1.f. Guidance on conducting effluent toxicity reduction evaluations, including toxicity identification evaluations (TIEs) to characterize and identify the causative toxicants, if necessary, is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

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

Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080), September 1993.

Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (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) Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program, U.S. EPA, March 27, 2001.

b. Conduct the TRE

Within 30 days after submittal of the TRE plan to the Compliance Data Section, the permittee must initiate the TRE consistent with the TRE plan.

c. Post-TRE Toxicity Testing Requirements

(1) After completing the TRE, the permittee must conduct monthly post-TRE toxicity tests with the two (2) test species *Ceriodaphnia dubia* and Fathead Minnow (*Pimephales promelas*) for a period of three (3) consecutive months.

(2) If the three (3) monthly tests demonstrate no toxicity with any test species as described in Part I.F.1.f.(1) and f.(2), the TRE will be considered successful. Otherwise, the TRE study must be continued.

- (3) The post-TRE toxicity tests must be conducted in accordance with the procedures in Part I.F.1. The results of these tests must be submitted as part of the final TRE Report required under Part I.F.2.d.
- (4) After successful completion of the TRE, the permittee must resume the chronic toxicity tests required in Part I.F.1. The permittee may request in the final TRE report under Part I.F.2.d.(2) a reduction in the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. IDEM will then make a determination on species sensitivity to effluent toxicity and notify the permittee of its decision as part of the TRE approval. The established starting date for the frequency in Part I.F.1.d. is the first day of the first month following successful completion of the post-TRE toxicity tests.

d. Reporting

- (1) Progress reports must be submitted every 90 days to the IDEM Office of Water Quality, Compliance Data Section beginning six (6) months from the date of two (2) consecutive failed toxicity tests (i.e., the date of termination of the second test). Each TRE progress report must include a listing of proposed activities for the next quarter and a schedule to reduce toxicity in the effluent discharge to acceptable levels through control of the toxicant source or treatment of whole effluent.
- (2) Within 90 days of successfully completing the TRE, including the three (3) consecutive monthly tests required as part of the post-TRE toxicity testing requirements in Part I.F.2.c., the permittee must submit to the IDEM Office of Water Quality, Compliance Data Section a final TRE Report that includes the following:
 - (A) A discussion of the TRE results.
 - (B) The starting date established under Part I.F.2.c.(4) for the continuation of the toxicity testing required in Part I.F.1.
 - (C) If applicable, a request to reduce the number of species tested to the one most sensitive to the toxicity in the effluent under Part I.F.2.c.(4).

e. Compliance Date

The permittee must complete items a., b., c. and d. from Part I.F.2. and reduce toxicity in the effluent discharge to acceptable levels as soon as possible, but no later than three (3) years from the date that toxicity is initially demonstrated in two (2) consecutive toxicity tests (i.e., the date of termination of the second test) as described in Part I.F.1.f.g.

G. POLLUTANT 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 Total Residual Chlorine.

- 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 ninety (90) days of the effective date of this permit.
 - (2) Implementation of appropriate cost-effective control measures, consistent with the control strategy within one hundred and eighty (180) 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 pollutant 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 pollutant minimization program is required if the permittee demonstrates that the discharge of a pollutant with a WQBEL below the LOQ is reasonably expected to be in compliance with the WQBEL at the point of discharge into the receiving water. This demonstration may include, but is not limited to, the following:
 - (1) Treatment information, including information derived from modeling the destruction or removal of the pollutant in the treatment process.
 - (2) Mass balance information.
 - (3) Fish tissue studies or other biological studies.
- c. In determining appropriate cost-effective control measures to be implemented in a pollution minimization program, the following factors may be considered:
 - (1) Significance of sources.
 - (2) Economic and technical feasibility.
 - (3) Treatability.

H. REOPENING CLAUSES

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

1. to comply with any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
 - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. controls any pollutant not limited in the permit.
2. for any of the causes listed under 327 IAC 5-2-16.
3. to include Whole Effluent Toxicity (WET) limitations or to include limitations for specific toxicants if the results of the WET testing and/or the Toxicity Reduction Evaluation (TRE) study indicate that such limitations are necessary.
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 reduce the mercury monitoring frequency if twelve (12) months (six (6) consecutive samples) of monitoring data demonstrate there is not a reasonable potential for mercury to exceed Indiana water quality standards; or to include effluent limitations for mercury, if mercury is found to be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above the mercury water quality criterion.
7. 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.

8. to include revised Streamlined Mercury Variance (SMV) and/or Pollutant Minimization Program Plan (PMPP) requirements.
9. to comply with any applicable standards, regulations and requirements issued or approved under section 316(b) of the Clean Water Act. This includes but is not limited to any revisions needed to reflect a change in the selected impingement mortality BTA.

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 all of the following occur:

- 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.

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

- a. 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:
 1. Violation of any terms or conditions of this permit;
 2. 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

3. 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.
- b. 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.
- c. 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(e), a person who willfully or negligently violates any NPDES permit condition or filing requirement, or any applicable standards or limitations of IC 13-18-3-2.4, IC 13-18-4-5, IC 13-18-12, IC 13-18-14, IC 13-18-15, or IC 13-18-16, commits a Class A misdemeanor.

Pursuant to IC 13-30-10-1.5(i), an offense under IC 13-30-10-1.5(e) is a Level 4 felony if the person knowingly commits the offense and knows that the commission of the offense places another person in imminent danger of death or serious bodily injury. The offense becomes a Level 3 felony if it results in serious bodily injury to any person, and a Level 2 felony if it results in death to any person.

Pursuant to IC 13-30-10-1.5(g), a person who willfully or recklessly violates any applicable standards or limitations of IC 13-18-8 commits a Class B misdemeanor.

Pursuant to IC 13-30-10-1.5(h), a person who willfully or recklessly violates any applicable standards or limitations of IC 13-18-9, IC 13-18-10, or IC 13-18-10.5 commits a Class C misdemeanor.

Pursuant to IC 13-30-10-1, a person who knowingly or intentionally makes any false material statement, representation, or certification in any NPDES form, notice, or report commits a Class B misdemeanor.

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, (b) tampers with, falsifies, or renders inaccurate or inoperative a recording or monitoring device or method, including the data gathered from the device or method, or (c) makes a false material statement or representation in any label, manifest, record, report, or other document; all required to be maintained under the terms of 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

Pursuant to IC 13-18-11-11 and 327 IAC 5-23-6, a permittee's wastewater treatment plant must be under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as determined under 327 IAC 5-23-4.

A certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant if the requirements under 327 IAC 5-23-7(b) are met. "Operator in responsible charge" is defined at 327 IAC 5-23-2(16).

Pursuant to 327 IAC 5-23-6(4)(A), the permittee shall notify IDEM when there is a change in 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 and submitted via e-mail to the Compliance Data Section of the Office of Water Quality at WWReports@idem.IN.gov.

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

16. New or Increased Discharge of Pollutants into an OSRW

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

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

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

B. MANAGEMENT REQUIREMENTS

1. Proper Operation and Maintenance

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

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

2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(12), the following are requirements for bypass:

- a. The following definitions:

- (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 contained in this permit, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to Part II.B.2.c. and d.
- c. 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) As required by 327 IAC 5-2-8(11)(C), the permittee shall orally report an unanticipated bypass that exceeds any effluent limitations in the permit within twenty-four (24) hours from the time the permittee becomes aware of such noncompliance. A written submission shall also be provided within five (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 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 noncompliance. If a complete report is submitted by e-mail within 24 hours of the noncompliance, then that e-mail report will satisfy both the oral and written reporting requirement. E-mails should be sent to wwreports@idem.in.gov.
- d. The following provisions are applicable to bypasses:
- (1) Except as provided by Part II.B.2.b., bypass is prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless the following occur:

- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. 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.
 - (C) The permittee submitted notices as required under Part II.B.2.c.
- (2) 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.d.(1). The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.
- e. 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.

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. or
- d. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: Copper, Total Chromium, Zinc

The permittee can make the oral reports by calling (317)232-8670 during regular business hours and asking for the Compliance Data Section 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 52415), whichever is appropriate, to IDEM at (317) 232-8637 or wwreports@idem.in.gov. If a complete e-mail submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the email report will satisfy both the oral and written reporting requirements.

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.

5. Other Information

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

6. Signatory Requirements

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

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

- (1) For a corporation: by a responsible corporate officer. A “responsible corporate officer” means either of the following:
 - a. A president, secretary, treasurer, any vice president of the corporation in charge of a principal business function, or any other person who performs similar policymaking or decision making functions for the corporation; or
 - b. 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 governmental 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 327 IAC 5-2-9, the permittee shall notify the Commissioner as soon as it knows or has reason to know:

- a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant that is not limited in the permit if that discharge will exceed the highest of the following notification levels.
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/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 the Commissioner's 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 it has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant that was not reported in the permit application under 40 CFR 122.21(g)(9). However, this subsection b. does not apply to the permittee's use or manufacture of a toxic pollutant solely under research or laboratory conditions.

10. Future Electronic Reporting Requirements

IDEM is currently developing the technology and infrastructure necessary to allow compliance with the EPA Phase 2 e-reporting requirements per 40 CFR 127.16 and to allow electronic reporting of applications, notices, plans, reports, and other information not covered by the federal e-reporting regulations. IDEM will notify the permittee when IDEM's e-reporting system is ready for use for one or more applications, notices, plans, reports, or other information. This IDEM notice will identify the specific applications, notices, plans, reports, or other information that are to be submitted electronically and

the permittee will be required to use the IDEM electronic reporting system to submit the identified application(s), notice(s), plan(s), report(s), or other information. See Part I.C.2. of this permit for the current electronic reporting requirements for the submittal of monthly monitoring reports such as the Discharge Monitoring Report (DMR) and the Monthly Monitoring Report (MMR).

PART III
Other Requirements

A. Polychlorinated Biphenyl

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>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Total PCBs*	608	0.1 ug/l	0.3 ug/l

*Total PCBs is the sum of the following aroclors: PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260

B. Additional Conditions for Steam Electric Power Generating Sources

1. An electric generating unit shall qualify as a low utilization electric generating unit or permanently ceasing the combustion of coal by December 31, 2028, if such qualification would have been demonstrated absent the following qualifying event:
 - a. An emergency order issued by the Department of Energy under Section 202(c) of the Federal Power Act,
 - b. A reliability must run agreement issued by a Public Utility Commission, or
 - c. Any other reliability-related order or agreement issued by a competent electricity regulator (e.g., an independent system operator) which results in that electric generating unit operating in a way not contemplated when the certification was made; or
 - d. The operation of the electric generating unit was necessary for load balancing in an area subject to a declaration under 42 U.S.C. 5121 *et seq.*, that there exists:
 - (1) An "Emergency," or
 - (2) A "Major Disaster," and

- (3) That load balancing was due to the event that caused the “Emergency” or “Major Disaster” in paragraph 1.d. of this section to be declared,
- 2. Any facility providing the required documentation pursuant to §423.19(g) may avail itself of the protections of this permit condition.

Part IV Cooling Water Intake Structures

A. Best Technology Available (BTA) Determination

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

The EPA promulgated a CWA section 316(b) regulation on August 15, 2014, which became effective on October 14, 2014. 79 Fed. Reg. 48300-439 (August 15, 2014). This regulation established application requirements and standards for cooling water intake structures. The regulation is applicable to point sources with a cumulative design intake flow (DIF) greater than 2 MGD where 25% or more of the water withdrawn (using the actual intake flow (AIF)) is used exclusively for cooling purposes. All existing facilities subject to these regulations must submit the information required by 40 CFR 122.21(r)(2)–(r)(8) and facilities with an actual intake flow of greater than 125 MGD must also submit the information required by 40 CFR 122.21(r)(9)–(r)(13). The regulation establishes best technology available standards to reduce impingement and entrainment of aquatic organisms at existing power generation and manufacturing facilities.

Based on available information, IDEM has made a Best Technology Available (BTA) impingement and entrainment determination.

The permittee has chosen the impingement compliance alternative at 40 CFR 125.94(c)(2). Under this alternative, the permittee must operate a cooling water intake structure that has a maximum design through-screen intake velocity of 0.5 fps. The maximum velocity must be achieved under all conditions including during minimum ambient source water surface elevations and during periods of maximum head loss across the screens or other devices during normal operation of the intake structure.

The MCGS intake has a through-screen design intake velocity of 0.26 fps which is below the maximum through screen velocity of 0.5 fps under this alternative; therefore, IDEM has determined that the permittee's intake meets BTA for impingement.

IDEM has determined that the existing facility meets BTA for entrainment. Primary in this entrainment BTA determination is that the facility will cease operations no later than December 31, 2028 and the permittee does have a single parabolic draft cooling tower which has allowed the permittee to achieve reductions in water usage.

These determinations will be reassessed at the next permit reissuance to ensure that the CWISs continue to meet the requirements of Section 316(b) of the federal Clean Water Act (33 U.S.C. section 1326).

B. Permit Requirements

The permittee shall comply with requirements below:

1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.
2. The permittee must at all times properly operate and maintain the cooling water intake structure and associated intake equipment.
3. The permittee must inform IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.
4. Any discharge of intake screen backwash must meet the Minimum Narrative Limitations contained in Part I.B of the permit. There must be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.
5. The permittee must either conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather).
6. In accordance with 40 CFR 125.97(c), by January 31 of each year, the permittee must submit to the Industrial NPDES Permit Section IDEM-OWQ an annual certification statement for the preceding calendar year signed by the responsible corporate officer as defined in 40 CFR 122.22 (see 327 IAC 5-2-22) subject to the following:
 - a. If the information contained in the previous year's annual certification is still pertinent, you may simply state as such in a letter to IDEM and the letter, along with any applicable data submission requirements specified in this section shall constitute the annual certification.
 - b. If you have substantially modified operation of any unit at your facility that impacts cooling water withdrawals or operation of your cooling water intake structures, you must provide a summary of those changes in the report. In addition, you must submit revisions to the information required at 40 CFR 122.21(r) in your next permit application.

7. BTA determinations for entrainment mortality and impingement mortality at cooling water intake structures will be made in each permit reissuance in accordance with 40 CFR 125.90-98. The permittee must submit all the information required by the applicable provisions of 40 CFR 122.21(r)(2) through (r)(8) with the next renewal application. Since the permittee has submitted the studies required by 40 CFR 122.21(r), the permittee may, in subsequent renewal applications pursuant to 40 CFR 125.95(c), request to reduce the information required if conditions at the facility and in the waterbody remain substantially unchanged since the previous application so long as the relevant previously submitted information remains representative of the current source water, intake structure, cooling water system, and operating conditions. Any habitat designated as critical or species listed as threatened or endangered after issuance of the current permit whose range of habitat or designated critical habitat includes waters where a facility intake is located constitutes potential for a substantial change that must be addressed by the owner/operator in subsequent permit applications, unless the facility received an exemption pursuant to 16 U.S.C. 1536(o) or a permit pursuant to 16 U.S.C. 1539(a) or there is no reasonable expectation of take. The permittee must submit the request for reduced cooling water intake structure and waterbody application information at least **two years and six months** prior to the expiration of the NPDES permit. The request must identify each element in this subsection that it determines has not substantially changed since the previous permit application and the basis for the determination. IDEM has the discretion to accept or reject any part of the request.
8. The permittee shall submit and maintain all the information required by the applicable provisions of 40 CFR 125.97.
9. The permittee must keep records of all submissions that are part of its permit application until the subsequent permit issued to document compliance with 40 CFR 125.95. If IDEM approves a request for reduced permit application studies under 40 CFR 125.95(a) or (c) or 40 CFR 125.98(g), the permittee must keep records of all submissions that are part of the previous permit application until the subsequent permit is issued.
10. All required reports must be submitted to the IDEM, Office of Water Quality, NPDES Permits Branch, Industrial NPDES Permit Section at OWQWWPER@idem.in.gov and the Compliance Branch at wwReports@idem.in.gov.

Part V Streamlined Mercury Variance (SMV)

Introduction

The permittee submitted an application for a renewed streamlined mercury variance (SMV) on October 1, 2025 in accordance with the provisions of 327 IAC 5-3.5. The SMV establishes a streamlined process for obtaining a variance from a water quality criterion used to establish a WQBEL for mercury in an NPDES permit. Based on a review of the SMV application, IDEM has determined the application to be complete as outlined in 327 IAC 5-3.5-4(e). Therefore, the SMV is being incorporated into the NPDES permit in accordance with 327 IAC 5-3.5-6.

Term of SMV

The SMV and the interim discharge limit included in Part I.A.1., Discharge limitations Table, will remain in effect until the NPDES permit expires under IC 13-14-8-9 (amended under SEA 620, May 2005). Pursuant to IC 13-14-8-9(e), when the NPDES permit is extended under IC 13-15-3-6 (administratively extended), the SMV will remain in effect as long as the NPDES permit requirements affected by the SMV are in effect.

Annual Reports

The annual report is a condition of the Pollutant Minimization Program Plan (PMPP) requirements of 327 IAC 5-3.5-9(a)(8). The annual report must describe the permittee's progress toward fulfilling each PMPP requirement, the results of all mercury monitoring within the previous year, and the steps taken to implement the planned activities outlined under the PMPP. The annual report may also include documentation of chemical and equipment replacements, staff education programs, and other initiatives regarding mercury awareness or reductions. The complete inventory and complete evaluation required by the PMPP may be submitted as part of the annual report.

The permittee will submit the annual reports to IDEM on the anniversary of the effective date of this NPDES permit renewal, as indicated on Page 1 of this permit. Annual Reports should be submitted to the Office of Water Quality, Industrial NPDES Permit Section at OWQWWPER@idem.in.gov and the Compliance Branch at wwReports@idem.in.gov.

SMV Renewal

As authorized under 327 IAC 5-3.5-7(a)(1), the permittee may apply for the renewal of an SMV at any time within 180 days prior to the expiration of the NPDES permit. In accordance with 327 IAC 5-3.5-7(c), an application for renewal of the SMV must contain the following:

- All information required for an initial SMV application under 327 IAC 5-3.5-4, including revisions to the PMPP, if applicable.
- A report on implementation of each provision of the PMPP.
- An analysis of the mercury concentrations determined through sampling at the facility's locations that have mercury monitoring requirements in the NPDES permit for the two (2) year period prior to the SMV renewal application.
- A proposed alternative mercury discharge limit, if appropriate, to be evaluated by the department according to 327 IAC 5-3.5-8(b) based on the most recent two (2) years of representative sampling information from the facility.

Renewal of the SMV is subject to a demonstration showing that PMPP implementation has achieved progress toward the goal of reducing mercury from the discharge.

Pollutant Minimization Program Plan (PMPP)

The PMPP is a requirement of the SMV application and is defined in 327 IAC 5-3.5-3(4) as the plan for development and implementation of Pollutant Minimization Program (PMP). The PMP is defined in 327 IAC 5-3.5-3(3) as the program developed by an SMV applicant to identify and minimize the discharge of mercury into the environment. PMPP requirements (including the enforceable parts of the PMPP) are outlined in 327 IAC 5-3.5-9. In accordance with 327 IAC 5-3.5-6, the permittee's PMPP is hereby incorporated within this permit below:

Planned Action	Action Type	Goal	Measure of Performance	Schedule of Action	Progress
Complete Inventory		Finalize inventory.	Submittal of completed inventory to IDEM.	With 6 months of SMV approval.	Completed. Updated as needed.
Review of Purchasing Procedures	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Restrict or eliminate (as practicable) the purchase of mercury containing chemicals and equipment.	Adoption/Implementation of Purchasing Procedures which are specific to the mercury content of materials.	Within 9 months of SMV approval.	The mercury content of all new or changed bulk chemicals is reviewed before the chemical is purchased.
Awareness Training	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Continued education and awareness.	Conductance of annual training and record keeping.	Currently implemented, ongoing.	No change
Good Housekeeping Program	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Increased awareness and reduced possibility of accidental spills and releases.	Conductance of annual training and record keeping.	Currently implemented, ongoing.	No change
Maintenance Activities	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Proper and safe-handling during maintenance activities.	Implement procedures to minimize release of mercury from mercury-containing chemicals and equipment during maintenance activities.	Currently implemented, ongoing.	No change
Maintenance Activities / Disposal Practices	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Review of the Mercury Containing Regulator Removal Procedure for opportunities for improvement or expansion to include additional devices beyond mercury containing regulators.	Adoption/Implementation of Procedures that address removal practices for other mercury containing equipment.	Within 9 months of SMV approval.	A procedure for the handling of mercury containing devices has been implemented.
Emergency Spill Response	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Safe and proper spill response for dealing with chemical spills.	Conductance of annual training and record keeping.	Currently implemented, ongoing.	No change
Disposal Practices of Mercury-Containing Items: Lighting Waste	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	As available, replacement of spent bulbs and lamps with low-mercury versions. In addition, track the quantity of mercury that is properly disposed of and removed from the site.	Disposal records.	Currently implemented. Updates will be provided as part of the Annual Progress Report.	Replacement of spent bulbs with low mercury versions is continuing.
Disposal Practices of Mercury-Containing Items: Out-of-Service Equipment	Type 3: Awareness, Accidental Release Prevention, and Waste Minimization	Removal and proper disposal of mercury from out-of service equipment.	Disposal records.	Currently implemented. Updates will be provided as part of the Annual Progress Report.	Replacement of mercury from out-of- service equipment is an ongoing process.

Alternatives for Reduction Evaluation	Type 2: Alternatives for Reduction Evaluation	Develop a process to evaluate alternatives to in-service mercury-containing chemicals or equipment.	Implementation of the process.	Within 9 months of SMV approval.	The mercury content of all new of changed bulk chemicals is reviewed before the chemical is purchased. A review of mercury containing equipment is conducted at the time of its replacement to see if a non-mercury equivalent is available.
Source Characterization: Bulk ^(A) and Other ^(B) Chemicals	Type 1: Source Characterization	Estimate the amount and magnitude of mercury from bulk chemicals via direct sampling, literature review, and/or vendor information.	Documentation that mercury has been quantified.	Within 9 months of SMV approval and ongoing after that.	Completed (See Inventory)
Source Characterization: Mercury-Containing Items	Type 1: Source Characterization	Estimate the amount and magnitude of mercury from mercury-containing items via direct sampling, literature review, and/or vendor information.	Documentation that mercury has been quantified.	Currently implemented. Updates will be provided as part of the Annual Progress Report.	Completed (See Inventory)
Outfall 001 Source Characterization	Type 1: Source Characterization	Investigate solids build-up throughout specific components and selected areas of the service water system.	Documentation of investigation.	Currently implemented, ongoing.	No change
Outfall 001 Alternatives for Reduction Evaluation	Type 1: Source Characterization	Investigate replacement chemicals for Bentonite which is used in conjunction with Clamtrol during Zebra Mussel control.	Documentation of evaluation.	Currently implemented, ongoing.	Zebra Mussel control has not occurred during the past several years. No effective alternative chemicals were identified but will be looked into if zebra mussel control resumes.
Outfall 001 Source Characterization	Type 1: Source Characterization	Perform periodic mercury monitoring of internal Outfalls 101 and 201 for comparison to historical data.	Documentation of evaluation.	Revised Activity. Minimum frequency: Once every 5 years	Last completed in 2025; Ongoing
Outfall 001 Source Characterization	Type 1: Source Characterization	Perform periodic mercury monitoring of internal Outfall 301 (infrequently discharges).	Documentation of evaluation.	Revised Activity. Minimum frequency: Once every 5 years (as feasible pending frequency of discharge)	Last completed in 2020; Ongoing as feasible (planned for next discharge event)

Outfall 001 Source Characterization	Type 1: Source Characterization	Perform periodic mercury monitoring of internal Outfall 601 (infrequently discharge) for comparison to historical data.	Documentation of evaluation.	Revised Activity. Minimum frequency: Once every 5 years (as feasible pending frequency of discharge)	Last completed in 2025; Ongoing as feasible.
Outfall 001 Source Characterization	Type 1: Source Characterization	Perform periodic mercury monitoring of the Trail Creek Intake waters for comparison to historical data.	Documentation of evaluation.	Revised Activity. Minimum frequency: Once every 5 years	Last completed in 2024; Ongoing
Outfall 001 Source Characterization	Type 1: Source Characterization	Retesting of internal Outfall 201 for comparison to historical data.	Documentation of evaluation.	New Activity. Complete before the next annual report (Apr 1, 2026)	Planned



**National Pollutant Discharge Elimination System
Fact Sheet for
NIPSCO – Michigan City Generating Station
Draft: July 2026
Final: TBD**

Indiana Department of Environmental Management

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

Permittee:	Northern Indiana Public Service Company LLC (NIPSCO) 801 East 86 th Avenue Merrillville, Indiana 46410
Existing Permit Information:	Permit Number: IN0000116 Expiration Date: March 31, 2026
Facility Contact:	Nikki Goodson, Team Leader Environmental (219) 851-3654, ngoodson@nisource.com
Facility Location:	101 West Wabash Street Michigan City, Indiana 46360 LaPorte County
Receiving Stream(s):	Lake Michigan, Trail Creek
GLI/Non-GLI:	GLI
Proposed Permit Action:	Renew
Date Application Received:	October 1, 2025
Source Category:	NPDES Major – Industrial
Permit Writer:	Jodi Wray (317) 234-9739; jwray@idem.in.gov

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1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from NIPSCO – Michigan City Generating Station on October 1, 2025.

In accordance with 327 IAC 5-2-6(a), the current five-year permit was issued with an effective date of April 1, 2021. A five year permit is proposed in accordance with 327 IAC 5-2-6(a).

The Federal Water Pollution Control Act (more commonly known as the Clean Water Act), as amended, (Title 33 of the United States Code (U.S.C.) Section 1251 *et seq.*), requires an NPDES permit for the discharge of pollutants into surface waters. Furthermore, Indiana law 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 and implements these 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 Title 327 of the Indiana Administrative Code (IAC) Article 5-3-8, a Fact Sheet is required for certain NPDES permits. This document fulfills the requirements established in these 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, Indiana water quality standards-based wasteload allocations, and other information available to IDEM. Decisions to award variances to Water Quality Standards or promulgated effluent guidelines are justified in the Fact Sheet where necessary.

2.0 FACILITY DESCRIPTION

2.1 General

NIPSCO – Michigan City Generating Station (MCGS) is classified under Standard Industrial Classification (SIC) Code 4911 – Electric Services.

The facility is an electric power generating facility that utilizes coal fired boilers to convert water into high pressure steam which is then used to drive turbines to generate electricity via electrical generators. The plant consists of one (1) generating unit (#12) with a generating capacity of 469 MW. The condensers associated with Unit 12 use recycled cooling water, which is generated in a Marley Parabolic natural draft cooling tower. A Dry Flue Gas Desulfurization unit is installed on Unit 12. Cooling tower blowdown is utilized as the source of water for this closed loop system. As part of activities for compliance with Disposal of Coal Combustion Residuals from Electric Utilities rule (CCR Rule), MCGS has terminated the use of ash ponds and has converted to a closed loop ash handling system. No ash/sludge wastewater is discharged from the facility. The source water for the electric power generation processes is Trail Creek and the source water for the boilers is municipal water. A map showing the location of the facility has been included as Figure 1.

2.2 Outfall Locations

Outfall 001	Latitude: 41° 43' 21" Longitude: -86° 54' 44"
Outfall 002	Latitude: 41° 43' 17" Longitude: -86° 54' 25"

In order to comply with Office policy on rounding, the GPS coordinates for Outfall 001 have been changed to round the 'seconds' portion of the measurement to the nearest whole number. However, the physical location of the outfall has not changed.

2.3 Descriptions of Outfalls and Wastewater Treatment

The MCGS has two external outfalls and four internal outfalls. All internal outfalls discharge through Outfall 001. A description of the wastewater discharged through each outfall and any treatment utilized is included below. A Water Balance Diagram has been included as Figure 2.

Outfall 001 is the main outfall for the facility and discharges into Lake Michigan. Outfall 001 is comprised of the discharges from Outfalls 101, 201, 301, 601, stormwater and groundwater.

Internal Outfall 101 consists of oil-water separator treated stormwater and low volume wastes (i.e., wastewaters from sumps, floor drains, etc. associated with Unit #12 operations). Treatment at Internal Outfall 101 includes sedimentation.

Internal Outfall 201 consists of cooling tower blowdown. There is no treatment provided.

Internal Outfall 301 is the overflow from the Final Pond. Waters routed to the Final Pond are coal pile runoff, stormwater from the cooling tower area, groundwater, and low volume wastes (i.e., wastewaters associated with water treatment, boiler blowdown, and sumps/drains). These waters are normally reused/recycled internally but Final Pond overflow as Internal Outfall 301 can discharge to Outfall 001. Treatment at Internal Outfall 301 includes sedimentation in the Final Pond.

Internal Outfall 601 consists of treated non-chemical metal cleaning wastewaters. The exact physical treatment technology (e.g., hydrocyclones, carbon filtration, etc.) applied varies based on the subcontractor utilized.

Outfall 002 is comprised solely of stormwater from the coal conveyer system and the main parking lot. Outfall 002 discharges to Trail Creek. There is no treatment provided.

Figure 2: Water Balance Diagram

Color Key:

- ◆ Stormwater and/or Groundwater
- ◆ Ash/Slag Transport Sluice Water
- ◆ Coal Pile Runoff
- ◆ Service / Re-use / Cooling Tower Makeup
- ◆ Non-Chemical Metal Cleaning WW
- ◆ Cooling Tower Blowdown
- ◆ Low Volume WW

Representative Average Flows

Based on April 2021 to May 2025 Period

Outfall 001 = 7.44 MGD

Outfall 101 = 0.008 MGD

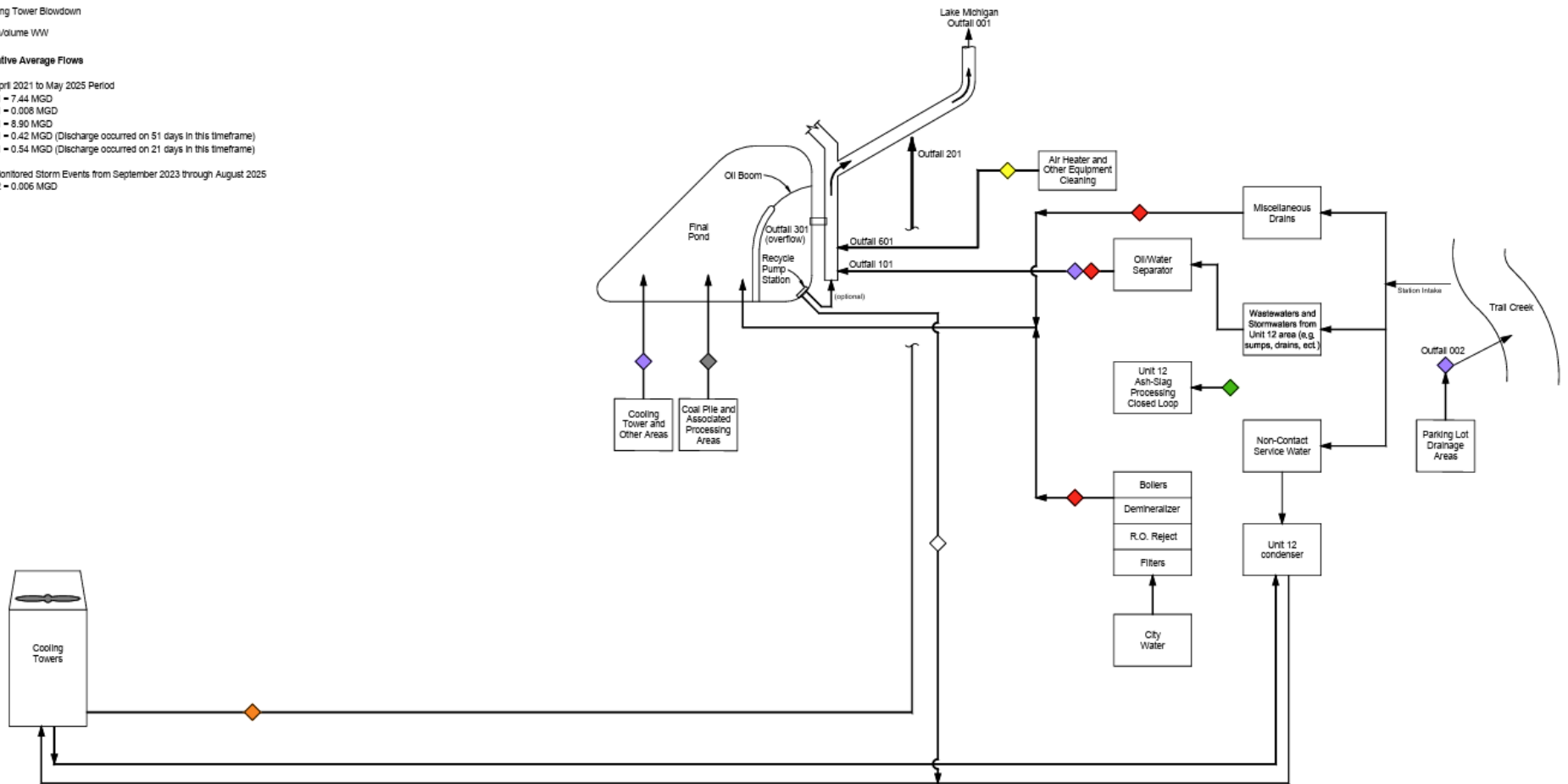
Outfall 201 = 8.90 MGD

Outfall 301 = 0.42 MGD (Discharge occurred on 51 days in this timeframe)

Outfall 601 = 0.54 MGD (Discharge occurred on 21 days in this timeframe)

Based on Monitored Storm Events from September 2023 through August 2025

Outfall 002 = 0.006 MGD



Outfall 001: The average daily discharge (for the period of April 2021 to May 2025) from Outfall 001 to Lake Michigan is 7.4 MGD. The design flow (highest monthly average) based on the most recent 2 years of data (June 2023 to May 2025) is 11.2 MGD.

Outfall 002: The average daily discharge from Outfall 002 (for the period of September 2023 to May 2025) to Trail Creek is 0.010 MGD. The design flow (highest monthly average) based on the most recent 2 years of data (September 2023 to May 2025) is 0.014 MGD.

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 5-23-6.

IDEM has given the permittee a Class A-SO industrial wastewater treatment plant classification based on the use of sedimentation.

2.4 Changes in Operation

In the permit application, no changes in operation were identified as occurring since the previous permit renewal.

2.5 Facility Stormwater

Facility stormwater is discharged through both external outfalls. Outfall 001 discharges stormwater from Internal Outfall 101. Outfall 002 discharges stormwater from the coal conveyor system and the main parking lot.

3.0 PERMIT HISTORY

3.1 Compliance History

A review of this facility's discharge monitoring data was conducted for compliance verification. This review indicates the following permit limitation violation at Outfall 001 between September/2022 and September/2025; 1 Oil and Grease violation. There were no violations at any of the other outfalls. There are no pending or current enforcement actions regarding this NPDES permit.

4.0 LOCATION OF DISCHARGE/RECEIVING WATER USE DESIGNATION

The receiving stream for Outfall 001 is Lake Michigan. The $Q_{7,10}$ low flow value of Lake Michigan is 0.0 cfs. Lake Michigan is designated as an Outstanding State Resource Water (OSRW) in accordance with 327 IAC 2-1.5-19. 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; and is designated as an industrial water supply in accordance with 327 IAC 2-1.5-5(a)(1-5).

The receiving stream for Outfall 002 is Trail Creek, a tributary to Lake Michigan. The $Q_{7,10}$ low flow value of Trail Creek is 23 cfs. Trail Creek is designated for full body contact recreation; shall be capable of supporting a well-balanced warm water aquatic community; and is designated as salmonid waters and shall be capable of supporting in accordance with 327 IAC 2-1.5-5(a)(1-3).

The permittee discharges to a waterbody that has been identified as a water of the state within the Great Lakes system. Therefore it is subject to NPDES requirements specific to Great Lakes system dischargers under 327 IAC 2-1.5 and 327 IAC 5-2-11.4 through 11.6. These rules contain water quality standards applicable to dischargers within the Great Lakes system and the procedures to calculate and incorporate water quality-based effluent limitations.

A Site Map has been included as Figure 3.

Figure 3: Site Map



4.1 Total Maximum Daily Loads (TMDLs)

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 TMDLs for these waters in order to achieve compliance with the water quality standards. Indiana's 2024 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 2024 Cycle.

Lake Michigan, Assessment-Unit INC0163_G1094, HUC 040400010603, is on the 2024 303(d) list for PCBs in fish tissue, mercury in fish tissue, and E. coli. Trail Creek, Assessment-Unit INC0115_01, HUC 040400010105, is on the 2024 303(d) list for PCBs in fish tissue and E. coli. A TMDL for Lake Michigan has been developed for E. coli. The TMDL was approved on September 1, 2004.

5.0 PERMIT LIMITATIONS

5.1 Technology-Based Effluent Limits (TBELs)

EPA develops effluent limitations guidelines (ELGs) for industrial and commercial activities as required by the Clean Water Act (CWA). ELGs are technology-based effluent limits (TBELs). TBELs established pursuant to sections 301(b), 304, and 306 of the CWA represent the minimum level of treatment for industrial point sources that must be included in an NPDES permit (327 IAC 5-5-2(a)). The federal effluent guidelines and standards are located at 40 CFR 403 through 471, inclusive, and are incorporated into Indiana law at 327 IAC 5-2-1.5. In Indiana, NPDES permits are required to ensure compliance with these federal ELGs under 327 IAC 5-2-10(a)(1), 327 IAC 5-2-10(a)(2), and 327 IAC 5-5-2.

In the absence of ELGs for a particular process or parameter, TBELs can also be established on a case-by-case basis for a particular process or parameter using best professional judgment (BPJ) in accordance with 327 IAC 5-5-2 and 5-2-10 (see also 40 CFR 122.44 and 125.3, and Section 402(a)(1) of the CWA).

The applicable technology-based standards for the facility are contained in 40 CFR 423 – Steam Electric Point Source Category. Discharges from this facility are subject to 40 CFR 423.12, Best Practicable Control Technology (BPT), and/or 40 CFR 423.13, Best Available Control Technology (BAT).

Requirements applicable to all regulated dischargers:

1. 40 CFR 423.12(b)(1) – The pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 s.u.
2. 40 CFR 423.12(b)(2) – There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

Regulated discharges at MCGS and their applicable requirements:

1. Cooling tower blowdown – The BPT guidelines are found at 40 CFR 423.12(b)(7) and (8), the BAT guidelines at 40 CFR 423.13(d).
2. Low volume wastewater – The BPT guidelines are found at 40 CFR 423.12(b)(3), there are no BAT guidelines.
3. Metal cleaning wastewater – The BPT guidelines are found at 40 CFR 423.12(b)(5), the BAT guidelines are contained in 40 CFR 423.13(e).
4. Coal pile runoff – The BPT guidelines are found at 40 CFR 423.12(b)(9) and (10), there are no BAT guidelines for coal pile runoff.

Table 1 below summarizes the most stringent federal guidelines for each of these wastewater sources.

Table 1: Applicable ELGs

Wastestream**** (Outfall)	pH	Free Available Chlorine		TSS		Oil & Grease		Total Copper		Total Iron		Total Chromium		Total Zinc	
		Daily Max	Month. Avg.	Daily Max	Month. Avg.	Daily Max	Month. Avg.	Daily Max	Month. Avg.	Daily Max	Month. Avg.	Daily Max	Month. Avg.	Daily Max	Month. Avg.
Cooling Tower Blowdown** (Internal Outfall 201)	≥ 6.0 s.u. and ≤ 9.0 s.u.	0.5 mg/l*	0.2 mg/l*	N/A		N/A		N/A		N/A		0.2 mg/l	0.2 mg/l	1.0 mg/l	1.0 mg/l
Low Volume Wastewater (Internal Outfalls 101 and 301)	≥ 6.0 s.u. and ≤ 9.0 s.u.	N/A		100.0 mg/l	30.0 mg/l	20.0 mg/l	15.0 mg/l	N/A		N/A		N/A		N/A	
Coal Pile Runoff (Internal Outfall 301)	≥ 6.0 s.u. and ≤ 9.0 s.u.	N/A		50 mg/l***		N/A		N/A		N/A		N/A		N/A	
Metal Cleaning Wastewater (Internal Outfall 601)	≥ 6.0 s.u. and ≤ 9.0 s.u.	N/A		100.0 mg/l	30.0 mg/l	20.0 mg/l	15.0 mg/l	1.0 mg/l	1.0 mg/l	1.0 mg/l	1.0 mg/l	N/A		N/A	

* The discharge of chlorine is limited to a maximum of two hours per day for each electrical generating unit.

** 40 CFR 423.13(d)(1) prohibits the discharge of the 126 priority pollutants in detectable amounts due to the use of cooling tower chemicals.

*** Maximum concentration at any time.

**** In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled attributable to each controlled waste source shall not exceed the specified limitations for that waste source.

5.2 Water Quality-Based Effluent Limits (WQBELs)

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 developed under the procedures described in 327 IAC 2-1.5-11 through 16 and implementation procedures in 327 IAC 5. Limitations are required for any parameter which has the reasonable potential to exceed a water quality criterion as determined using the procedures under 327 IAC 5-2-11.5.

5.3 Effluent Limitations and Monitoring Requirements by Outfall

Under 327 IAC 5-2-10(a) (see also 40 CFR 122.44), NPDES permit requirements are technology-based effluent limitations and standards (including TBELs based on federal effluent limitations guidelines or developed on a case-by-case basis using BPJ, where applicable), water quality standards-based, or based on other more stringent requirements. The decision to limit or monitor the parameters contained in this permit is based on information contained in the permittee's NPDES application and other available information relating to the facility and the receiving waterbody as well as the applicable federal effluent limitations guidelines. In addition, when renewing a permit, the existing permit limits, the antibacksliding requirements under 327 IAC 5-2-10(a)(11), and the antidegradation requirements under 327 IAC 2-1.3 must be considered.

5.3.1 All External Outfalls (001 and 002)

Narrative Water Quality Based Limits

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

Flow

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

5.3.2 Outfall (001)

Total Residual Chlorine (TRC) – Continuous

Effluent limitations for continuous TRC are being retained in this permit. Continuous TRC limitations are based on Water Quality Standards at 327 IAC 2-1.5-8. The effluent limitations are 0.01 mg/l Monthly Average and 0.02 mg/l Daily Maximum. The water quality-based effluent limits for continuous TRC are less than the limit of quantitation (LOQ) of 0.06 mg/l. The permittee will be considered in compliance with the permit limits if the effluent concentrations measured are less than the LOQ of 0.06 mg/l. The mass limitations for continuous TRC are also being retained. Mass limitations are 1.29 lbs/day Monthly Average and 2.59 lbs/day Daily Maximum. Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 7.76 lbs/day.

Total Residual Chlorine (TRC) – Intermittent

Intermittent TRC limitations are being retained from the previous permit. The effluent limitations for intermittent TRC are 0.2 mg/l Daily Maximum and are based on 327 IAC 2-1.5-8.

Total Residual Oxidants (TRO)

Effluent limitations for TRO are being retained from the previous permit. TRO limitations are 0.06 mg/l Daily Maximum. These limitations apply anytime bromine is used and may be present in the discharge.

Chlorination Frequency

The monitoring of chlorination frequency applies only when the facility is chlorinating intermittently. The Permit requires the permittee to provide a monthly report on the “times per day” the permittee is intermittently chlorinating. The permittee is limited to no more than four (4) chlorination cycles per day.

Chlorination Duration

The monitoring for duration of chlorination dose applies only when the facility is chlorinating intermittently. The Permit requires the permittee to provide a monthly report on the number of minutes per chlorination cycle the permittee is chlorinating intermittently. The permittee is limited to no more than forty (40) minutes per chlorination cycle.

Total Suspended Solids (TSS)

The permittee is required to meet federal effluent guidelines for TSS at each of the internal outfalls as described in Section 5.1 above and the following sections for each internal outfall. Monitoring requirements for TSS at Outfall 001 are being retained in this renewal.

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.

Copper

Effluent limitations for copper are 17.0 ug/l (2.2 lbs/day) Monthly Average and 29.0 ug/l (3.75 lbs/day) Daily Maximum. These limitations are being retained from the previous permit and are based on a site-specific metal translator study developed in accordance with 327 IAC 5-2-11.4(c)(8)(E). NIPSCO has requested continued approval of the study value in their permit renewal application. Refer to Section 6.6 of this Fact Sheet for more information.

Temperature

Monitoring for temperature is included in the permit.

Mercury

Effluent limitations for mercury are being retained from the previous permit. The WQBELs for mercury are 1.3 ng/l (0.00017 lbs/day) Monthly Average and 3.2 ng/l (0.00041 lbs/day) Daily Maximum. NIPSCO has requested a renewal of the Streamlined Mercury Variance (SMV) in their renewal application. The renewal has been granted in accordance with 327 IAC 5-3.5. See Section 6.4 of this Fact Sheet for more information.

Whole Effluent Toxicity (WET) Testing

Please refer to Section 5.4 below for WET Testing information.

pH

Limitations for pH in the permit are based on the criteria established in 327 IAC 2-1.5-8(c)(2).

5.3.3 Outfall 101

Total Suspended Solids (TSS)

Effluent limitations for TSS are 26.3 mg/l Monthly Average and 87.8 mg/l Daily Maximum and are calculated using the building block approach. See Appendix A for the calculations.

Oil and Grease (O&G)

Effluent limitations for O&G are 13.2 mg/l Monthly Average and 17.6 mg/l Daily Maximum and are calculated using the building block approach. See Appendix A for the calculations.

pH

Limitations for pH in the permit are based on the criteria established in 327 IAC 2-1.5-8(c)(2).

5.3.4 Outfall 201

Free Available Chlorine

Effluent limitations for free available chlorine are based on the discharge of cooling tower blowdown pursuant to 40 CFR 423.12(b)(7). The limitations are 0.2 mg/l Monthly Average and 0.5 mg/l Daily Maximum and are being retained from the previous permit.

Chlorination Duration per Day

Pursuant to 40 CFR 423.13(d)(2), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

Total Chromium

Effluent limitations for total chromium are being retained from the previous permit. These limitations are based on the discharge of cooling tower blowdown and pursuant to 40 CFR 423.13(d). Limitations for total chromium are 0.2 mg/l Monthly Average and Daily Maximum.

Total Zinc

Effluent limitations for total zinc are being retained from the previous permit. These limitations are based on the discharge of cooling tower blowdown and pursuant to 40 CFR 423.13(d). Limitations for total zinc are 1.0 mg/l Monthly Average and Daily Maximum.

pH

Limitations for pH in the permit are based on the criteria established in 327 IAC 2-1.5-8(c)(2).

126 Priority Pollutants

40 CFR 423.13(d)(1) prohibits the discharge of the 126 priority pollutants (listed in Appendix A of the regulations) except chromium and zinc (which have specific numeric limits) in detectable amounts due to chemicals added for cooling tower maintenance. 40 CFR 423.13(d)(3) states that at the permitting authority's discretion, compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants (except chromium and zinc) are not detectable (due to the use of cooling tower chemicals) in the final discharge by the analytical methods in 40 CFR part 136.

As part of this permit renewal, the permittee has submitted information that demonstrates the 126 priority pollutants (except chromium and zinc which have specific numeric limits) are not detectable in the final discharge due to the use of cooling tower chemicals.

5.3.5 Outfall 301

Total Suspended Solids (TSS)

Effluent limitations for TSS were calculated using the building block approach. The limitations for TSS are 24.4 mg/l Monthly Average and 68.7 mg/l Daily Maximum. The calculations used to derive these limitations is included as Appendix A.

Oil and Grease (O&G)

Effluent limitations for O&G were calculated using the building block approach. The limitations for O&G are 8.4 mg/l Monthly Average and 11.2 mg/l Daily Maximum. The calculations used to derive these limitations is included as Appendix A.

pH

Limitations for pH in the permit are based on the criteria established in 327 IAC 2-1.5-8(c)(2).

5.3.6 Outfall 601

Total Suspended Solids (TSS)

Effluent limitations for TSS are being retained from the previous permit. These limitations are 30.0 mg/l Monthly Average and 50 mg/l Daily Maximum and are based on the discharge of metal cleaning wastewater pursuant to 40 CFR 423.12(b)(5). The 50 mg/l daily maximum is being retained due to antibacksliding.

Oil and Grease (O&G)

Effluent limitations for O&G are being retained from the previous permit. These limitations are 15.0 mg/l Monthly Average and 20.0 mg/l Daily Maximum and are based on the discharge of metal cleaning wastewater pursuant to 40 CFR 423.12(b)(5).

Total Copper

Effluent limitations for total copper are being retained from the previous permit. These limitations are 1.0 mg/l Monthly Average and Daily Maximum and are based on the discharge of metal cleaning wastewater and pursuant to 40 CFR 423.12(b)(5) and 40 CFR 423.13(e).

Total Iron

Effluent limitations for total iron are being retained from the previous permit. These limitations are 1.0 mg/l Monthly Average and Daily Maximum and are based on the discharge of metal cleaning wastewater and pursuant to 40 CFR 423.12(b)(5) and 40 CFR 423.13(e).

pH

Limitations for pH in the permit are based on the criteria established in 327 IAC 2-1.5-8(c)(2).

5.3.6 Outfall 002

Total Suspended Solids (TSS), pH, Oil and Grease, Chemical Oxygen Demand (COD)

Monitoring requirements for the above noted parameters are carried over in this renewal. These parameters are common constituents of discharges of stormwater from industrial facilities.

Selenium and Arsenic

In the previous permit, IDEM included monitoring requirements for these parameters in order to ensure that they are not being discharged in amounts that would violate Indiana water quality standards. After evaluating the data collected during the past 5 years, there is no reasonable potential for these parameters to exceed a water quality criterion. Therefore, IDEM is removing monitoring requirements for these parameters in this permit.

Mercury

In the previous permit, IDEM included monitoring requirements for mercury at this outfall in order to ensure that it is not being discharged in amounts that would violate Indiana water quality standards. After evaluating the data collected during the past 5 years, there is a concern that mercury has the potential to exceed a water quality criterion. However, there is not enough data to support including a water quality-based limit at this time. Therefore, IDEM is increasing the monitoring frequency for mercury at this outfall to 6 X Yearly in order to evaluate the reasonable potential to exceed (RPE) a water quality criterion during the next permit cycle.

5.4 Whole Effluent Toxicity (WET) Testing

Under 327 IAC 2-1.5-8(b)(1)(E)(ii), a discharge shall not cause acute toxicity, as measured by whole effluent toxicity (WET) tests, at any point in the waterbody. Under 327 IAC 2-1.5-8(b)(2)(A)(iv) a discharge shall not cause chronic toxicity to aquatic life, outside of the applicable mixing zone, as measured by WET tests. Under 327 IAC 5-2-11.5(c)(2), IDEM may include WET test requirements in an NPDES Permit if determined to be necessary to generate the data needed to determine whether WET limits are required in the permit.

Therefore, the permittee is required to conduct WET tests to determine the toxicity of the final effluent at Outfall 001. This does not negate the requirement to submit a water treatment additive (WTA) application and/or worksheet for replacement or new additives/chemicals proposed for use at the site.

5.5 Antibacksliding

Indiana's prohibitions on backsliding under 327 IAC 5-2-10(a)(11) are applicable to BPJ case-by-case technology-based effluent limitations, when proposed to be increased based on subsequently promulgated effluent guidelines under Section 304(b) of the CWA, and limitations based on Indiana water quality standards or treatment standards (327 IAC 5-10). Prohibitions on other types of backsliding (e.g., backsliding from limitations derived from effluent guidelines, from existing case-by-case limitations to new case-by-case limitations, and from conditions such as monitoring requirements that are not effluent limitations) are covered under federal regulation at 40 CFR 122.44(l)(1).

Under 327 IAC 5-2-10(a)(11), unless an exception under 327 IAC 5-2-10(a)(11)(B) applies, a permit may not be renewed, reissued or modified to contain effluent limitations that are less stringent than the comparable effluent limitations in the previous permit. For effluent limitations based on Indiana water quality or treatment standards, less stringent effluent limitations may also be allowed if they are in compliance with Section 303(d)(4) of the CWA. Under 40 CFR 122.44(l)(1), a permit may not be renewed or reissued to contain less stringent interim effluent limitations, standards or conditions than the final effluent limitations, standards or conditions in the previous permit unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR 122.62.

None of the limits calculated as part of this permit renewal are less stringent than the comparable effluent limitations in the previous permit, therefore, backsliding is not an issue in accordance with 327 IAC 5-2-10(a)(11) and 40 CFR 122.44(l)(1).

5.6 Antidegradation

Indiana's Antidegradation Standards and Implementation procedures are outlined in 327 IAC 2-1.3. The antidegradation standards established by 327 IAC 2-1.3-3 apply to all surface waters of the state. 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 and 2-1.3-6.

The NPDES permit does not propose to establish a new or increased loading of a regulated pollutant; therefore, the Antidegradation Implementation Procedures in 327 IAC 2-1.3-5 and 2-1.3-6 do not apply to the permitted discharge.

5.7 Stormwater

Under 327 IAC 5-4-6(d), if an individual permit is required under 327 IAC 5-4-6(a) for discharges consisting entirely of stormwater, or if an individual permit is required under 327 IAC 5-2-2 that includes discharge of commingled stormwater associated with industrial activity, IDEM may consider the following in determining the requirements to be contained in the permit:

- (1) The nature of the discharges and activities occurring at the site or facility.
- (2) Information relevant to the potential impact on water quality.
- (3) The requirements found in the following: (A) 327 IAC 5-2, (B) 327 IAC 5-5, (C) 327 IAC 5-9, and (D) 327 IAC 15-6.
- (4) "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits", EPA 833-D-96-001, September 1, 1996, available from U.S. EPA, National Service Center for Environmental Publications at <https://www.epa.gov/nscep> or from IDEM.

In accordance with 327 IAC 15-2-2(a), the commissioner may regulate stormwater discharges associated with industrial activity, as defined in 40 CFR 122.26(b)(14), consistent with the EPA 2008 NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, as modified, effective May 27, 2009, under an NPDES general permit. Therefore, using Best Professional Judgment to develop case-by-case technology-based limits as authorized by 327 IAC 5-2-10, 327 IAC 5-5, and 327 IAC 5-9 (see also 40 CFR 122.44, 125.3, and Section 402(a)(1) of the Clean Water Act (CWA)), IDEM has developed stormwater requirements for individual permits that are consistent with the EPA 2008 NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity. The 2008 Multi-Sector General Permit and Fact Sheet is available from: <https://www.epa.gov/npdes/previous-versions-epas-msgp-documents>.

According to 40 CFR 122.26(b)(14) and 327 IAC 15-6-2 facilities classified under Standard Industrial Classification (SIC) Code 4911, are considered to be engaging in "industrial activity" for purposes of 40 CFR 122.26(b). Therefore, the permittee is required to have all stormwater discharges associated with industrial activity permitted. Treatment for stormwater 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 stormwater associated with industrial activity.

Stormwater associated with industrial activity must also be assessed to ensure compliance with all water quality standards. Effective implementation of the non-numeric technology-based requirements should, in most cases, control discharges as necessary to meet applicable water quality standards. 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 stormwater 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 stormwater discharge is in compliance with the antidegradation standards found in 327 IAC 2-1.3-3, and pursuant to 327 IAC 2-1.3-4(a)(5), an antidegradation demonstration is not required.

The technology-based effluent limits (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 stormwater discharges, (3) minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur, (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 stormwater 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 stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team, (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 technology-based requirements should ensure compliance with applicable water quality standards. 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 and IDEM may impose additional water quality-based limitations.

“Terms and Conditions” to Provide Information in a Stormwater 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 327 IAC 5-1-3 (see also CWA section 402(a)(2)).

It should be noted that EPA has developed a guidance document, “Developing your Stormwater Pollution Prevention Plan: A guide for Industrial Operators (EPA 833-B09-002), March 2021, to assist facilities in developing a SWPPP, as well as an Industrial Stormwater Monitoring and Sampling Guide (EPA 832-B-09-003), April 2021.

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 make it immediately available, at the time of an onsite inspection or upon request, to IDEM. When submitting the SWPPP to IDEM, if any information in the SWPPP is considered to be confidential, that information shall be submitted in accordance with 327 IAC 12.1. Interested persons can request a copy of the SWPPP through IDEM. Any information that is confidential pursuant to Indiana law will not be 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 an outfall governed under the permit, the permittee must apply for and obtain approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) available at: <https://www.in.gov/idem/forms/idem-forms-list/> and submitting any needed supplemental information. In the review and approval process, IDEM determines, based on the information submitted with the application, whether the use of any new or changed water treatment additives/chemicals or dosage rates could potentially cause the discharge from any permitted outfall to cause chronic or acute toxicity in the receiving water.

The authority for this requirement can be found under one or more of the following: 327 IAC 5-2-8(11)(B), which generally requires advance notice of any planned changes in the permitted facility, any activity, or other circumstances that the permittee has reason to believe may result in noncompliance with permit requirements; 327 IAC 5-2-8(11)(F)(ii), which generally requires notice as soon as possible of any planned physical alterations or additions to the permitted facility if the alteration or addition could significantly change the nature of, or increase the quantity of, pollutants discharged; and 327 IAC 5-2-9(2) which generally requires notice as soon as the discharger knows or has reason to know that the discharger has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant that was not reported in the permit application. A list of approved water treatment additives is included on the following pages.

Chemical	Purpose/Use	Status & Request
ChemTreat BL1304	pH Control	Currently in use and continued approval is requested.
ChemTreat BL153	pH Control	
ChemTreat CL1370	Circ Water Conditioning	
ChemTreat CL15	Biocide	
ChemTreat CL206	Biocide for Reverse Osmosis	
ChemTreat CL2873T	Corrosion Inhibitor	
ChemTreat CL8001	Silt and Suspended Solids Control	
ChemTreat RL124	Dechlorination	
ChemTreat RL9907	RO Maintenance	
Citric acid (anhydrous)	RO Maintenance	
Powdex PCH	Polisher	
Sodium Hypochlorite	Algaecide and Biocide	
Sodium Sulfite	Dechlorination	
Sulfuric Acid	pH Control for Circ Water	
Ammonium Hydroxide	pH Control	Currently not in use, but continued approval is requested.
Bentonite Clay	Used with Bulab 6086 as a Filtering Media for Low Head System Mussel Control	
Bulab 5101	Dechlorination (for Circ water and during/following mussel control events)	
Bulab 6040	Biocide for Circ Water	
Bulab 6060	Algaecide for Circ Water	
Bulab 6086	Biocide for Low Head System Mussel Control	
Bulab 6150	Used with Sodium Hypochlorite for Low Head System Mussel Control	
Bulab 7034	Copolymer used for silt and suspended solids control for Circ water	
Bulab 7112	Scale Inhibitor for Circ Water	
Bulab 8805	Scale Inhibitor for Reverse Osmosis	
Bulab 8861	Biocide for Reverse Osmosis	
Bulab 9062	pH control of Reverse Osmosis	
Bulab 9325	Corrosion Inhibitor for Bearing Cooling Water System	
Nalco 3DT121	Circ Water Conditioning	
Nalco 3DT138	CCR Polymer	
Nalco 7385 (PBTC)	Circ Water Conditioning	
Nalco 7408	Dechlorination	
Nalco 7468	Antifoaming Agent	

Chemical	Purpose/Use	Status & Request
Nalco 8735	pH Control	Currently not in use, but continued approval is requested.
Nalco Nalsperse 73551	Dispersant and Detergent used in Preparation of Cooling System Biocide Application	
Nalco PC-11	Biocide for Reverse Osmosis	
Nalco PC-191T	Scale Inhibitor for Reverse Osmosis	
Nalco Trac 109	Corrosion Inhibitor	

Notes:

1. Only Water Treatment Additives previously approved by IDEM are listed in this table. Required information for these chemicals (e.g., dosage, SDSs, etc.) was provided during the original application submission.
2. Any requests for approval of new or replacement chemicals will be provided to IDEM under separate cover.
3. MCGS maintains dual flexible approaches for addressing mussel control. Both approaches involve dosing of approved biocides at the intake pumps followed by biocide neutralization w/approved chemicals prior to discharge to Lake Michigan. For one approach, the dosing is continuous and for the other, a one-time (annual) dosage is applied. The chemicals used for each approach are different and only one approach is implemented at a time.

6.0 PERMIT DRAFT DISCUSSION

6.1 Discharge Limitations, Monitoring Conditions and Rationale

The proposed final effluent limitations are based on the more stringent of the Indiana water quality-based effluent limitations (WQBELs), technology-based effluent limitations (TBELs), or approved total maximum daily loads (TMDLs) and NPDES regulations as appropriate for each regulated outfall. Section 5.3 of this document explains the rationale for the effluent limitations at each Outfall.

Analytical and sampling methods used shall conform to the version of 40 CFR 136 as referenced in 327 IAC 5-2-13(d)(1) and 327 IAC 5-2-1.5.

As discussed in Section 5.3.6, for Outfall 002, the monitoring frequency for mercury has been increased to 6 X Yearly. This monitoring frequency is comparable to the monitoring frequencies included in permits regulating similar types of discharges. Monitoring requirements for selenium and arsenic have been removed at Outfall 002.

Outfall 001:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
TRC					
Continuous	0.01(1.29)	0.02(2.59)	mg/l(lbs/day)	Daily	Grab
Intermittent	----	0.2	mg/l	Daily	Grab
TRO	----	0.06	mg/l	Daily	Grab
Chlorination/ Bromination					
Frequency	----	4	times/day	Daily	Report
Duration	----	40	min/dose	Daily	Report
TSS	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Oil and Grease	10	15	mg/l	1 X Weekly	Grab
Copper	17.0(2.2)	29.0(3.75)	ug/l(lbs/day)	2 X Monthly	24-Hr. Comp.
Temperature	Report	Report	°F	Daily	Grab
Mercury					
Final	1.3(0.00017)	3.2(0.00041)	ng/l(lbs/day)	6 X Yearly	Grab
Interim (SMV)	3.1	Report	ng/l	6 X Yearly	Grab
Whole Effluent Toxicity					
Acute	NA	Report	TUa	Variable	24-Hr.
Chronic	Report	NA	TUc	Variable	Comp.

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	Daily	Grab

Internal Outfall 101:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
TSS	26.3	87.8	mg/l	2 X Monthly	24-Hr. Comp.
Oil and Grease	13.2	17.6	mg/l	2 X Monthly	Grab

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	1 X Weekly	Grab

Internal Outfall 201:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
Free Available Chlorine	0.2	0.5	mg/l	Daily	Grab
Chlorination/Bromination Duration/Day	----	120	min/day	Daily	Report
Total Chromium	0.2	0.2	mg/l	1 X Monthly	Grab
Total Zinc	1.0	1.0	mg/l	1 X Monthly	Grab

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	1 X Weekly	Grab

Internal Outfall 301:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
TSS	24.4	68.7	mg/l	2 X Monthly	Grab
Oil and Grease	8.4	11.2	mg/l	2 X Monthly	Grab

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	1 X Weekly	Grab

Internal Outfall 601:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
TSS	30.0	50.0	mg/l	2 X Monthly	24-Hr. Comp.
Oil and Grease	15.0	20.0	mg/l	2 X Monthly	Grab
Total Copper	1.0	1.0	mg/l	Daily	24-Hr. Comp.
Total Iron	1.0	1.0	mg/l	Daily	24-Hr. Comp.

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	1 X Weekly	Grab

Outfall 002:

Parameter	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	MGD	Semi-Annual	Estimate
TSS	Report	mg/l	Semi-Annual	Grab
pH	Report	s.u.	Semi-Annual	Grab
Oil and Grease	Report	mg/l	Semi-Annual	Grab
COD	Report	mg/l	Semi-Annual	Grab
Mercury	Report	ng/l	6 X Yearly	Grab

6.2 Schedule of Compliance

The circumstances in this NPDES permit do not qualify for a schedule of compliance.

6.3 Clean Water Act Section 316(b) Cooling Water Intake Structure(s) (CWIS)**6.3.1 Introduction**

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

The EPA promulgated a CWA section 316(b) regulation on August 15, 2014, which became effective on October 14, 2014. 79 Fed. Reg. 48300-439 (August 15, 2014). This regulation established application requirements and standards for cooling water intake structures. The regulation is applicable to point sources with a cumulative design intake flow (DIF) greater than 2 MGD where 25% or more of the water withdrawn (using the actual intake flow (AIF)) is used exclusively for cooling purposes. All existing facilities subject to these regulations must submit the information required by 40 CFR 122.21(r)(2)–(r)(8) and facilities with an actual intake flow of greater than 125 MGD must also submit the information required by 40 CFR 122.21(r)(9)-(r)(13). The regulation establishes best technology available standards to reduce impingement and entrainment of aquatic organisms at existing power generation and manufacturing facilities.

Impingement is the process by which fish and other aquatic organisms are trapped and often killed or injured when they are pulled against the CWIS's outer structure or screens as water is withdrawn from a waterbody. Entrainment is the process by which fish larvae and eggs and other aquatic organisms in the intake flow enter and pass through a CWIS and into a cooling

water system, including a condenser or heat exchanger, which often results in the injury or the death of the organisms (see definitions at 40 CFR 125.92(h) and (n)).

NIPSCO – Michigan City Generating Station (MCGS) has one coal-fired unit (Unit 12) with a natural draft water system that began operating in 1974. Cooling water for the facility is withdrawn from Trail Creek through an approximately 38-foot-wide shoreline intake which includes a trash rack to keep large debris from entering the system. Cooling water is drawn from the intake to a flume and pumped from the flume via two circulating water pumps. The water is pumped through traveling screens prior to being utilized in the facility.

The design intake flow (DIF) for the permittee is 43.2 MGD. The actual intake flow (AIF), as defined under 40 CFR 125.92(a), is the average volume of water withdrawn on an annual basis by the cooling water intake structures over the past five years. The actual intake flow for the facility over this period is 10.1 MGD. Over the past five years, an average of 100% is used for cooling purposes.

Therefore, since the facility has a DIF greater than 2 MGD, and because the percentage of flow used at the facility exclusively for cooling is greater than 25%, the facility is required to meet the BTA standards for impingement and entrainment mortality, including any measures to protect Federally-listed threatened and endangered species and designated critical habitat established under 40 CFR 125.94(g).

As an existing facility with a DIF greater than 2 MGD and because the AIF is less than or equal to 125 MGD, the permittee was required to submit the application information required by 40 CFR 122.21(r)(2) through (r)(8). The permittee submitted a complete 316(b) application included with the renewal application on October 1, 2025.

The regulation also established requirements that build on existing CWA requirements to coordinate with the U.S. Fish and Wildlife Service (USFWS) prior to issuing NPDES permits. Pursuant to 40 CFR 125.98(h), upon receipt of an NPDES permit 316(b) application for an existing facility subject to the rule, the Director (IDEM) must forward a copy of the permit application to the appropriate Field Office of the U.S. Fish and Wildlife Service for a 60-day review. A copy of this permit application was sent to the Bloomington Field Office of the U.S. Fish and Wildlife Service on October 8, 2025. The USFWS's response is discussed in Section 6.3.5 below.

Much of the factual and narrative information presented below was taken, sometimes directly, from the permittee's 316(b) application.

6.3.2 Facility and Cooling Water Intake Structure (CWIS) Description

A. Detailed Description

The MCGS Intake is located on Trail Creek (41° 43' 19" N, 86° 54' 30" W). This shoreline intake withdraws water through trash racks to prevent large debris from entering the system. From the intake, water is drawn into a flume that narrows to a width of approximately eight feet. This flume carries water to the screen house where it widens to approximately 30 feet and varies in depth (18.6' to 25' depending on water levels). Water is

pulled from the flume by two Peerless Model 28HXB vertical turbine, single stage, centrifugal circulating water pumps. Each pump is rated with a 15,000 gpm capacity and a listed efficiency of 100%.

The circulating water pumps pull the intake water through four Stephens-Adamson traveling screens with one-eighth-inch by one-quarter-inch (1/8" 1/4") brass vertical bars set on three-eighth-inch (3/8) centers. The screens rotate at approximately 11.23 feet per minute and can pass up to 81,250 gallons per minute at a low water elevation screen submergence of 16 feet. The screens are designed to be rotated manually and rotate automatically under a differential head loss at high water depth. Debris is sprayed off and washed into a sluiceway where material is removed and disposed. The spray wash system for each screen is rated at 320 gpm at 80 psi. The open area for the traveling screens is 260.8 square feet.

Cooling Tower Additional Information

The MCGS uses a closed-cycle cooling system with a single Marley Parabolic draft-induced cooling tower which is used continuously except during plant outages. The cooling tower at the MCGS averages 1.3 Cycles of Concentration (COC). Based on the system design, the cooling tower (CT) is operated to automatically blow down to maintain a specific depth of water in the tower. Blowdown is continuous during periods of operation and the volume of cooling water used varies seasonally with respect to the incoming water temperature. Conductivity levels are monitored and used to calculate the COC, however, conductivity is not the controlling factor driving the CT blowdown rate, system design is the primary controlling factor.

Source water is pulled from the Trail Creek, which is immediately contiguous on the east of the Station. Intake water is treated to reduce the potential for biofouling. This treated low-head service water (LHSW) is sent to the condenser and associated appurtenances for purposes of cooling after which the hot non-contact service water is sent to the cooling tower (CT), cooled then recirculated. Low Head Service Water is used to cool numerous plant heat loads including the Main Condenser vacuum pump, Turbine lube oil coolers, the Isophase bus duct coolers, Generator hydrogen coolers, Generator stator water coolers, Boiler feed pump turbine lube oil coolers, Boiler feed pump vacuum pumps, and the Bearing cooling water heat exchanger. The MCGS is located on the shores of Lake Michigan. During the summer months, when the temperature of the Lake increases, an increased flow of LHSW is required to cool the aforementioned plant heat loads. In order to maintain operating levels within the tower, this increase in the cooling water system volume results in a corresponding increase in cooling tower blow down. Efforts to retain the additional water volume (i.e. to not blow down the system) would result in an over flow condition the cooling tower basin. This event (i.e. an over flow of the CT basin) would cause damage to the facility as well as the neighboring residential community.

B. Intake Flows, Velocity of Intake Flows Through Submerged Intake Openings, Velocity of Intake Flows Through Traveling Screens and Area of Influence

The MCGS Intake has a DIF of 43.2 MGD based on the design capacity (15,000 gpm each) of the two circulating water pumps at 100% efficiency. The AIF from 2020-2024 was 10.1

MGD. With an open screen area of 260.8 square feet, the through-screen design intake velocity at the DIF and through-screen actual intake velocity at the AIF are calculated to be 0.26 fps and 0.06 fps, respectively.

Year	Annual Average Actual Intake Flow (MGD)
2020	8.5
2021	9.6
2022	11.1
2023	11.8
2024	9.5
AIF	10.1

The Area of Influence (AOI), which is also called the hydraulic zone of influence (HZI), is defined as the portion of the source waterbody hydraulically affected by the cooling water intake structure withdrawal of water at 40 CFR 125.83. The HZI is determined using potential flow theory by equating the mean ambient source water velocity to the velocity induced by the intake in still water. This approach is reasonable when evaluating potential sampling locations and impacts to populations. In reality; however, there is no hard dividing line because fluid turbulence imposes random variation, and entrainment of non-motile organisms is a stochastic process.

The input values and the calculated dimensions of the HZI for the shoreline CWIS located on Trail Creek are shown in Table 2 below. This table provides results for two river flow conditions based on data from USGS Gauging Station No. 04095300, Trail Creek at Michigan City, Indiana for the period of record 1970 through 2012, and the maximum design intake flow condition. It should be noted that the calculations in Table 3 were based on an intake flow of 27.6 MGD, which was used as the design intake flow in the 2015 316(b) application, but which has since been corrected to a design intake flow of 43.2 MGD in this fact sheet. The formulas used to calculate the AOI were supplied in the permittee's 316(b) report submitted in August 25, 2015 and included with the 2025 submission.

The location of the HZI-line with Trail Creek will change with creek flow and intake flow and; therefore, with time. The location of the HZI-line at any time will depend on the ratio of the intake flow to the creek flow. Under extreme low-flow hydrologic conditions (e.g., lowest mean annual flow conditions at the Michigan City gauging station), the HZI-line will move away from the shoreline and downstream. The maximum values for this scenario are approximately 164.2 ft and 111.1 ft, respectively. Under this scenario, the HZI width is approximately 40 percent of the overall width of Trail Creek. Outside a line defined by these dimensions, the probability of hydraulically influencing non-motile organisms remains low most of the time. Under normal hydrologic conditions (e.g., mean annual flow conditions), the HZI-line will move toward the shoreline and toward the intake. The values for this scenario are approximately 109.6 ft and 71.4 ft, respectively. Under these conditions, the HZI width is approximately one-quarter of the overall width of Trail Creek. Consequently, inside a line defined by these dimensions, the probability is high most of the time. Between these extremes, the probability of hydraulically influencing non-motile organisms is moderate and variable.

Table 2

Hydraulic Zone of Influence Calculation
Trail Creek
Michigan City Generating Station

Hydraulic Zone of Influence Trail Creek - Michigan City Generating Station				
	Variable	Units	Scenarios	
			1	2
Design Intake Flow	$Q_o(t)$	cfs	42.70	42.70
Flow in the River	$Q_R(t)$	cfs	79	51
Hydraulic Depth of River	d	ft	10.00	10.00
Width of the River	W	ft	417	417
Width of Littoral Zone	Y_{Lz}	ft	10	10
Velocity Profile Exponent	n		7	7
River Cross-sectional Area	A	ft ²	4170	4170
Mean velocity	V	ft/s	0.02	0.01
Centerline Velocity in River	U_o	ft/s	0.02	0.01
Critical Flow	Q_c	cfs	4	2
HZI Width (initial guess)	Y_o	ft		
HZI Width (final calculation)	$Y_o(t)$	ft	109.58	164.17
HZI Width Error	$Y_o-error$	ft		
HZI Downstream Distance	$X_o(t)$	ft	71.4	111.1

Input Cells

Results for Balanced Spreadsheet

Maximum Design Intake Flow = 27.6 MGD (42.7 cfs)
Mean Annual Flow Trail Creek (USGS 1970-2012 Period of Record) = 78.9 cfs
Lowest Mean Annual Flow Trail Creek (USGS 1970-2012 Period of Record) = 50.7 cfs

Scenario 1 - Mean Annual Average Flow of Trail Creek
(1970 to 2012 Period of Record; USGS 04095300, Trail Creek at Michigan City, IN)
Scenario 2 - Lowest Mean Annual Flow of Trail Creek
(1970 to 2012 Period of Record; USGS 04095300, Trail Creek at Michigan City, IN)

6.3.3 Source Water Biological Characterization

The description and water quality regime of Trail Creek and Lake Michigan has not materially changed since the August 2015 CWIS Report. Trail Creek near the MCGS remains impaired for full body contact recreation due to *E. coli* and human health and wildlife uses because of polychlorinated biphenyls in fish tissue (United States Environmental Protection Agency [USEPA], 2025). The total maximum daily limit for *E. coli* established in 2003 and fish consumption advisories are still in effect (USEPA, 2025; Indiana State Department of Health, 2025).

The United States Army Corps of Engineers (USACE) reported that maintenance dredging of Trail Creek was last performed in 2002 because a suitable disposal site is not available for the poor-quality sediment. However, 70,000 cubic yards of sediment were removed from the outer harbor and entrance channel in December 2021 (USACE, 2024).

A bulkhead related project for a portion of Trail Creek near the facility was also completed in the summer of 2025. The project consisted of adding new sheet pile bulkhead offset by 4-18 inches from the existing bulkhead. The existing bulkhead was kept in place to maintain the existing shoreline.

The source water baseline biological characterization information provided in the August 2015 CWIS Report is still considered representative of current conditions. While more recent fishery studies and evaluations of impingement and entrainment have been performed for other facilities withdrawing water from southern Lake Michigan, no new studies have been completed in Trail Creek at MCGS that would provide more representative site-specific information. The general fishery community of tributaries to southern Lake Michigan likely has not changed; but where new data are available, they have been included.

The Indiana Department of Natural Resources (IDNR) Fish Stocking Database identifies four species of salmonids stocked into Trail Creek annually: brown trout (*Salmo trutta*), Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead (*O. mykiss*) (IDNR, 2025). Since the August 2015 CWIS Report, Chinook salmon, coho salmon, and steelhead were stocked each year except in 2018 when brown trout was stocked instead of Chinook salmon and in 2025 when no coho salmon were stocked as of July 2025. Over the past 11 years, IDNR has annually stocked an average of 56,400 coho salmon, 74,800 Chinook salmon, and 151,700 steelhead. 10,000 brown trout were released in 2018 (IDNR, 2025). Additionally, the IDNR stocked rainbow trout in Trail Creek, mostly from Meer Road, annually from 2015 through 2024 (USFWS/GLFC, 2025). The combined number of yearlings and fall fingerlings stocked ranged from approximately 198,000 to 368,000 each year (USFWS/GLFC, 2025).

6.3.4 Impingement and Entrainment– Aquatic Life Studies

No impingement or entrainment studies have been conducted at the Michigan City Generating Station; therefore, data from impingement and entrainment studies conducted at NIPSCO's Bailly Generating Station (BGS) and the D.C. Cook Nuclear Power Plant (CNPP) were used by the permittee to address impingement and entrainment species at risk at the Michigan City Generating Station. The BGS is located in Chesterton, Indiana approximately 20 miles west of the Michigan City Generating Station. The CNPP is located in Stevensville, Michigan, approximately 30 miles northeast of the Michigan City Generating Station.

Although not addressed in the permit application, impingement and entrainment studies have also been conducted at several other industrial facilities located in Indiana and that pull intake water directly from Lake Michigan at either off-shore intakes and/or near shore intakes. These include US Steel Midwest and Gary operations as well as Arcelor Mittal Burns Harbor (now Cleveland-Cliffs Burns Harbor) facility.

A. Impingement

Impingement studies were conducted at the BGS from November 1975 to November 1976 and from April 2005 to July 2006. During these two studies, 33 fish taxa were observed as impinged (see Appendix B). The CNPP conducted impingement studies from 1975 to 1982 and 61 fish taxa were observed as impinged during that time (see Appendix B).

The permittee considers the study results from these two southern Lake Michigan power plants to be representative of fishes susceptible to impingement from the southern Lake Michigan source waterbody. The MCGS withdraws water from Trail Creek and not directly from Lake Michigan. However, the shoreline intake is located near the mouth of Trail Creek and may be expected to encounter species which use both waterbodies. Although these species may be considered the most susceptible to impingement, the level of susceptibility at the MCGS is expected to be much lower than at either the BGS or the CNPP. MCGS's DIF is 43.2 MGD whereas the DIF at BGS was (the facility closed in 2018) approximately 443 MGD and at CNPP is approximately 2,400 MGD. The through screen velocity at MCGS is < 0.5 fps, which is the standard set by EPA for minimizing the impact of impingement mortality of fish at cooling water intake structures.

Common species encountered during impingement studies at southern Lake Michigan facilities include Gizzard Shad, Alewife, Yellow Perch, Spottail Shiner, Rainbow Smelt, Emerald Shiner, Round Goby, and Bluegill.

B. Entrainment

Entrainment sampling was conducted at the BGS from November 1975 to November 1976 and from April 2005 to June 2006. Additional entrainment monitoring was conducted from March to June 2007. Between the three study periods, 12 fish taxa were observed in the entrainment (Appendix B). At the CNPP, entrainment sampling was conducted from 1975 to 1982. In total, 13 fish species and 4 additional fish taxa (identified to family) were identified in the entrainment (Appendix B). Similar to the impingement data, the species identified in these studies are considered representative of the fish eggs and larvae susceptible to entrainment from the Lake Michigan source waterbody. The permittee believes that the overall susceptibility of species to entrainment at the MCGS is expected to be one to two orders of magnitude less than for the BGS and the CNPP facilities, based upon plant DIF being significantly lower than DIF at these other facilities.

As discussed above, entrainment sampling has been conducted at several other industrial facilities located in Indiana and that pull directly from Lake Michigan, either from offshore intakes or from intakes in the near shore area. These include US Steel Midwest and Gary operations as well as Arcelor Mittal Burns Harbor (now Cleveland-Cliffs Burns Harbor) facility. These entrainment studies generally concluded that the numbers of organisms entrained are minimal and that impacts on aquatic ecology are expected to be negligible. Intake flows at these facilities are much greater than the intake flows at MCGS. It should be noted however, that MCGS pulls from Trail Creek and without an actual entrainment study, it's difficult to make definitive conclusions on the numbers of organisms entrained at MCGS.

Common taxa encountered in entrainment studies include ichthyoplankton from the family Centrarchidae (basses and sunfish) and Percidae (true perches and darters) and species including round goby and alewife.

6.3.5 Protected Species Susceptible to Impingement and Entrainment

The most recent La Porte County Endangered, Threatened, and Rare Species List dated February 26, 2025 (IDNR, 2025) was compared to the August 2015 CWIS Report Table 6 listing of protected aquatic species (Table 3 below). Fourteen species are now included and four species are no longer listed. A portion of these changes may be from how inclusion criteria were applied for species with the potential for indirect impacts of impingement and entrainment. Two additional fish species, greater redhorse (state endangered) and longnose dace (state species of special concern) are included in Table 4 below because they are listed by IDNR for La Porte County. However, neither fish is likely to inhabit Trail Creek near the MCGS. Clausen et al. (1998) notes that the greater redhorse is “known from the Wabash, St. Josephs, Eel, St. Mary’s, Iroquois, and Maumee rivers, and Pawpaw and Squirrel Creeks (Simon 1992, Brant Fisher, pers. comm., 1998).” Longnose dace prefer “swiftly flowing, gravel or bouldery creeks and small to medium rivers; also in inshore waters of lakes over gravel or boulder bottoms.” (Hammerson, 2004). Given the inability for the USACE to find a suitable sediment disposal site, Trail Creek has not been dredged in over 20 years (USACE, 2024). It is likely that much of the sediment near the MCGW CWIS is fine-grained and not preferred habitat for the longnose dace.

The U.S. Fish and Wildlife Service has indicated that there are no federally threatened or endangered aquatic species in Lake Michigan and, therefore, there are no CWIS ESA impacts. No new critical habitat, as determined by the United States Fish and Wildlife Service and mapped on its Critical Habitat for Threatened & Endangered Species on-line database, has been designated in the MCGS CWIS’ zone of influence.

Table 3: Threatened/Endangered Species in LaPorte County, IN (2021 Renewal Permit)

Scientific Name	Common Name	State Status
<i>Lymnaea stagnalis</i>	Swamp Lymnaea	Special Concern
<i>Isoperla frisoni</i>	Wisconsin Stripetail	Endangered
<i>Cordulegaster bilineata</i>	Brown Spiketail	Watch List
<i>Leucorrhinia frigida</i>	Frosted Whiteface	Threatened
<i>Nannothemis bella</i>	Elfin Skimmer	Endangered
<i>Rhionaeschna mutata</i>	Spatterdock Darner	Threatened
<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	State Rare
<i>Acipenser fulvescens</i>	Lake Sturgeon	Endangered
<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	Endangered
<i>Moxostoma valenciennesi</i>	Greater Redhorse	Endangered
<i>Rhinichthys cataractae</i>	Longnose Dace	Special Concern
<i>Acris blanchardi</i>	Blanchard’s Cricket Frog	Special Concern
<i>Hemidactylium scutatum</i>	Four-toed Salamander	Special Concern
<i>Necturus maculosus</i>	Common Mudpuppy	Special Concern
<i>Clemmys guttata</i>	Spotted Turtle	Endangered
<i>Clonophis kirtlandii</i>	Kirtland’s Turtle	Endangered
<i>Emydoidea blandingii</i>	Blanding’s Turtle	Endangered
<i>Opheodrys vernalis</i>	Smooth Green Snake	Endangered
<i>Sistrurus catenatus</i>	Eastern Massasauga	Endangered
<i>Terrapene carolina</i>	Eastern Box Turtle	Special Concern
<i>Terrapene ornata</i>	Ornate Box Turtle	Endangered
<i>Thamnophis proximus proximus</i>	Western Ribbon Snake	Special Concern

Table 4: Comparison of Protected Species Listed in La Porte County, Indiana: 2015 vs. 2025

Higher Taxon	Scientific Name	Common Name	Previous Status ^a	Current Status ^a	Notes
Fish	<i>Acipenser fulvescens</i>	Lake Sturgeon	SE	SE	
	<i>Moxostoma valenciennesi</i>	Greater Redhorse	--	SE	
	<i>Rhinichthys cataractae</i>	Longnose Dace	--	SSC	
Amphibian	<i>Acris crepitans blanchardi</i>	Northern Cricket Frog	SSC	SSC	Nomenclature changed to Blanchard's cricket frog (<i>Acris blanchardi</i>)
	<i>Rana pipiens</i>	Northern Leopard Frog	SSC	--	No longer listed for the county
	<i>Hemidactylium scutatum</i>	Four-toed Salamander	--	SSC	
	<i>Necturus maculosus</i>	Common Mudpuppy	--	SSC	
Reptile ^b	<i>Clemmys guttata</i>	Spotted Turtle	SE	SE	Federal Candidate species
	<i>Emydoidea blandingii</i>	Blanding's Turtle	SE	SE	Federal Candidate species
	<i>Clonophis kirtlandii</i>	Kirtland's Snake	--	SE	
	<i>Thamnophis proximus proximus</i>	Western Ribbon Snake	--	SSC	
Bird ^c	<i>Ardea alba</i>	Great Egret	--	SSC	
	<i>Chlidonias niger</i>	Black Tern	SE	SE	
	<i>Cygnus buccinator</i>	Trumpeter Swan	--	SE	
	<i>Gallinula galeata</i>	Common gallinule	--	SE	
	<i>Grus canadensis</i>	Sandhill Crane	SSC	SSC	Nomenclature changed to <i>Antigone canadensis</i>
	<i>Haliaeetus leucocephalus</i>	Bald Eagle	SSC	--	No status but included in the IDNR list
	<i>Ixobrychus exilis</i>	Least Bittern	SE	SE	
	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	SE	SE	

Table 4 Continued: Comparison of Protected Species Listed in La Porte County, Indiana: 2015 vs. 2025

Higher Taxon	Scientific Name	Common Name	Previous Status ^a	Current Status ^a	Notes
	<i>Pandion haliaetus</i>	Osprey	SE	SSC	
	<i>Phalacrocorax auritus</i>	Double-crested Cormorant	SX	--	
	<i>Rallus limicola</i>	Virginia Rail	SE	SE	
Aquatic Plant	<i>Bidens beckii</i>	Beck's Water-marigold	--	SE	
	<i>Lemna gibba</i>	Inflated Duckweed	--	SE	
	<i>Lemna valdiviana</i>	Pale Duckweed	--	SE	
	<i>Myriophyllum pinnatum</i>	Cutleaf Water-milfoil	SE	SE	
	<i>Myriophyllum tenellum</i>	Slender Water-milfoil	--	SE	
	<i>Najas gracillima</i>	Thread-like Naiad	--	ST	
	<i>Potamogeton epihydrus</i>	Nuttall Pondweed	SE	SE	
	<i>Potamogeton friesii</i>	Fries' Pondweed	ST	SE	
	<i>Potamogeton praelongus</i>	White-stem Pondweed	ST	ST	
	<i>Potamogeton pulcher</i>	Spotted Pondweed	SE	ST	
	<i>Potamogeton pusillus</i>	Slender Pondweed	WL	--	
	<i>Potamogeton robbinsii</i>	Flatleaf Pondweed	SR	ST	
	<i>Potamogeton strictifolius</i>	Straight-leaf Pondweed	ST	ST	
	<i>Potamogeton vaseyi</i>	Vasey's Pondweed	SE	SE	
	<i>Utricularia geminiscapa</i>	Hidden-fruit Bladderwort	SE	Se	
	<i>Utricularia minor</i>	Lesser Bladderwort	ST	ST	
	<i>Utricularia purpurea</i>	Purple Bladderwort	SR	ST	
	<i>Utricularia subulata</i>	Zigzag Bladderwort	ST	ST	

^a SE = state endangered; SR = state rare; SSC = state species of special concern; ST = state threatened; SX = state extirpated; WL = watch list

^b Only semi-aquatic reptiles are included. Terrestrial turtles and snakes listed by IDNR for La Porte County were excluded.

^c Only birds whose main prey or forage are at risk for impingement or entrainment are included because they could potentially be impacted indirectly.

6.3.6 Best Technology Available (BTA) Determinations

A. Impingement BTA

Under 40 CFR 125.94(c) existing facilities subject to the rule must comply with one of the following seven BTA Standards for Impingement Mortality:

1. Operate a closed-cycle recirculating system as defined at 40 CFR §125.92;
2. Operate a CWIS that has a maximum design through-screen design intake velocity of 0.5 fps;
3. Operate a CWIS that has a maximum actual through-screen intake velocity of 0.5 fps;
4. Operate an offshore velocity cap that is a minimum of 800 feet offshore;
5. Operate a modified traveling screen that the Director (IDEM) determines meets the definition of the rule (at §125.92(s)) and that the Director (IDEM) determines is BTA for impingement reduction;
6. Operate any other combination of technologies, management practices, and operational measures that the Director (IDEM) determines is BTA for impingement reduction; or
7. Achieve the specified impingement mortality performance standard of less than 24 percent.

The permittee has proposed to comply with alternative 2, above. Under this alternative, the permittee must operate a cooling water intake structure that has a maximum design through-screen intake velocity of 0.5 feet per second. The permittee must submit information to IDEM that demonstrates that the maximum design intake velocity as water passes through the structural components of a screen measured perpendicular to the screen mesh does not exceed 0.5 feet per second. The maximum velocity must be achieved under all conditions, including during minimum ambient source water surface elevations (based on BPJ using hydrological data) and during periods of maximum head loss across the screens or other devices during normal operation of the intake structure.

Based on the information submitted by the permittee, IDEM has determined that the permittee's chosen alternative meets BTA for impingement. The MCGS intake has a design through-screen velocity of 0.26 fps which is below the maximum through-screen velocity of 0.5 fps in alternative 2 above.

B. Entrainment BTA

For existing facilities, EPA did not identify any single technology or group of technology controls as available and feasible for establishing national performance standards for entrainment. Instead, EPA's regulations require the permitting agency to make a site-specific determination of the BTA standard for entrainment for each individual facility. See 40 CFR 125.94(d).

EPA's regulations put in place a framework for establishing entrainment requirements on a site-specific basis, including the factors that must be considered in the determination of the appropriate entrainment controls. These factors include the number of organisms entrained, emissions changes, land availability, and remaining useful plant life as well as social benefits and costs of available technologies when such information is of sufficient rigor to make a decision. These required factors are listed under 40 CFR 125.98(f)(2).

EPA's regulations also establish factors that may be considered when establishing site-specific entrainment BTA requirements, including: entrainment impacts on the waterbody, thermal discharge impacts, credit for flow reductions associated with unit retirements, impacts on reliability of energy delivery, impacts on water consumption, and availability of alternative sources of water. (40 CFR 125.98(f)(3))

The previous permit evaluated and concluded that the existing CWIS met BTA for entrainment. The Fact Sheet for the 2021 iteration of the Permit includes additional discussion on the basis for that decision. IDEM used the facility's cycle of concentration of 1.33 (lower than EPA's COC threshold of 3.0 for freshwater facilities) and a 75.1% reduction in flow compared to a once-through cooling system to support the entrainment BTA decision in the 2021 permit renewal.

IDEM finds that the existing facility meets BTA for entrainment. This is primarily based on the following factors:

1. The permittee is planning to cease operations at this facility by no later than December 31, 2028.
2. The permittee does have closed-cycle cooling via a single parabolic draft induced cooling tower which has allowed the permittee to achieve a reduction in water usage compared to a once-through system.

Must and May Factor Discussion (40 CFR 125.98(f)(2) and (3))

1. MUST FACTORS (40 CFR 125.98(f)(2))

- i. Numbers and types of organisms entrained, including, specifically, the numbers and species (or lowest taxonomic classification possible) of Federally-listed, threatened and endangered species, and designated critical habitat (e.g., prey base);*

The use of a closed-cycle recirculating system (cooling tower), coupled with the low intake velocity, results in a significant reduction in the number and type of organisms that could be entrained. In addition, there are no endangered, threatened or rare aquatic species in the vicinity of the MCGS intake.

ii. Impact of changes in particulate emissions or other pollutants associated with entrainment technologies;

The MCGS existing cooling tower more than likely has some impacts to air. However, MCGS is currently permitted under a Part 70 (Title V) Operating Permit, which ensures that the MCGS is in compliance with the ambient air standards.

iii. Land availability insofar as it relates to the feasibility of entrainment technology;

The cooling tower is already in place, and therefore, land availability is not an issue for the MCGS.

iv. Remaining useful plant life; and

MCGS is currently planning to retire Unit 12 by the end of 2028.

v. Quantified and qualitative social benefits and costs of available entrainment technologies when such information on both benefits and costs is of sufficient rigor to make a decision.

MCGS is not required to provide a Cost Evaluation Study (40 CFR § 122.21(r)(10)) or Benefits Evaluation (40 CFR § 122.21(r)(11)) because the AIF is less than 125 MGD. In addition, the MCGS already employs a closed-cycle cooling tower.

2. MAY FACTORS (40 CFR 125.98(f)(3))

i. Entrainment impacts on the waterbody;

The utilization of the cooling tower in conjunction with the low intake velocity results in minimal entrainment impacts to Trail Creek and Lake Michigan.

ii. Thermal discharge impacts;

Thermal discharge impacts are minimized with the utilization of the cooling tower. In addition, the MCGS discharges are in compliance with Lake Michigan temperature standards.

iv. Impacts on the reliability of energy delivery within the immediate area;

The operation of the already existing cooling tower has minimal impacts on the reliability of energy delivery within the immediate area.

v. Impacts on water consumption; and

The MCGS already utilizes closed-cycle cooling and therefore impacts on water consumption from installation of closed-cycle cooling is not applicable for MCGS.

vi. Availability of process water, gray water, waste water, reclaimed water, or other waters of appropriate quantity; and, quality for reuse as cooling water

There is a lack of availability of process water, gray water, wastewater, reclaimed water, or other waters of appropriate quantity and quality for reuse as cooling water. Therefore, this factor is not applicable to MCGS.

6.3.7 BTA Impingement and Entrainment Determination Summary

The permittee has chosen impingement compliance alternative 2 above (40 CFR 125.94(c)(2)). Under this alternative, the permittee must operate a cooling water intake structure that has a maximum design through-screen intake velocity of 0.5 fps. The MCGS intake has a through-screen design intake velocity of 0.26 fps which is below the maximum through screen velocity of 0.5 fps under this alternative; therefore, IDEM has determined that the permittee's intake meets BTA for impingement.

Further, IDEM has determined that the existing facility meets BTA for entrainment. Primary in this entrainment BTA determination is that the facility will cease operations no later than December 31, 2028 and the permittee does have a single parabolic draft cooling tower which has allowed the permittee to achieve reductions in water usage.

6.3.8 Permit Conditions

The permittee shall comply with requirements below:

1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.
2. The permittee must at all times properly operate and maintain the cooling water intake structure and associated intake equipment.
3. The permittee must inform IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.
4. Any discharge of intake screen backwash must meet the Minimum Narrative Limitations contained in Part I.B of the permit. There must be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.
5. The permittee must either conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap,

or during periods of inclement weather).

6. In accordance with 40 CFR 125.97(c), by January 31 of each year, the permittee must submit to the Industrial NPDES Permit Section IDEM-OWQ an annual certification statement for the preceding calendar year signed by the responsible corporate officer as defined in 40 CFR 122.22 (see 327 IAC 5-2-22) subject to the following:
 - a. If the information contained in the previous year's annual certification is still pertinent, you may simply state as such in a letter to IDEM and the letter, along with any applicable data submission requirements specified in this section shall constitute the annual certification.
 - b. If you have substantially modified operation of any unit at your facility that impacts cooling water withdrawals or operation of your cooling water intake structures, you must provide a summary of those changes in the report. In addition, you must submit revisions to the information required at 40 CFR 122.21(r) in your next permit application.
7. BTA determinations for entrainment mortality and impingement mortality at cooling water intake structures will be made in each permit reissuance in accordance with 40 CFR 125.90-98. The permittee must submit all the information required by the applicable provisions of 40 CFR 122.21(r)(2) through (r)(8) with the next renewal application. Since the permittee has submitted the studies required by 40 CFR 122.21(r), the permittee may, in subsequent renewal applications pursuant to 40 CFR 125.95(c), request to reduce the information required if conditions at the facility and in the waterbody remain substantially unchanged since the previous application so long as the relevant previously submitted information remains representative of the current source water, intake structure, cooling water system, and operating conditions. Any habitat designated as critical or species listed as threatened or endangered after issuance of the current permit whose range of habitat or designated critical habitat includes waters where a facility intake is located constitutes potential for a substantial change that must be addressed by the owner/operator in subsequent permit applications, unless the facility received an exemption pursuant to 16 U.S.C. 1536(o) or a permit pursuant to 16 U.S.C. 1539(a) or there is no reasonable expectation of take. The permittee must submit the request for reduced cooling water intake structure and waterbody application information at least **two years and six months** prior to the expiration of the NPDES permit. The request must identify each element in this subsection that it determines has not substantially changed since the previous permit application and the basis for the determination. IDEM has the discretion to accept or reject any part of the request.
8. The permittee shall submit and maintain all the information required by the applicable provisions of 40 CFR 125.97.
9. The permittee must keep records of all submissions that are part of its permit application until the subsequent permit issued to document compliance with 40 CFR 125.95. If IDEM approves a request for reduced permit application studies under 40 CFR 125.95(a) or (c) or 40 CFR 125.98(g), the permittee must keep records of all submissions that are part of the previous permit application until the subsequent permit is issued.

10. All required reports must be submitted to the IDEM, Office of Water Quality, NPDES Permits Branch, Industrial NPDES Permit Section at OWQWWPER@idem.in.gov and the Compliance Branch at wwReports@idem.in.gov.

6.4 Streamlined Mercury Variance (SMV)

The permittee applied for a Streamlined Mercury Variance (SMV) on January 15, 2010. The SMV was initially incorporated into the NPDES Permit with a modification that became effective on June 8, 2010. The permittee submitted a SMV renewal application on October 1, 2025. The SMV renewal application was deemed complete on October 23, 2025. The SMV renewal has been incorporated into this permit renewal and applies to the discharge from Outfall 001.

The SMV establishes a streamlined process for obtaining a variance from a water quality criterion used to establish a WQBEL for mercury in an NPDES permit. The goal of the SMV is to reduce the effluent levels of mercury towards, and achieve as soon as practicable, compliance with the mercury WQBELs through implementation of a pollutant minimization program plan (PMPP). The SMV renewal will remain in effect until the permit expires under IC 13-14-8-9. Pursuant to IC 13-14-8-9(e), when the SMV renewal is incorporated into a permit extended under IC 13-15-3-6 (administratively extended), the renewal will remain in effect as long as the NPDES permit requirements affected by the SMV are in effect.

Mercury Interim Discharge Limit

The permit includes an interim discharge limit for mercury of 3.1 ng/l. Compliance with the interim discharge limit will be achieved when the average of the measured effluent daily values over the rolling twelve month period is less than the interim limit. Each reporting period, the permittee shall report both a daily maximum value and an annual average value for mercury.

The interim discharge limit was developed in accordance with 327 IAC 5-3.5-7 and with 327 IAC 5-3.5-8. Specifically, the interim discharge limit shall be based upon available, valid, and representative data of the effluent mercury levels collected and analyzed over the most recent two (2) year period from the facility. The existing interim limit of 3.1 ng/l will continue to be effective in the renewal of the SMV. The continuation of the existing interim limit is based upon a review of the most recent two (2) years of effluent mercury data. The effluent data indicates that the PMPP is making progress in the reduction of mercury as an overall trend. However, the effluent data indicates that the existing interim limit of 3.1 ng/l should be maintained in the SMV renewal to ensure the goal of the SMV is met; to reduce the effluent levels of mercury towards, and achieve as soon as practicable, compliance with the mercury WQBELs.

Pollutant Minimization Program Plan (PMPP)

PMPP requirements are outlined in 327 IAC 5-3.5-9 and are included in Part V of the NPDES permit in accordance with 327 IAC 5-3.5-6. The PMPP focuses on pollution prevention and source control measures to achieve mercury reduction in the effluent. The PMPP was public noticed prior to submittal to IDEM in accordance with 327 IAC 5-3.5-9(c). No comments were received during the public notice period. The goal of the PMPP is to reduce the effluent levels

of mercury towards, and achieve as soon as practicable, compliance with the mercury WQBELs established for the permitted facility.

SMV Annual Reports

The permittee is required to submit annual reports to IDEM by August 1 of each year in which the SMV is in effect. The annual report must describe the SMV applicant's progress toward fulfilling each PMPP requirement, the results of all mercury monitoring within the previous year, and the steps taken to implement the planned activities outlined under the PMPP.

6.5 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.

<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

6.6 Dissolved Metal Translator Study for Copper

On October 12, 2010 IDEM received a site-specific Dissolved Metal Translator Study (DMT, fD) Study Report from MCGS. The facility has requested a renewal of the Metal Translator Study for Copper in the permit application.

In the development of the wasteload allocation for metals that have an acute or chronic aquatic criterion expressed in the form of dissolved metal, Indiana regulation under 327 IAC 5-2-11.4(c)(1) requires that the criterion be set equal to Instream, the total recoverable metal concentration outside the mixing zone that equates to an acute or chronic aquatic life water quality criterion expressed in the form of dissolved metal. Wasteload allocations are then calculates so that the Instream is met outside the mixing zone.

The value of Instream is calculated by dividing the criterion in the form of dissolved metals by the metals translator. Indiana regulation included default metals translators along with the following provisions under IAC 5-2-11.4(c)(8)(E) for developing site-specific metals translators:

“A discharger or proposed discharger may request the use of an alternative translator by using site-specific data. The discharger must conduct a site-specific study to identify the ratio of the dissolved fraction to the total recoverable fraction for a metal in the receiving waterbody outside the mixing zone. If the discharger provides an acceptable study, and other provisions of 327 IAC 2-1.5 and this article are satisfied (such as antibacksliding and antidegradation), the commissioner shall use the site-specific translator. A translator derived for one (1) discharge into a waterbody segment may be applied to other dischargers on the same waterbody segment

if the translator would adequately represent the site-specific conditions applicable to the other dischargers.”

This regulation requires the site-specific metal translator to be determined outside the mixing zone which is consistent with the calculation of the wasteload allocations to meet acute criteria outside the zone of initial dilution (327 IAC2-1.5-8(b)(1)(E)) and to meet chronic criteria outside of the mixing zone (327 IAC 2-1.5-8(b)(1)(2)). Therefore, since the intent is not to exceed water quality outside the mixing zone, the use of a site specific metals translator should not result in criteria being exceeded outside the mixing zone.

US EPA had developed the guidance document “The Metals Translator: Guidance for Calculating A Total Recoverable Permit Limit from a Dissolved Criterion: EPA 823-B-96-007, June 1996, to assist in the development of site-specific metals translators that will ensure that water quality criteria are met outside the mixing zone. The determination of appropriate sampling locations to develop site-specific metals translators that will ensure water quality criteria are met outside the mixing zone. The determination of appropriate sampling locations to develop site-specific metals translators is included in Section 3.2 of the guidance document. According to Section 3.2 of the guidance document:

“The following approaches are acceptable for the purpose of developing the translator. When deciding where to locate sampling stations, consideration should be giving to sampling at the point of complete mixing (rather than the edge of the mixing zone) if existing environmental factors constitute a basis for concern that downstream conditions may result in nontoxic metal becoming toxic.”

The guidance document lists the following approaches:

1. Collect samples at or beyond the edge of the mixing zone
2. Collect samples from the far field
3. Collect samples from effluent and ambient water and combine in the laboratory.

Since a mixing zone is not allowed in Lake Michigan, any point in Lake Michigan, beyond discharge would be considered outside the mixing zone. Due to the difficulty of sampling in Lake Michigan, IDEM chose a location at the Michigan City Lighthouse that would be outside the mixing zone and accessible by land. This is considered to be the far field. To obtain information about the metals translator closer to the outfall, IDEM chose a laboratory dilution of five to one (5:1). While the metals translator developed from sampling data indicate that dissolved metals concentrations are decreasing from the outfall to the far field. Therefore, the use of the metals translator at the 5:1 dilution will not result in water quality criteria being exceeded in Lake Michigan outside the mixing zone. The IDEM OWQ Environmental Toxicology and Chemistry Section completed a review of the Dissolved Metals Translator Study in December of 2010. IDEM determined that the metals translator at a 5:1 dilution calculated as the geometric mean of the ratio of twenty paired dissolved to total recoverable metal concentrations was 0.680.

Therefore, a metals translator of 0.680 may be used instead of the default metals translator of 0.960 in the calculation of monthly average and daily maximum water quality-based effluent limitations for copper. In the calculation of the WQBEL, a monitoring frequency of two (2) times per month was used. The calculation also used the Lake Michigan 50th percentile hardness of

140 mg/l and the background copper concentration of 0.9 ug/l that were used in the August 18, 2004 wasteload allocation report (WLA000493).

WQBEL for Copper Calculated Using Site-Specific Metals Translator

Acute and Chronic Metals Translator for Copper: 0.680

Monthly Average: 17 ug/l (2.2 lbs/day)

Daily Maximum: 29 ug/l (3.75 lbs/day)

6.7 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.

6.8 Permit Processing/Public Comment

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at <https://www.in.gov/idem/public-notices/>. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. A 30-day comment period is available to solicit input from interested parties, including the public.

Appendix A: Building Block Approach Calculations

Appendix B: Species Identified in Nearby I&E Studies

FAMILY	SCIENTIFIC NAME	COMMON NAME	NON-NATIVE ¹	T&E STATUS ²	CNPP IMPINGEMENT ⁷	CNPP ENTRAINMENT ⁷	CNPP LAKE STUDIES ⁸	BGS IMPINGEMENT	BGS ENTRAINMENT
ACIPENSERIDAE	<i>Acipenser fulvescens</i>	Lake Sturgeon	-	SE	X	X			
AMIIDAE	<i>Amia calva</i>	Bowfin	-	-					
ANGUILLIDAE	<i>Anguilla rostrata</i>	American Eel	X	-					
APHREDODERIDAE	<i>Aphredoderus sayanus</i>	Pirate perch	-	-	X				
ATHERINIDAE	<i>Labidesthes sicculus</i>	Brook Silverside	-	-		X			
CATOSTOMIDAE	<i>Carpiodes cyprinus</i>	Quillback	-	-	X	X	X		
CATOSTOMIDAE	<i>Catostomus catostomus</i>	Longnose Sucker	-	SSC	X	X			X (LJ) ¹¹
CATOSTOMIDAE	<i>Catostomus commersoni</i>	White Sucker	-	-	X	X		X ^{9,10}	X ⁹
CATOSTOMIDAE	<i>Erimyzon oblongus</i>	Creek Chubsucker	-	-					
CATOSTOMIDAE	<i>Erimyzon sucetta</i>	Lake Chubsucker	-	-	X				
CATOSTOMIDAE	<i>Hypentelium nigricans</i>	Northern Hog Sucker	-	-					
CATOSTOMIDAE	<i>Ictiobus bubalus</i>	Smallmouth Buffalo	-	-					
CATOSTOMIDAE	<i>Ictiobus cyprinellus</i>	Bigmouth Buffalo ⁵	X	-					
CATOSTOMIDAE	<i>Ictiobus niger</i>	Black Buffalo ⁵	-	-					
CATOSTOMIDAE	<i>Minytrema melanops</i>	Spotted Sucker	-	-	X				
CATOSTOMIDAE	<i>Moxostoma anisurum</i>	Silver Redhorse ⁵	-	-	X	X			
CATOSTOMIDAE	<i>Moxostoma carinatum</i>	River Redhorse ⁵	-	-					
CATOSTOMIDAE	<i>Moxostoma duquesnei</i>	Black Redhorse	-	-					
CATOSTOMIDAE	<i>Moxostoma erythrum</i>	Golden Redhorse	-	-		X			
CATOSTOMIDAE	<i>Moxostoma macrolepidotum</i>	Shorthead Redhorse	-	-	X	X			
CENTRARCHIDAE	<i>Ambloplites rupestris</i>	Rock Bass ³	-	-	X	X		X ^{9,10}	
CENTRARCHIDAE	<i>Lepomis cyanellus</i>	Green Sunfish	-	-	X	X		X ⁹	
CENTRARCHIDAE	<i>Lepomis gibbosus</i>	Pumpkinseed ³	-	-	X	X		X ^{9,10}	
CENTRARCHIDAE	<i>Lepomis gulosus</i>	Warmouth	-	-	X				
CENTRARCHIDAE	<i>Lepomis macrochirus</i>	Bluegill ³	-	-	X	X		X ^{9,10}	
CENTRARCHIDAE	<i>Lepomis microlophus</i>	Redear Sunfish	X	-					
CENTRARCHIDAE	<i>Lepomis peltastes</i>	Longear Sunfish ⁵	-	-					
CENTRARCHIDAE	<i>Micropterus dolomieu</i>	Smallmouth Bass ³	-	-	X	X		X ^{9,10}	
CENTRARCHIDAE	<i>Micropterus salmoides</i>	Largemouth Bass ³	-	-	X	X		X ⁹	
CENTRARCHIDAE	<i>Pomoxis annularis</i>	White Crappie ³	-	-	X			X ⁹	
CENTRARCHIDAE	<i>Pomoxis nigromaculatus</i>	Black Crappie ³	-	-	X	X		X ⁹	
CLUPEIDAE	<i>Alosa pseudoharengus</i>	Alewife ⁴	X	-	X	X	X	X ^{9,10}	
CLUPEIDAE	<i>Alosa sapidissima</i>	American Shad ⁵	-	-					
CLUPEIDAE	<i>Dorosoma cepedianum</i>	Gizzard Shad ³	-	-	X	X		X ^{9,10}	X ⁹ , (LJ) ¹¹
COTTIDAE	<i>Cottus bairdi</i>	Mottled Sculpin	-	-	X	X	X	X ⁹	X ⁹
COTTIDAE	<i>Cottus cognatus</i>	Slimy Sculpin ⁴	-	SSC	X	X	X	X ⁹	X ⁹
COTTIDAE	<i>Cottus ricei</i>	Spoonhead Sculpin ⁵	-	-					
COTTIDAE	<i>Myoxocephalus thompsoni</i>	Deepwater Sculpin ^{4,5}	-	-	X		X		
CYPRINIDAE	<i>Camptostoma anomalum</i>	Central Stoneroller	-	-					
CYPRINIDAE	<i>Camptostoma oligolepis</i>	Large-scale Stoneroller	-	-					
CYPRINIDAE	<i>Carassius auratus</i>	Goldfish	X	-	X			X ⁹	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NON-NATIVE ¹	T&E STATUS ²	CNPP IMPINGEMENT ⁷	CNPP ENTRAINMENT ⁷	CNPP LAKE STUDIES ⁸	BGS IMPINGEMENT	BGS ENTRAINMENT
CYPRINIDAE	<i>Chrosomus eos</i>	Northern Redbelly Dace ^{5,6}	-	-					
CYPRINIDAE	<i>Chrosomus neogaeus</i>	Finescale Dace ^{5,6}	-	-					
CYPRINIDAE	<i>Couesius plumbeus</i>	Lake Chub	-	-	X	X			
CYPRINIDAE	<i>Ctenopharyngodon idella</i>	Grass Carp	-	-					
CYPRINIDAE	<i>Cyprinella spiloptera</i>	Spotfin Shiner	-	-		X			
CYPRINIDAE	<i>Cyprinus carpio</i>	Carp	X	-	X	X	X	X ^{9,10}	X ⁹
CYPRINIDAE	<i>Hybognathus hankinsoni</i>	Brassy Minnow ^{5,6}	-	-					
CYPRINIDAE	<i>Luxilus cornutus</i>	Common Shiner	-	-		X			
CYPRINIDAE	<i>Margariscus margarita</i>	Pearl Dace ^{5,6}	-	-					
CYPRINIDAE	<i>Nocomis biguttatus</i>	Hornyhead Chub	-	-					
CYPRINIDAE	<i>Notemigonus crysoleucas</i>	Golden Shiner	-	-	X	X			
CYPRINIDAE	<i>Notropis atherinoides</i>	Emerald Shiner	-	-	X	X		X ⁹	
CYPRINIDAE	<i>Notropis heterodon</i>	Blackchin Shiner	-	-		X			
CYPRINIDAE	<i>Notropis heterolepis</i>	Blacknose Shiner	-	-		X			
CYPRINIDAE	<i>Notropis hudsonius</i>	Spottail Shiner	-	-	X	X	X	X ^{9,10}	X ⁹
CYPRINIDAE	<i>Notropis rubellus</i>	Rosyface Shiner	-	-					
CYPRINIDAE	<i>Notropis stramineus</i>	Sand Shiner	-	-		X			
CYPRINIDAE	<i>Notropis volucellus</i>	Mimic Shiner	-	-					
CYPRINIDAE	<i>Opsopoeodus emiliae</i>	Pugnose Minnow	-	-					
CYPRINIDAE	<i>Pimephales notatus</i>	Bluntnose Minnow	-	-		X			
CYPRINIDAE	<i>Pimephales promelas</i>	Fathead Minnow	-	-		X			
CYPRINIDAE	<i>Rhinichthys atratulus</i>	Blacknose Dace ⁵	-	-		X			
CYPRINIDAE	<i>Rhinichthys cataractae</i>	Longnose Dace	-	SSC	X	X			
CYPRINIDAE	<i>Semotilus atromaculatus</i>	Creek Chub	-	-		X			
ESOCIDAE	<i>Esox americanus</i>	Grass Pickerel	-	-	X	X			
ESOCIDAE	<i>Esox lucius</i>	Northern Pike	-	-	X	X			
ESOCIDAE	<i>Esox masquinongy</i>	Muskellunge	-	-					
ESOCIDAE	<i>Esox niger</i>	Chain Pickerel ⁶	-	-					
FUNDULIDAE	<i>Fundulus diaphanus</i>	Banded Killifish	-	-		X			
GASTEROSTEIDAE	<i>Apeltes quadracus</i>	Fourspine Stickleback ⁵	-	-					
GASTEROSTEIDAE	<i>Culaea inconstans</i>	Brook Stickleback	-	-					
GASTEROSTEIDAE	<i>Gasterosteus aculeatus</i>	Threespine Stickleback	X	-					
GASTEROSTEIDAE	<i>Pungitius pungitius</i>	Ninespine Stickleback ⁴	-	-	X	X	X	X ⁹	
GOBIIDAE	<i>Neogobius melanostomus</i>	Round Goby ⁴	X	-				X ¹⁰	X (L/J) ¹¹
GOBIIDAE	<i>Proterorhinus marmoratus</i>	Tubenose Goby ⁵	X	-					
HIODONTIDAE	<i>Hiodon tergisus</i>	Mooneye	-	-					
ICTALURIDAE	<i>Ameiurus melas</i>	Black Bullhead	-	-	X	X			X ⁹
ICTALURIDAE	<i>Ameiurus natalis</i>	Yellow Bullhead	-	-	X				
ICTALURIDAE	<i>Ameiurus nebulosus</i>	Brown Bullhead	-	-	X				
ICTALURIDAE	<i>Ictalurus punctatus</i>	Channel Catfish ³	-	-	X	X		X ^{9,10}	
ICTALURIDAE	<i>Noturus flavus</i>	Stonecat	-	-	X				
ICTALURIDAE	<i>Noturus gyrinus</i>	Tadpole Madtom	-	-	X			X ⁹	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NON-NATIVE ¹	T&E STATUS ²	CNPP IMPINGEMENT ⁷	CNPP ENTRAINMENT ⁷	CNPP LAKE STUDIES ⁸	BGS IMPINGEMENT	BGS ENTRAINMENT
ICTALURIDAE	<i>Pylodictis olivaris</i>	Flathead Catfish	X	-	X				
LEPISOSTEIDAE	<i>Lepisosteus oculatus</i>	Spotted Gar	-	-					
LEPISOSTEIDAE	<i>Lepisosteus osseus</i>	Longnose Gar	-	-	X				
LEPISOSTEIDAE	<i>Lepisosteus platostomus</i>	Shortnose Gar ⁵	X	-					
LOTIDAE	<i>Lota lota</i>	Burbot ⁴	-	-	X	X	X	X ³	
MORONIDAE	<i>Morone americana</i>	White Perch	X	-					
MORONIDAE	<i>Morone chrysops</i>	White Bass	-	-					
OSMERIDAE	<i>Osmerus mordax</i>	Rainbow Smelt ^{3,4}	X	-	X	X	X	X ³	X ³
PERCIDAE	<i>Etheostoma caeruleum</i>	Rainbow Darter	-	-					
PERCIDAE	<i>Etheostoma exile</i>	Iowa Darter	-	-					
PERCIDAE	<i>Etheostoma nigrum</i>	Johnny Darter	-	-	X	X	X	X ³	
PERCIDAE	<i>Gymnocephalus cernuus</i>	Ruffe ⁵	X	-					
PERCIDAE	<i>Perca flavescens</i>	Yellow Perch ^{3,4}	-	-	X	X	X	X ^{3,10}	X ³ , (LJ) ¹¹
PERCIDAE	<i>Percina caprodes</i>	Logperch	-	-	X	X			
PERCIDAE	<i>Sander canadensis</i>	Sauger	-	-					
PERCIDAE	<i>Sander vitreus</i>	Walleye ³	-	-	X			X ¹⁰	X ¹⁰ (1 egg)
PERCOPSIDAE	<i>Percopsis omiscomaycus</i>	Trout-perch	-	SSC	X	X	X	X ³	X ³
PETROMYZONTIDAE	<i>Ichthyomyzon castaneus</i>	Chestnut Lamprey	-	-	X				
PETROMYZONTIDAE	<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey ⁵	-	SE					
PETROMYZONTIDAE	<i>Ichthyomyzon unicuspis</i>	Silver Lamprey	-	-					
PETROMYZONTIDAE	<i>Lampetra appendix</i>	American Brook Lamprey	-	-					
PETROMYZONTIDAE	<i>Petromyzon marinus</i>	Sea Lamprey ³	X	-	X				
SALMONIDAE	<i>Coregonus artedii</i>	Lake Herring/Cisco	-	SSC	X	X			
SALMONIDAE	<i>Coregonus clupeaformis</i>	Lake Whitefish	-	SSC	X	X			
SALMONIDAE	<i>Coregonus hoyi</i>	Bloater ⁴	-	-	X	X			
SALMONIDAE	<i>Coregonus kiyi</i>	Kiyi ⁵	-	-					
SALMONIDAE	<i>Coregonus reighardi</i>	Shortnose Cisco	-	-					
SALMONIDAE	<i>Coregonus zenithicus</i>	Shortjaw Cisco	-	-					
SALMONIDAE	<i>Oncorhynchus kisutch</i>	Coho Salmon ³	X	-	X	X		X ³	
SALMONIDAE	<i>Oncorhynchus mykiss</i>	Rainbow Trout ³	X	-	X	X		X ¹⁰	
SALMONIDAE	<i>Oncorhynchus nerka</i>	Sockeye Salmon (Kokanee) ⁵	X	-					
SALMONIDAE	<i>Oncorhynchus tshawytscha</i>	Chinook Salmon ³	X	-	X	X			
SALMONIDAE	<i>Oncorhynchus gorbusha</i>	Pink Salmon ⁵	X	-					
SALMONIDAE	<i>Prosopium coulteri</i>	Pygmy Whitefish ^{5,6}	-	-					
SALMONIDAE	<i>Prosopium cylindraceum</i>	Round Whitefish ⁶	-	-	X	X		X ¹⁰	
SALMONIDAE	<i>Salmo salar</i>	Atlantic Salmon	X	-					
SALMONIDAE	<i>Salmo trutta</i>	Brown Trout ³	X	-	X	X		X ³	
SALMONIDAE	<i>Salvelinus fontinalis</i>	Brook Trout	-	-					
SALMONIDAE	<i>Salvelinus namaycush</i>	Lake Trout ³	-	-	X	X		X ³	
SCIAENIDAE	<i>Aplodinotus grunniens</i>	Freshwater Drum ³	-	-	X	X			
UMBRIDAE	<i>Umbra limi</i>	Central Mudminnow	-	-	X	X			

FAMILY	SCIENTIFIC NAME	COMMON NAME	NON-NATIVE ¹	T&E STATUS ²	CNPP IMPINGEMENT ⁷	CNPP ENTRAINMENT ⁷	CNPP LAKE STUDIES ⁸	BGS IMPINGEMENT	BGS ENTRAINMENT
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¹ USGS. 2012. Nonindigenous Aquatic Species Database, Gainesville, FL. <http://nas.er.usgs.gov>

² No species were federally listed; State listings are for State of Indiana only (SE = State Endangered; SSC = State Special Concern)

³ Species identified as being in vicinity of MCGS by IDNR (http://www.in.gov/dnr/fishwild/files/fw-LakeMI_Shoreline_Tributaries_Fishing_Information.pdf)

⁴ Species indicated in Madenjian, C.P., D.B. Bunnell, T.J. Desorcie, M.J. Kostich, P.M. Armenio, and J.V. Adams. 2014. Status and Trends of Prey Fish Populations in Lake Michigan, 2013. USGS. 16pp. http://www.in.gov/dnr/fishwild/files/fw-LMich_Prey_Fish_Report_Final_2013.pdf

⁵ Species range does not include vicinity of MCGS (Becker 1983)

⁶ Lake MI fish spp not identified by IDNR on state species list. http://www.in.gov/dnr/fishwild/files/fw-Fishes_Of_Indiana.pdf

⁷ Species identified in impingement and entrainment monitoring at the D.C. Cook Nuclear Power Plant (CNPP) conducted from 1975 - 1982.

⁸ Species identified in source waterbody assessments (i.e., trawling, gillnetting, seining) near the Cook Nuclear Power Plant (CNPP), 1975-1982

⁹ Species identified in impingement and entrainment monitoring at the NIPSCO Bailly Generating Station (BGS) conducted from November 1975 - November 1976.

¹⁰ Species identified in impingement and entrainment monitoring at the NIPSCO Bailly Generating Station (BGS) conducted from 2005 - 2007.

¹¹ LJJ = Larval/Juvenile identified in impingement and entrainment monitoring at the NIPSCO Bailly Generating Station (BGS) conducted from 2005 - 2007.