

**STATE OF INDIANA**  
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PUBLIC**  
**NOTICE NO: 20241113 – IN0002801– D**  
**DATE OF NOTICE: November 13, 2024**  
**DATE RESPONSE DUE: December 13, 2024**

The Office of Water Quality proposes the following DRAFT NPDES PERMIT:

**MINOR – RENEWAL:**

**Duke Energy Indiana, LLC – Noblesville Generating Station**, Permit No. IN0002801, HAMILTON COUNTY, 12225 Riverwood Avenue, Noblesville, IN. This minor industrial steam electric power plant facility generates 300 MW of electricity. The facility discharges 3.4 MGD of non-process wastewater to the West Fork White River via Outfalls 001 and 005. Outfall 001 is located at Latitude: 40° 05' 4.3", Longitude: -85° 58' 9"; Outfall 005 is located at Latitude: 40° 05' 43", Longitude: -85° 58' 10". Permit Manager: Heidi Etter, 317/233-4903, [hetter@idem.in.gov](mailto:hetter@idem.in.gov). Posted online at <https://www.in.gov/idem/public-notices/>.

**PROCEDURES TO FILE A RESPONSE**

You are hereby notified of the availability of a 30-day public comment period regarding the referenced draft permit, in accordance with 327 IAC 5-3-9. The application and draft permit documents are available for inspection at IDEM, Office of Water Quality, Indiana Government Center North - Room 1255, 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 is posted online on the above-referenced IDEM public notice web page. 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 is 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 circulated in at least one newspaper in the geographical area of the discharge and to those persons submitting comments and/or on the mailing list at least 30 days prior to the hearing.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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**Eric J. Holcomb**  
*Governor*

**Brian C. Rockensuess**  
*Commissioner*

November 13, 2024

VIA ELECTRONIC MAIL

Chris Roeder, General Manager  
Duke Energy Indiana, LLC  
1000 East Main Street  
Plainfield, Indiana 46168

Dear Chris Roeder:

Re: NPDES Permit No. IN0002801  
Draft Permit  
Duke Energy Indiana, LLC—Noblesville  
Noblesville, IN – Hamilton 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 Heidi Etter of my staff, at 317/233-4903 or [hetter@idem.in.gov](mailto:hetter@idem.in.gov).

Sincerely,

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

Enclosures

cc: Hamilton County Health Department  
Tena Hopkins, Duke Energy Indiana, LLC  
Joey Van Skaik, Duke Energy Indiana, LLC  
Chief, Permits Section, U.S. EPA, Region 5  
Aaron Deeter, 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 IC 13-15,

DUKE ENERGY INDIANA, LLC

is authorized to discharge from the Noblesville Generating Station, an electric generating facility, that is located at 21225 Riverwood Avenue, Noblesville, Indiana, Hamilton County to receiving waters identified as the West Fork of the White River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

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

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 40° 05' 43", Longitude -85° 58' 09". The discharge is limited to noncontact cooling water, low volume waste (HRSG boiler blowdown, oil & grease from floor drains, demineralizer wastewater, and filter backwash), intake screen backwash, and stormwater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the West Fork of the White River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3][4][5][18]  
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								
Effluent	Report	Report	MGD	----	----	----	Daily	24 Hr. Total
Intake	----	----	----	----	----	----	----	----
Interim	Report	Report	MGD	----	----	----	Daily	24 Hr. Total
Final	Report	Report	Number	----	----	----	Daily	Report
Cycles of Concentration (COC)	Report	Report	Number	----	----	----	Daily	Report
Copper [6]	----	----	----	0.04	0.1	mg/l	2 X Monthly	Grab
TSS[7]	----	----	----	11	35	mg/l	2 X Monthly	Grab
Oil & Grease [7]	----	----	----	7.3	15	mg/l	2 X Monthly	Grab
TRC-Continuous[8][9][10]	----	----	----	0.02	0.04	mg/l	Daily	Grab
TRC-Intermittent[9][11]	----	----	----	----	0.2	mg/l	Daily	Grab
TRC – Intermittent Frequency[11]	----	4	Times/Day	----	----	----	Daily	Report
TRC – Intermittent Dose Duration[11]	----	40	Min/Dose	----	----	----	Daily	Report
Temperature[12]								
Upstream (Intake)	----	----	----	Report	Report	°F	Daily	Grab
Interim	----	----	----	Report	Report	°F	Hourly	Grab
Final	----	----	----	Report	Report	°F	Continuous [13]	Report
Effluent	----	----	----	Report	Report	°F	Continuous [13]	Report
Mixed River	----	----	----	Report	Report	°F	Daily	Report
Interim [14]	----	----	----	Report	Report	°F	Daily	Report
Final [15][16]	----	----	----	Report	Report	°F	Daily	Report
Hours above max	----	87.6	Hours	----	----	----	Daily [13]	Report
Whole Effluent Toxicity Testing [19]								

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [17]	6.0	----	9.0	s.u.	Daily	Grab

- [1] Compliance monitoring including flow and outfall temperature shall be conducted at the discharge weir located in the secondary settling pond and is identified as the Outfall 001 monitoring location.
- [2] See Part I.B. of the permit for the minimum narrative limitations.
- [3] 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 dosage, 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-agency-forms/>.
- [4] Intake screen backwash is discharged into the effluent discharge channel after the Outfall 001 monitoring point which is located at the secondary settling pond. The combination of effluent and intake screen backwash discharges to the West Fork White River through the Outfall 001 discharge structure. The intake screen backwash discharge shall meet the Narrative Water Quality Standards found in Part I.B. of this permit.
- [5] 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.
- [6] The permittee shall measure and report the identified metal as total recoverable metal.
- [7] The technology-based effluent limits for TSS and oil & grease shall be reevaluated during the next permit renewal. For IDEM to consider approval of an allocation for a parameter that is contributed by any wastestream not regulated by the ELG, the following must be submitted with the next permit renewal application:
  - (a) Average flow rates for each regulated, unregulated and dilution wastestream before combining with a wastestream of a different category (regulated, unregulated and dilution),
  - (b) Beginning at least 24 months prior to the next permit renewal application due date, collect analytical data at least 1 x Month for the parameter contributed by

each unregulated wastestream prior to combining with a wastestream of a different category for which the permittee wants an allocation,

- (c) Analytical data for the parameter for each wastestream which discharges directly to the Outfall 001 wastewater treatment plant shall be collected prior to entering the wastewater treatment plant. In addition, analytical data for the parameter shall be collected at the discharge from the treatment system, and
- (d) The permittee must submit a sampling plan to IDEM for review and approval prior to initiating the monitoring described above

[8] The water quality based effluent limit (WQBEL) for TRC (continuous) is less than the limit of quantitation (LOQ) as specified in footnote [9]. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ. If the measured concentration of TRC (continuous) is greater than the water quality based effluent limitations and above the respective LOD specified in footnote [9] in any three (3) consecutive analyses, or any five (5) out of nine (9) analyses, then the discharger shall:

- (1) Determine the source of the parameter through an evaluation of sampling techniques, analytical/laboratory procedures, and waste streams (including internal waste streams); and re-examine the chlorination /dechlorination procedures.
- (2) The sampling and analysis for TRC (continuous) shall be increased to 2 X Daily and remain at this increased sampling frequency until:
  - (a) The increased sampling frequency for TRC (continuous) has been in place for at least five (5) days.
  - (b) At least nine (9) samples have been taken under this increased sampling frequency; and
  - (c) The measured concentration of TRC (continuous) is less than the LOD specified in footnote [9] in at least seven (7) out of the nine (9) most recent analyses.

[9] 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>
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 shall

be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [10] 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 6-1, Footnote [6]. These water quality based effluent limits (WQBELs) are applicable any time that the discharge of chlorine does not meet this intermittent definition.
- [11] 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 6-1, Footnote [6], 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.
- [12] The following conditions apply for temperature outside the mixing zone:
- (1) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
  - (2) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.
  - (3) The maximum temperature rise at any time or place above natural shall not exceed five (5) degrees Fahrenheit.
- [13] Effluent temperatures shall be monitored continuously, and measurements recorded, at a minimum, every hour. The highest single recorded measurement for each day shall be reported on the MMR for each day. The highest single recorded daily measurement shall be reported on the DMR as the maximum daily temperature for that month. The total number of minutes the mixed river temperature is above the applicable corresponding maximum limits in Table 1 for the twelve (12) months shall be reported on both the MMR and DMR. The twelve months shall include the current month and the previous eleven (11) months.

- [14] Continuous/hourly temperature monitoring and reporting is required at Outfall 001. Until the permittee can comply with the hourly upstream (intake) river temperature and daily intake flow monitoring requirements, the following mixed river temperature calculation may be used in the interim and the results reported to IDEM on each DMR and MMR.

$$T_{MR} = T_U + \frac{Q_E(T_E - T_U)}{38.75}$$

where:

- T<sub>MR</sub> = mixed river temperature (°F)
- T<sub>U</sub> = upstream river temperature (°F)
- T<sub>E</sub> = effluent temperature (°F)
- Q<sub>E</sub> = effluent flow (MGD)
- 38.75 = one-half of the Q<sub>7,10</sub> low flow value of the receiving stream in MGD

- [15] The mixed river temperature shall be calculated each hour using the below equation (or more frequently if temperature is recorded more frequently than hourly). The highest single calculated result for each day shall be reported on the MMR for each day. The highest single calculated daily result for a month shall be reported on the DMR as the mixed river temperature maximum daily temperature for that month. The mixed river temperature is to be determined using the following equation:

$$T_{MR} = T_U + \frac{Q_E(T_E - T_U)}{0.5(Q_R - Q_I) + Q_E}$$

where:

- T<sub>MR</sub> = mixed river temperature (°F)
- T<sub>U</sub> = upstream river temperature (°F) [taken at the intake]
- T<sub>E</sub> = effluent temperature (°F)
- Q<sub>E</sub> = effluent flow (MGD)
- Q<sub>I</sub> = intake flow (MGD)
- Q<sub>R</sub> = The Q<sub>7,10</sub> of the receiving stream upstream of the facility = 48 MGD

- [16] Upon completion of the Schedule of Compliance set forth in Part I.G., the calculated mixed river temperature shall not exceed the maximum limits in the following table more than one percent (1%) of the hours in the twelve (12) month period ending with any month. At no time shall the mixed river temperature exceed the limits in the following table by more than three degrees Fahrenheit (3°F).

°F	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	50	50	60	70	80	90	90	90	90	78	70	57



- [17] 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.
- [18] The permittee is not authorized to discharge metal cleaning waste as defined at 40 CFR 423.11(d) or combustion residual leachate as defined at 40 CFR 423.11(r) at any outfall.
- [19] See Part I.F. of the permit for Whole Effluent Toxicity Testing requirements.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 201, located at Latitude 40° 05' 59", Longitude -85° 58' 18". 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 other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

**DISCHARGE LIMITATIONS [1][2]**

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 [3]	Report	----	MGD	----	----	----	1 X Daily	24 Hr. Total
Total Chromium [4]	----	----	----	0.2	0.2	mg/l	2 X Month	Grab
Zinc [4]	----	----	----	1.0	1.0	mg/l	2 X Month	Grab
Oil and Grease	----	----	----	Report	Report	mg/l	2 X Month	Grab
TSS	----	----	----	Report	Report	mg/l	2 X Month	Grab
TRC [5]	----	----	----	Report	Report	mg/l	1 X Daily	Grab
Chlorination Duration/Day [6]	----	120	Minutes/Day	----	----	----	1 X Daily	Report
126 Priority Pollutants [7]								

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [8]	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 dosage, 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-agency-forms/>.

- [3] Flow may be estimated using engineering calculations utilizing pipe diameter and pumping rates.
- [4] The permittee shall measure and report the identified metal as total recoverable metal.
- [5] 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>
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 shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [6] 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
- [7] The discharge of cooling tower blowdown is regulated by the 40 CFR 423.15(a)(10). 40 CFR 423.15(a)(10)(i) prohibits the discharge of the 126 priority pollutants listed in Appendix A of this regulation in detectable amounts, with the exception of total zinc and total chromium, which have specific numeric limits. In accordance with 423.15(a)(10)(iii), instead of the monitoring specified in 40 CFR 122.48(b), compliance with the limitations for the 126 priority pollutants in paragraph (a)(10)(i) of 40 CFR 423.15 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final cooling tower blowdown discharge by the analytical methods in 40 CFR part 136.

Within 6 months of the effective date of the permit, the permittee shall either provide sample data for the discharge from the cooling tower blowdown (prior to commingling with other wastestreams) showing that the 126 priority pollutants are not detectable in the cooling tower blowdown by the analytical methods in 40 CFR part 136; or provide the certified analytical contents of all chemicals used for cooling tower maintenance and engineering calculations demonstrating that any of the priority pollutants present in the maintenance chemicals would not be detectable in

the cooling tower discharge. Total Chromium and zinc are excluded from this requirement.

- [8] 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 stormwater from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 101, located at Latitude 40° 05' 42", Longitude -85° 58' 10". Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the West Fork of the White River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1] [2] [3]

<u>Parameter</u>	Outfall 101		<u>Monitoring Requirements</u>	
	<u>Daily Maximum</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	MGD	Annually	Estimate Total
Total Suspended Solids	Report	mg/l	Annually	Grab
pH	Report	s.u.	Annually	Grab
Oil & Grease	Report	mg/l	Annually	Grab
COD	Report	mg/l	Annually	Grab
CBOD <sub>5</sub>	Report	mg/l	Annually	Grab
Total Kjeldahl Nitrogen	Report	mg/l	Annually	Grab
Nitrate plus Nitrite Nitrogen	Report	mg/l	Annually	Grab
Total Phosphorus	Report	mg/l	Annually	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. There shall be a minimum of three (3) months between reported sampling events.

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] See Part I.B. of the permit for the minimum narrative limitations.

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 005, located at Latitude 40° 05' 43", Longitude -85° 58' 10". The discharge is limited to 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 West Fork of the White River. Such discharge shall be limited and monitored by the permittee as specified below:

**DISCHARGE LIMITATIONS [1][2]**  
Outfall 005

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	----	MGD	----	----	----	Daily	24 Hr. Total
Boron[4]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Total Iron[4]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Dissolved Iron	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Antimony[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Arsenic[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Barium[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Beryllium[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Cadmium[4]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Calcium[4]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Hexavalent Chromium[6]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Cobalt[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Fluoride[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Lead[4]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Lithium[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Mercury[5]	----	----	----	Report	Report	ng/l	6 X Yearly	Grab
Molybdenum[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Selenium[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Thallium[4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	Grab
Radium 226 and 228 combined[5]	----	----	----	Report	Report	pCi/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 [3]	6.0	----	9.0	s.u.	2 X Monthly	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 dosage, 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-agency-forms/>.
- [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 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
Radium 226 and 228 combined	903.0	0.253 pCi/L	0.805 pCi/L
Thallium	200.8	0.073 µg/l	1.0 µg/l
Thallium	200.7	5 µg/l	10 µg/l
Molybdenum	200.8	0.48 µg/l	5.0 µg/l
Molybdenum	200.7	25 µg/l	50 µg/l
Lithium	200.7	4.1 µg/l	20.0 µg/l
Cobalt	200.8	0.086 µg/l	1.0 µg/l
Cobalt	200.7	5 µg/l	10 µg/l
Hexavalent Chromium	218.6	0.04 µg/l	0.1 µg/l
Beryllium	200.8	0.033 µg/l	0.20 µg/l
Barium	200.8	4.9 µg/l	15.6 µg/l
Barium	200.7	25 µg/l	50 µg/l
Antimony	200.8	0.13 µg/l	1.0 µg/l
Antimony	200.7	3 µg/l	6 µg/l
Fluoride	SM 4500F/C	0.021 mg/l	0.10 mg/l
Fluoride	300.0	0.05 mg/l	0.1 mg/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 µg/l	1.6 µg/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 µg/l	1.3 µg/l
Arsenic	200.7	5 µg/l	10 µg/l
Selenium	200.8, Rev. 5.4 (1994)	0.35 µg/l	1.0 µg/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 shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

- [6] Hexavalent chromium shall be measured and reported as dissolved metal. The hexavalent chromium sample type shall be by grab method. The maximum holding time for a hexavalent chromium sample is 28 days under 40 CFR 136.3(e), Table II. However, as noted in footnote 20 of Table II, to achieve the 28-day holding time, the ammonium sulfate buffer solution specified in EPA Method 218.6 must be used. This holding time allowance of 28-days supersedes the preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement, in which case the preservation and holding time requirements [the sample must be analyzed within 24 hours of collection] in the method must be followed.



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 monitored 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 parameters.

2. Monthly Reporting

The permittee shall submit 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. Calculations that require averaging of measurements of daily values (both concentrations and mass) shall use an arithmetic mean, except the monthly average for *E. coli* shall be calculated as a geometric mean.
- b. Daily effluent values (both mass and concentration) 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 individual sampling time to formulate the “total flow” value,
  - (3) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value,
  - (4) then multiply the volume of the total composite sample by each individual sample’s percentage to determine the volume of that individual sample which will be included in the total composite sample.
- e. “Concentration” 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 of 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-storm water 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](mailto:OWQWWPER@idem.in.gov) and to the Compliance Branch at [wwReports@idem.in.gov](mailto: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:
  - (A) The inspection date and time;
  - (B) The name(s) and signature(s) of the inspectors;
  - (C) Weather information and a description of any discharges occurring at the time of the inspection;
  - (D) Any previously unidentified discharges of pollutants from the site;
  - (E) Any control measures needing maintenance or repairs;
  - (F) Any failed control measures that need replacement;
  - (G) Any incidents of noncompliance observed; and
  - (H) 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.

2. Contents

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

- a. Pollution Prevention Team -The plan shall list, by position title, the member or members of the facility organization as members of a 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.f.

### 1. Whole Effluent Toxicity (WET) Tests

The permittee must conduct the series of aquatic toxicity tests specified in Part I.F.1.d. to monitor the acute and chronic toxicity of the effluent discharged from Outfall(s) 001.

If toxicity is demonstrated in two (2) consecutive toxicity tests, as described in Part I.F.1.f., 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 Permits Branch.

- (3) The determination of acute and chronic endpoints of toxicity (LC<sub>50</sub>, NOEC and IC<sub>25</sub> 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 IC<sub>25</sub> 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) Tests may 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. 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 renewal samples after a test has been initiated, the most recently used sample may continue to be used for test renewal, if first approved by the IDEM Permits Branch, but for no longer than 72 hours after first use.
- (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 Permits Branch.
- (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 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 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 must be conducted monthly for a period of three (3) consecutive months.

If no toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.f., with either species in these three (3) monthly tests, the permittee may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. The permittee must then conduct chronic toxicity testing once every six (6) months, as calculated from six (6) months after the effective date of the permit, for the duration of the permit. The permittee must notify the Compliance Data Section under Part I.F.1.e. prior to reducing the number of species tested to the one most sensitive to the toxicity in the effluent.

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 compliance 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) Notifications of intent 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.f.(4) must be submitted in writing to the Compliance Data Section of IDEM's Office of Water Quality.
- (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) monthly tests, the results of the toxicity tests and laboratory report are due by the 28<sup>th</sup> 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 28<sup>th</sup> day of the month following the end of the period established in Part I.F.1.d.

- (3) The full whole effluent toxicity (WET) test laboratory report must be submitted to IDEM electronically as an attachment to an e-mail to the Compliance Data Section at [wwreports@idem.IN.gov](mailto: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<sub>50</sub> values), if available, and chronic (NOEC, LOEC and IC<sub>25</sub> 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<sub>25</sub>) 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<sub>a</sub>) and chronic toxic units (TU<sub>c</sub>), 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 <sub>50</sub>	%	Report			Laboratory Report
			TU <sub>a</sub>	Report			
		NOEC Survival	%	Report			
			TU <sub>c</sub>	Report			
		NOEC Reproduction	%	Report			
			TU <sub>c</sub>	Report			
	IC <sub>25</sub> Reproduction	%	Report				
TU <sub>c</sub>		Report					
Toxicity (acute) [3]	TU <sub>a</sub>	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61425)		
Toxicity (chronic) [4]	TU <sub>c</sub>	Report [5]	14.5	Report	Laboratory Report and NetDMR (Parameter Code 61426)		
<i>Pimephales promelas</i>	7-day Definitive Static-Renewal Larval Survival and Growth	96-hr. LC <sub>50</sub>	%	Report			Laboratory Report
			TU <sub>a</sub>	Report			
		NOEC Survival	%	Report			
			TU <sub>c</sub>	Report			
		NOEC Growth	%	Report			
			TU <sub>c</sub>	Report			
	IC <sub>25</sub> Growth	%	Report				
TU <sub>c</sub>		Report					
Toxicity (acute) [3]	TU <sub>a</sub>	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61427)		
Toxicity (chronic) [4]	TU <sub>c</sub>	Report [5]	14.5	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. LC<sub>50</sub> result reported in acute toxic units (TU<sub>a</sub>). The toxicity (acute) endpoint for *Pimephales promelas* is the 96-hr. LC<sub>50</sub> result reported in acute toxic units (TU<sub>a</sub>).

[4] The toxicity (chronic) endpoint for *Ceriodaphnia dubia* is the higher of the NOEC Survival, NOEC Reproduction and IC<sub>25</sub> Reproduction values reported in chronic toxic units (TU<sub>c</sub>). The toxicity (chronic) endpoint for *Pimephales promelas* is the higher of the NOEC Survival, NOEC Growth and IC<sub>25</sub> Growth values reported in chronic toxic units (TU<sub>c</sub>).

[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] These values do not represent effluent limitations, but rather exceedance of these values results in a demonstration of toxicity that triggers additional action and reporting by the permittee.

[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<sub>a</sub> (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.(2), the effluent concentration associated with acute toxicity is 100%.
- (2) Toxicity (chronic) will be demonstrated if the effluent is observed to have exceeded 14.5 TU<sub>c</sub> (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.(2), the effluent concentration associated with chronic toxicity is 6.9%.
- (3) If toxicity (acute) or toxicity (chronic) is demonstrated in any of the chronic toxicity tests specified 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. 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.
- (4) If any two (2) consecutive chronic toxicity tests, including any and all repeat tests, demonstrate acute or chronic toxicity, the permittee must notify the 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 compliance schedule.

g. Definitions

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

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE is only required if toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.f.(4). The post-TRE toxicity testing requirements in Part I.F.2.c. must also be completed as part of the TRE compliance schedule.

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

<b>Requirement</b>	<b>Deadline</b>
Development and Submittal of a TRE Plan	Within 90 days of the date of two (2) consecutive failed toxicity tests.
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.



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.

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 Compliance Data Section. The TRE plan must include appropriate measures to characterize the causative toxicants and 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 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., 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 reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. 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 Compliance Data Section beginning six (6) months from the date of two (2) consecutive failed toxicity tests. 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 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.; and
  - (C) If applicable, the intent 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.(4).

G. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the new mixed river temperature equation and corresponding monitoring requirements at Outfall 001 in accordance with the following schedule:
  - a. The permittee shall submit a written progress report to the Compliance Data Section of the Office of Water Quality (OWQ) nine (9) months from the effective date of this permit. The progress report shall include a description of the method(s) selected for meeting the newly imposed mixed river temperature monitoring requirements, in addition to any other relevant information. The progress report shall also include a specific time line specifying when each of the steps will be taken. The new mixed river temperature monitoring requirements are deferred for the term of this compliance schedule, unless the new requirements can be met at an earlier date. The permittee shall notify the Compliance Data Section of OWQ as soon as the newly imposed monitoring requirements for mixed river temperature calculations can be met. Upon receipt of such notification by OWQ, the final monitoring requirements for mixed river temperature will become effective, but no later than twenty-four (24) months from the effective date of this permit. Monitoring and reporting of the effluent for these parameters is required during the interim period.

- b. The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than eighteen (18) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final mixed river temperature monitoring requirements and whether the permittee is meeting the time line set out in the initial progress report.
  - c. Within thirty (30) days of completion of construction, the permittee shall file with the Industrial NPDES Permits Section of OWQ a notice of installation for the additional monitoring equipment and a design summary of any modifications.
  - d. The permittee shall comply with the final mixed river temperature monitoring requirements no later than twenty-four (24) months from the effective date of this permit.
2. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the Compliance Data Section of the OWQ stating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final mixed river temperature monitoring requirements.

#### 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 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.
4. to comply with any applicable standards, regulations and requirements issued or approved under section 316(b) of the Clean Water Act.

5. 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 the LOD and LOQ that can be achieved by use of the specified analytical method.
6. to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary to meet Indiana Water Quality Standards.

## 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

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

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

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

14. Construction Permit

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

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

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

15. Inspection and Entry

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

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

16. New or Increased Discharge of Pollutants

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

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

## B. MANAGEMENT REQUIREMENTS

### 1. Proper Operation and Maintenance

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

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

### 2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(12), 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](mailto: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 "Monthly Reporting", 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 or hazardous substances: Copper

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](mailto: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.
  - 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 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

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.

Steam Electric Effluent Limitation Guidelines

The Final Rule established in 2024 for the Steam Electric Effluent Limitation Guidelines included new provisions to improve transparency and public awareness with respect to water pollution. Under the final rule, facilities are required to post information, such as details of discharges and wastewater treatment systems in use, to a publicly available website. More information about this rule change can be found in 40 CFR 423.19(C).

## Part IV Cooling Water Intake Structures

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

Section 316(b) of the Clean Water Act requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) 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.

**Impingement Mortality BTA:** IDEM has determined that the current cooling water intake structure at this facility is the best technology available to minimize impingement mortality based on the following:

- (1) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(1) by operating a closed cycle recirculating system as defined at 40 CFR 125.92; and
- (2) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(2) by operating an intake that has a maximum design through-screen intake velocity that does not exceed 0.5 fps. This compliance method requires the maximum velocity to 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.

Both of these determinations are based, at least in part, on the premise that the design intake flow is 3.44 mgd. However, the permittee has not provided any substantive documentation, engineering calculations or any other information which supports this design intake flow value. Therefore, during this permit term, IDEM is requiring the permittee to provide engineering calculations and/or a study sufficient to verify the value of the maximum design intake flow for the facility.

**Entrainment Mortality BTA:** After considering all the factors that must and may be considered : IDEM has determined that the current cooling water intake structure at this facility is the best technology available to minimize entrainment mortality based on the following:

- (1) The facility uses a closed-cycle recirculating system which significantly reduces the amount of water withdrawn and number organisms entrained in comparison to facility with a comparable generating capacity without a closed-cycle recirculating system; and
- (2) The design intake flow of 3.44 MGD is approximately between 0.13 to 3.6% of the monthly average flow in the White River.

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 the following cooling water intake structure requirements:

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 (CWIS) 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 monitor the intake flow at a minimum frequency of daily. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the actual intake flows measured at a minimum frequency of daily. If a flow measurement device was not used to obtain this daily flow data, the annual report shall also include the engineering calculations prepared by a qualified professional and supporting data to support the flow data determinations.

6. The permittee must monitor and report its cycles of concentration at its cooling tower at a minimum frequency of daily. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the cycles of concentration measured at a minimum frequency of daily.
7. 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).
8. Within six months of the effective date of the permit, the permittee shall submit to IDEM engineering calculations and/or a study sufficient to verify the value of the maximum design intake flow for the facility. The design intake flow is used to calculate the velocity for the BTA compliance method cited at 40 CFR 125.94(c)(2), which requires the maximum velocity to 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.
9. 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.
10. 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.

11. The permittee shall submit and maintain all the information required by the applicable provisions of 40 CFR 125.97.
12. 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.
13. 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](mailto:OWQWWPER@idem.in.gov) and the Compliance Branch at [wwReports@idem.in.gov](mailto:wwReports@idem.in.gov).



**National Pollutant Discharge Elimination System**  
**Briefing Memo for**  
**Duke Energy Indiana, LLC – Noblesville Generating Station**  
**Draft: November 2024**  
**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](http://www.idem.IN.gov)

<b>Permittee:</b>	Duke Energy Indiana, LLC – Noblesville Generating Station 1000 East Main Street Plainfield, Indiana 46168
<b>Existing Permit Information:</b>	Permit Number: IN0002801 Expiration Date: June 30, 2023
<b>Facility Contact:</b>	Tena Hopkins, Senior EHS Professional (317) 838-1462, <a href="mailto:Tena.Hopkins@Duke-Energy.com">Tena.Hopkins@Duke-Energy.com</a>
<b>Facility Location:</b>	12225 Riverwood Avenue Noblesville, IN 46062 Hamilton County
<b>Receiving Stream(s):</b>	West Fork of the White River
<b>GLI/Non-GLI:</b>	Non-GLI
<b>Proposed Permit Action:</b>	Renew
<b>Date Application Received:</b>	December 29, 2022
<b>Source Category:</b>	NPDES Minor – Industrial
<b>Permit Writer:</b>	Heidi Etter (317) 233-4903   <a href="mailto:hetter@idem.in.gov">hetter@idem.in.gov</a>

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## 1.0 INTRODUCTION

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The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from Duke Energy, LLC – Noblesville Generating Station on December 29, 2022.

In accordance with 327 IAC 5-2-6(a), the current five-year permit was issued with an effective date of July 1, 2022. The permit was subsequently corrected on March 6, 2019, and modified on January 30, 2019, and July 22, 2020. 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) Section 124.7, as well as Title 327 of the Indiana Administrative Code (IAC) 327 Article 5-3-7, a Statement of Basis, or Briefing Memo, is required for certain NPDES permits. This document fulfills the requirements established in these regulations. This Briefing Memo was prepared in order to document the factors considered in the development of NPDES Permit effluent limitations. The technical basis for the Briefing Memo 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 Briefing Memo where necessary.

## 2.0 FACILITY DESCRIPTION

---

### 2.1 General

Duke Energy Indiana, LLC – Noblesville Generating Station is classified under Standard Industrial Classification (SIC) Code 4911-Electric Services. The facility was originally a coal fired steam electric generating facility. In 2003, the facility was converted to a combined-cycle natural gas-fired combustion turbine facility that generates 300 MW of electricity and utilizes mechanical cooling towers.

The source water for the facility is the West Fork of the White River and onsite wells. There are three (3) natural gas-fired combined cycle combustion systems, each of which includes a stationary combustion turbine and a Heat Recovery Steam Generator (HRSG). All wastewater, except intake screen backwash, discharges to the primary settling pond, which then discharges to the secondary settling pond. The discharge from the secondary settling pond flows south through a concrete channel and discharges to the West Fork of the White River above the low head dam (Outfall 001). Storm water only is discharged below the low head dam (Outfall 101).

For the purpose of compliance monitoring, all samples for Outfall 001 shall be taken at the discharge from the secondary settling pond. No coal handling or storage occurs on this site.

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

**Figure 1: Facility Location**



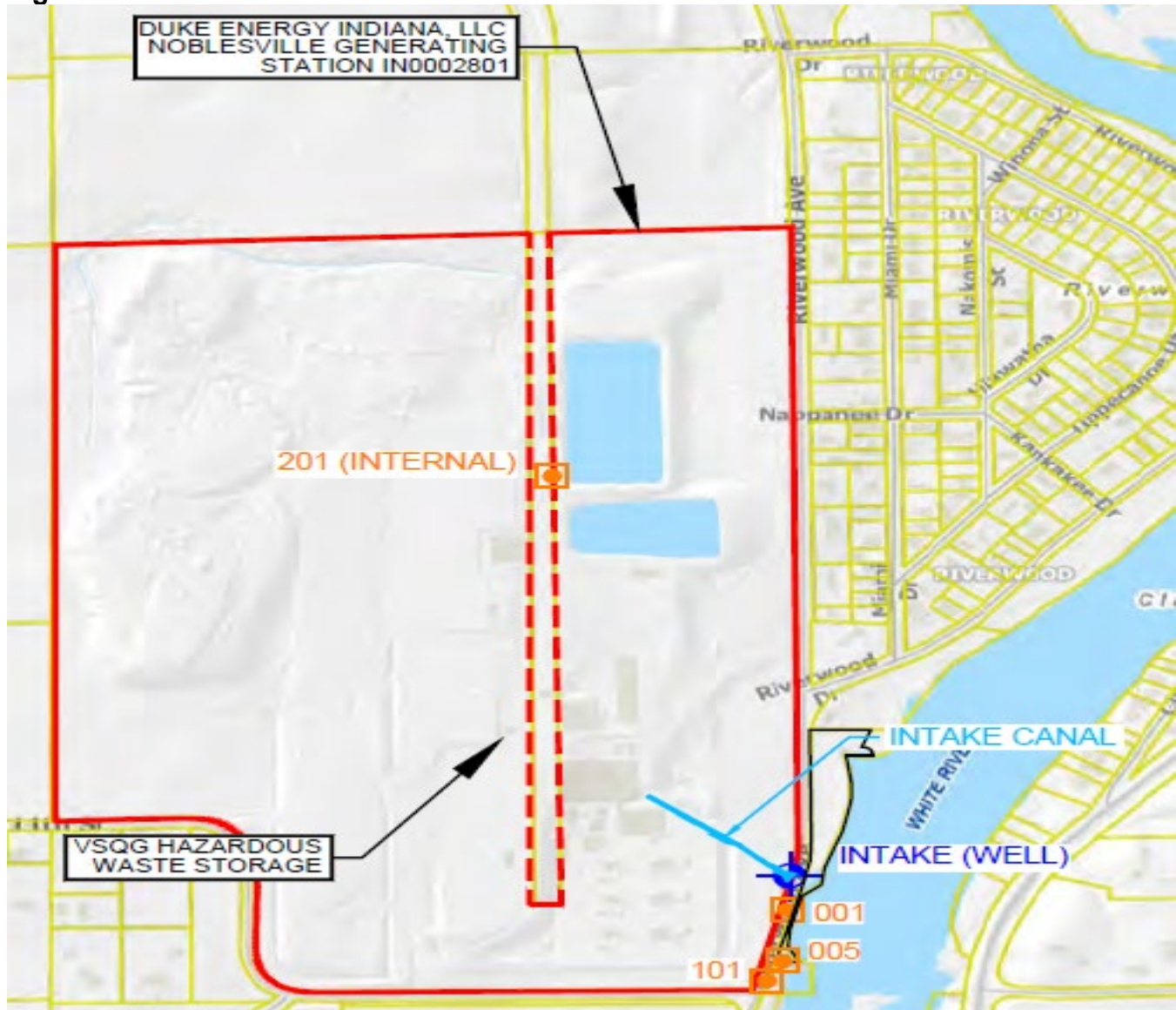
12225 Riverwood Avenue  
Noblesville, IN 46062– Hamilton County



## 2.2 Outfall Locations

Outfall 001	Latitude: 40° 05' 43" Longitude: -85° 58' 9"
Outfall 201	Latitude: 40° 05' 59" Longitude: -85° 58' 18"
Outfall 005	Latitude: 40° 05' 43" Longitude: -85° 58' 10"
Outfall 101	Latitude: 40° 05' 42" Longitude: -85° 58' 10"

Figure 1.1: Outfall Locations



## **2.3 Outfall Description and Wastewater Treatment**

### **Outfall 001**

The primary source of wastewater is cooling tower blowdown from the mechanical draft recirculating cooling tower (Internal Outfall 201), low volume wastewater, and stormwater. The cooling tower dissipates heat from the steam condensers and other equipment that is absorbed by the recirculating cooling water. Cooling tower makeup compensates for water loss occurring through evaporation and controlled blowdown.

All wastewater, except intake screen backwash, discharges to either the primary or secondary settling pond. The settling ponds are estimated to have a combined volume of 27 million gallons and have a 40-day holding capacity based upon the average discharge rate. The discharge from the secondary settling pond flows south through a concrete channel and discharges to the West Fork of the White River, above the low head dam (Outfall 001). For the purpose of compliance monitoring, all samples for Outfall 001 shall be taken at the discharge from the secondary settling pond.

Low volume wastewater consists of influent water treatment wastewater and solids, boiler blowdown (HRSG), water softening/demineralization backwash, equipment quench and wash water, and oil/water separator effluent. Other low volume wastes may consist of filter backwash and clarifier solids. In the 2008 Briefing Memo, it was noted that it is not possible to monitor the low volume wastewater separately; therefore, the combined wastestream is monitored at the Outfall 001 discharge from the secondary settling pond.

### **Outfall 201**

The primary source of wastewater is cooling tower blowdown. The recirculating cooling tower uses makeup water from the West Fork of the White River with a design intake flow of 2.6 MGD and a discharge flow of 0.45 MGD per four (4) cycles of cooling tower operation. The discharge from Outfall 201 is directed to the primary settling pond.

### **Outfall 005**

The primary source of wastewater is the groundwater interceptor wells. A groundwater interceptor well system that discharges through Outfall 005 to the West Fork of the White River was installed to limit the off-site migration of groundwater impacted by historic ash management areas. This installation is in accordance with the approved compliance plan for Agreed Order 2017-24922-S. Groundwater is withdrawn through six (6) extraction wells. Three (3) wells are located along the northern perimeter of the property, and three (3) are located along the western perimeter. The wells pump into a common collection pipe that routes the extracted groundwater along the northern, western, and southern property boundaries before turning north near the southeast corner of the property to join the existing discharge canal.

The groundwater interceptor well discharge (Outfall 005) and the pond discharge (Outfall 001) are separate outfalls but are combined and comingling before finally discharging through a common conveyance point to the river.

The wells discharge approximately 0.48 MGD to the West Fork of the White River, after comingling with Outfall 001 discharge.

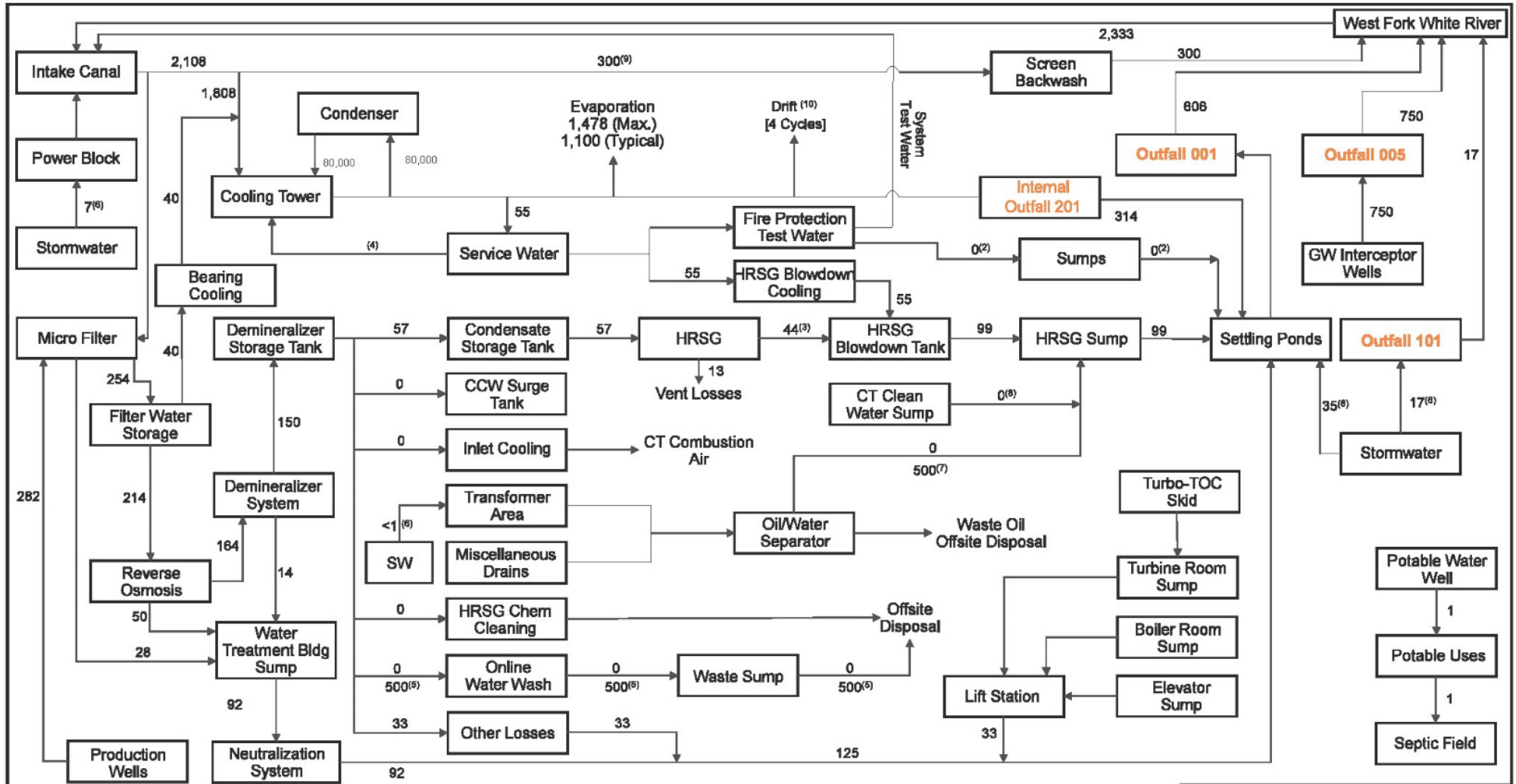
**Outfall 101**

Only stormwater is discharged below the low head dam at Outfall 101 and the flows are variable.

A Water Balance Diagram has been included as Figure 2.



Figure 2: Water Balance Diagram



**NOTES:**

1. All flows are designed based and/or typical and expressed in GPM unless otherwise noted.
2. Fire protection system discharges will be collected in plant sumps, all of which are ultimately directed to the settling ponds.
3. HRSG blowdown based on approximately 3% of total steam flow; HRSG losses based on worst-case deaerator vent discharge.
4. Service water supplied to STG H2 coolers, STG lube oil coolers, and closed cooling water system is recycled to the Intake through the cooling tower.
5. Denotes total flow (gallons) associated with one online water wash.
6. Runoff based on annual average rainfall.
7. Denotes maximum capability of oil / water separator.
8. Drains to CT clean water sump are very intermittent in nature.
9. Screen backwash is intermittent. Peak is 600 GPM.
10. Represents current operations.

DUKE ENERGY INDIANA, LLC  
 NOBLESVILLE GENERATING STATION  
 21225 RIVERWOOD AVENUE  
 NOBLESVILLE, INDIANA 46062

**FORM 2C LINE DIAGRAM**

**ARCADIS** | FIGURE

Outfall 001: The average daily discharge from Outfall 001 to the West Fork of the White River is 0.216 MGD. The design flow (highest monthly average) based on the most recent 2 years of data is 0.74 MGD.

Outfall 201: The average daily discharge from Outfall 201 to the primary settling pond is 0.158 MGD. The design flow (highest monthly average) based on the most recent 2 years of data is 0.74 MGD.

Outfall 005: The average daily discharge from Outfall 005 to the West Fork of the White River is 0.476 MGD. The design flow (highest monthly average) based on the most recent 2 years of data is 0.85 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 22-5. In order to operate a wastewater treatment plant, the operator shall have qualifications as established in 327 IAC 5-22-7. IDEM has given the permittee a Class A-SO industrial wastewater treatment plant classification based on information provided by the permittee.

## **2.4 Changes in Operation**

A groundwater interceptor well system that discharges through Outfall 005 to the West Fork of the White River was installed.

## **2.5 Facility Stormwater**

Storm water is discharged to the receiving stream via Outfall 101 (storm water only) or the Outfall 001 discharge channel (commingled). See Section 5.7 of this briefing memo for storm water requirements.

## **3.0 PERMIT HISTORY**

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### **3.1 Compliance History**

A review of this facility's discharge monitoring data was conducted for compliance verification and shows no permit limitation violations at Outfall 001, 005, 201 or 101 between October 2018 and February 2023. There are no pending or current enforcement actions regarding this NPDES permit.

The facility is under an Agreed Order with the Office of Land Quality (OLQ) to mitigate groundwater contamination from historic ash management areas. The facility converted its fuel source from coal to natural gas in 2003 and dry ash was placed in two ash piles until 1989. Duke Energy notified IDEM of the historic ash management areas and monitored wells on and off-site; boron was found above expected natural levels and was determined to be a result of the historic ash management areas. Elevated levels of boron are being addressed in the compliance plan approved by the OLQ.

#### **4.0 LOCATION OF DISCHARGE/RECEIVING WATER USE DESIGNATION**

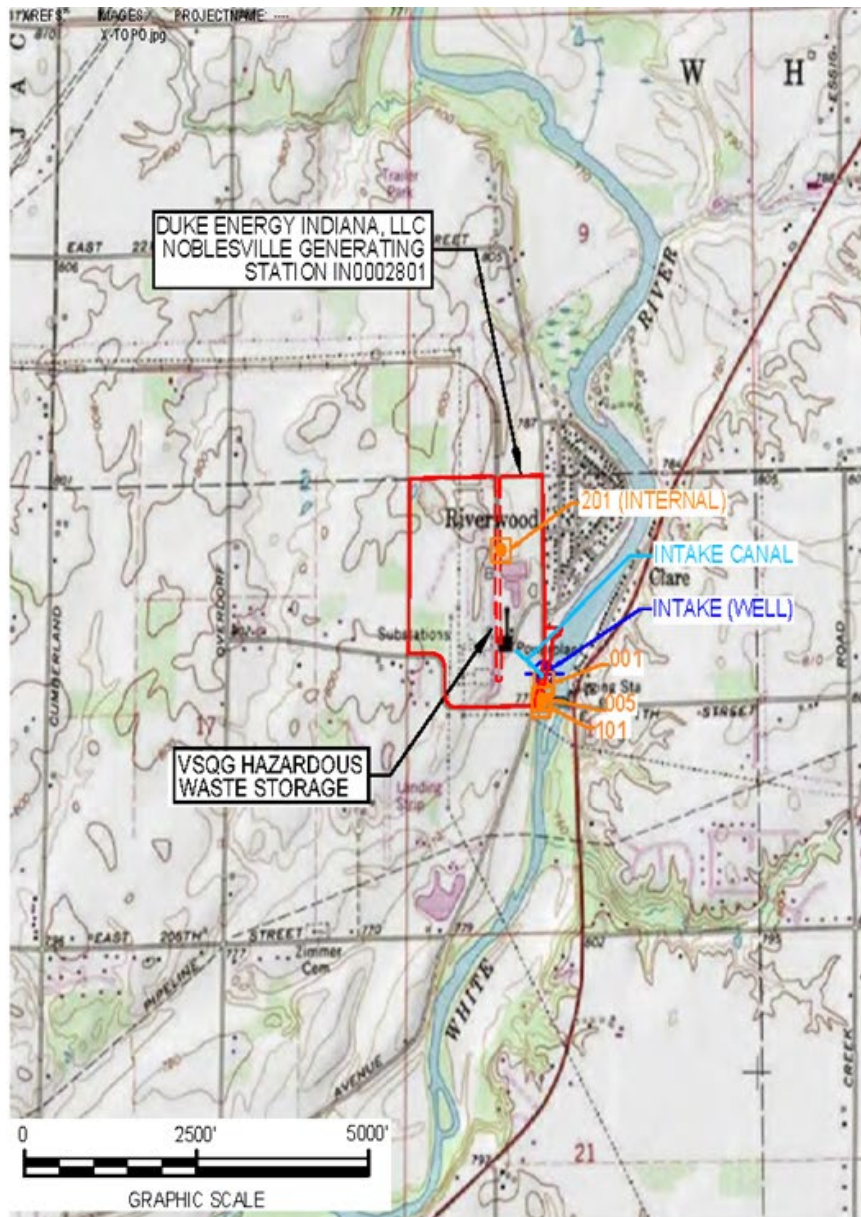
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The receiving stream for Outfall 001, 005 and 101 is the West Fork of the White River. The generating facility is located at River Mile 274.2 of the river on a reservoir formed by a low head dam. The reservoir provides for reserve water intake capacity and is also the location of the primary discharge, Outfall 001. Outfall 101 discharges stormwater only. The  $Q_{7,10}$  low flow value of the West Fork of the White River is 75 cfs according to the most recent wasteload allocation report (WLA002360). The receiving stream shall be capable of supporting a well-balanced, warm water aquatic community and full body contact recreation in accordance with 327 IAC 2-1-3.

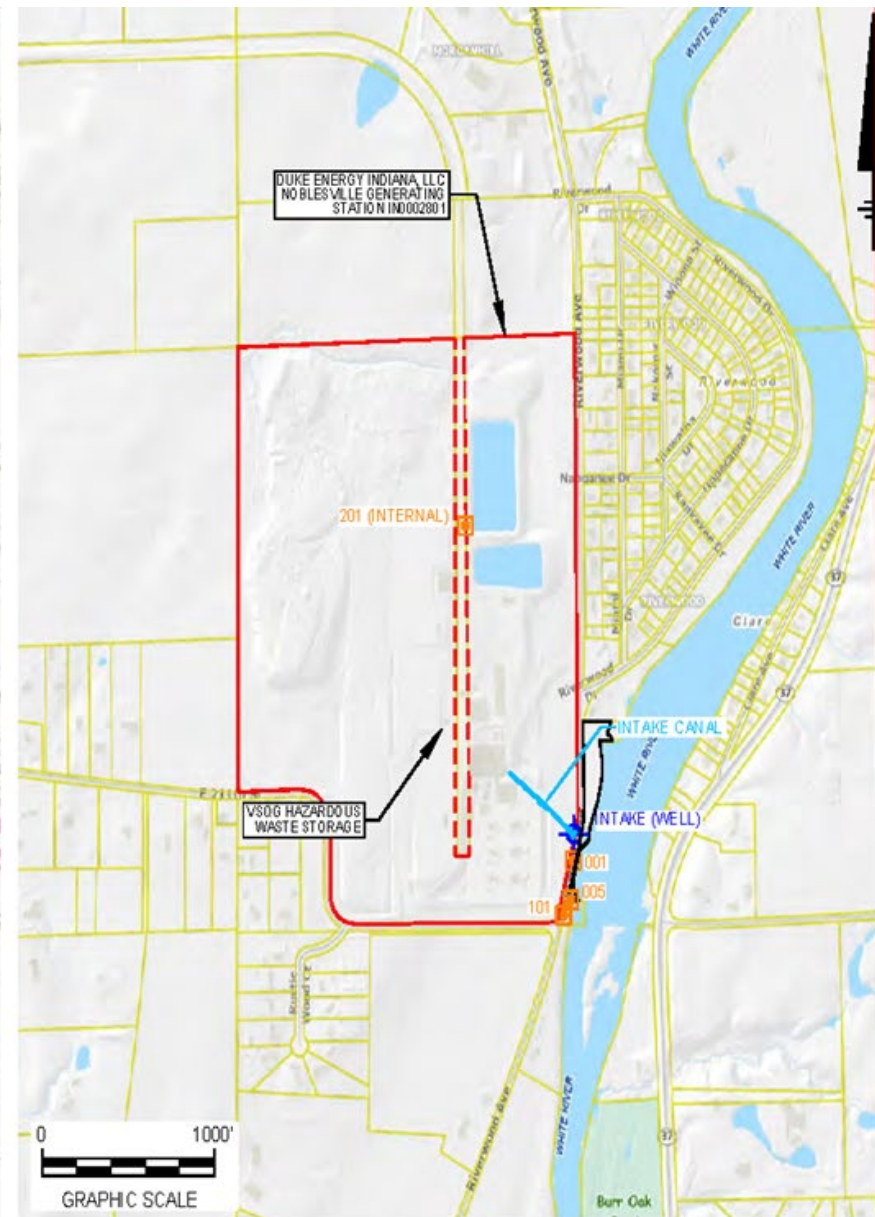
The permittee discharges to a waterbody that has been identified as a water of the state that is not within the Great Lakes system. Therefore, it is subject to NPDES requirements specific to dischargers not discharging to waters within the Great Lakes system under 327 IAC 2-1 and 327 IAC 5-2-11.1. These rules contain applicable water quality standards 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**



SOURCE: USGS TOPO MAPS (MAP SERVICE) - COPYRIGHT ©2013  
 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED  
 QUAD: RIVERWOOD, INDIANA



SOURCE: HAMILTON COUNTY, INDIANA GIS MAP MAP ©2022

- LEGEND:
- PROPERTY LINE
  -  INTAKE
  -  OUTFALL
  - VSOQ=VERY SMALL QUANTITY GENERATOR

## 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 2022 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 2022 Cycle.

The West Fork of the White River, Assessment-Unit IN INW0171\_05, HUC 051202010701, is on the 2022 303(d) list for impairments. A TMDL for the West Fork of the White River has been developed for *E. coli*.

## 5.0 PERMIT LIMITATIONS

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### 5.1 Technology-Based Effluent Limits (TBELs)

TBELs require every individual member of a discharge class or category to operate their water pollution control technologies according to industry-wide standards and accepted engineering practices. TBELs are developed by applying the National Effluent Limitation Guidelines (ELGs) established by EPA for specific industrial categories. Technology-based treatment requirements established pursuant to sections 301(b) and 306 of the CWA represent the minimum level of control that must be imposed in an NPDES permit (327 IAC 5-5-2(a)).

In the absence of ELGs for a particular process or parameter, TBELs can also be established on a case-by-case basis 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).

In the NPDES permit issued in 2003, which was based on the modified facility including the conversion from a coal fired steam electric generating facility to a natural gas-fired, combined-cycle combustion turbine steam electric generating facility and the installation of a recirculating mechanical draft cooling tower to replace the once-through cooling tower, IDEM applied the new source performance standards ELGs under 40 CFR 423.15 to the cooling tower blowdown. These new source performance standards for the cooling tower blowdown have been applied in all subsequent permits.

### Outfalls 001 and 201

The applicable technology-based standards for the Duke Energy Indiana, LLC – Noblesville Generating Station are contained in 40 CFR 423 – Steam Electric Point Source Category.



Applicable ELG Subparts:

Outfall	Subpart	Description
001	40 CFR 423.12(b)(3)	Low Volume Wastewater
	40 CFR 423.12(b) 40 CFR 423.13(a)	Polychlorinated biphenyl (PCB)
	40 CFR 423.12(b)(1)	pH Control
001 and 201	40 CFR 423.15(a)(10)(i), (ii) and (iii)	Cooling Tower Blowdown
201	40 CFR 423.15(a)(1)	Polychlorinated biphenyl (PCB)
	40 CFR 423.15(a)(2)	pH Control

The permittee has not requested authorization to discharge metal cleaning waste or combustion residual leachate; therefore, the permittee is not authorized to discharge metal cleaning waste as defined at 40 CFR 423.11(d) or combustion residual leachate as defined at 40 CFR 423.11(r) at any outfall.

## 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 2-1-6 or developed under the procedures described in 327 IAC 2-1-8.2 through 8.7 and 327 IAC 2-1-8.9, 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 5-2-11.1(h).

## 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, 005)

#### *Narrative Water Quality Based Limits*

The narrative water quality criteria contained under 327 IAC 2-1-6(a)(1) and (2) have been included in this permit to ensure that these minimum water quality conditions are met.

### **Numeric Water Quality Based Limits**

The numeric water quality criteria and values contained in this permit have been calculated using the tables of water quality criteria under 327 IAC 2-1-6(b) & (c).

#### **Flow**

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

#### **pH**

Discharges to waters of the state are limited to the range of 6.0-9.0 s.u., in accordance with 327 IAC 2-1-6(b)(2) and 40 CFR 423.12(b)(1) [at Outfall 001].

### **5.3.2 Outfall (001)**

#### **Temperature**

Continuous temperature monitoring and reporting is required at Outfall 001, the discharge from the secondary impoundment. This requirement has been retained from the previous permit. During the 2008 permit renewal, it was determined the predictive calculations of the recirculating cooling tower discharge identified by the facility would comply with temperature criteria in accordance with 327 IAC 2-1-6(b). The last two (2) years of DMR data identify that the recirculating cooling tower discharge is in compliance with the above referenced thermal discharge criteria. However, the following mixed river temperature calculation shall be utilized to demonstrate compliance for this permit.

$$T_{MR} = T_U + \frac{Q_E(T_E - T_U)}{0.5(Q_R - Q_I) + Q_E}$$

where:

$T_{MR}$  = mixed river temperature (°F)

$T_U$  = upstream river temperature (°F) [taken at intake]

$T_E$  = effluent temperature (°F)

$Q_E$  = effluent flow (MGD)

$Q_I$  = intake flow (MGD)

$Q_R$  = The  $Q_{7,10}$  of the receiving stream upstream of the facility = 48 MGD

#### **Copper**

The copper limitations were developed in a wasteload allocation report (WLA000847) based upon Indiana Water Quality Criterion in accordance with 327 IAC 2-1-6 and have been retained from the previous permit.

### **Total Residual Chlorine (TRC)-Continuous**

The TRC-Continuous limitations have been retained from the previous permit. The WQBELs for continuous TRC are based on the water quality standards in 327 IAC 2-1-6 and are 0.02 mg/l monthly average and 0.04 daily maximum. The water quality based effluent limits for chlorine 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. If the measured concentration of chlorine is greater than the water quality based effluent limitations and above the respective LOD of 0.02 mg/l for any three (3) consecutive analyses, or any five (5) out of nine (9) analyses, then the discharger shall re-examine the chlorination/de-chlorination procedures.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Chlorine	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l

### **Total Residual Chlorine (TRC)-Intermittent**

The TRC - Intermittent limitation has been retained from the previous permit. The limit is based on 327 IAC 2-1-6. To qualify for the intermittent discharge limitation of 0.2 mg/l daily maximum TRC shall not be detected in the discharge from any single generating unit for more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours. The permittee is limited to no more than four (4) chlorination cycles per day.

### **Oil and Grease (O & G) and Total Suspended Solids (TSS)**

The steam electric effluent limitations guidelines under 40 CFR 423 establish technology-based effluent limitations for oil and grease and total suspended solids for certain wastestreams. Under 40 CFR 423.12(b)(3), the following technology-based limits for oil and grease and total suspended solids are applicable to low volume waste sources, as defined at 40 CFR 423.11(b):

Parameter	Monthly Average (mg/l)	Daily Maximum (mg/l)
TSS	30.0	100.0
Oil and grease	15.0	20.0

In addition to low volume waste sources, Outfall 001 includes stormwater and cooling tower blowdown. EPA did not establish technology-based effluent limits for TSS and oil and grease for these wastestreams under 40 CFR 423. However, under 40 CFR 423.12(b)(12), in the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by the ELGs attributable to each controlled waste source shall not exceed the specified limitations for that waste source.



Compliance with this requirement may be achieved by establishing internal monitoring locations (outfalls) prior to the regulated wastestream commingling with other wastestreams. As an alternative to establishing internal monitoring locations for determining compliance with the federal effluent guidelines, the permittee may utilize the building block approach to calculate alternate compliance values based on the applicable portions of the ELG, to be applied to the discharge of the combined wastestreams at the final outfall(s). The permittee has previously stated that an internal monitoring point, prior to commingling, is not an option for this wastestream. Therefore, alternative limitations for TSS and Oil & Grease were developed using the building block approach.

The purpose of applying the building block approach is to ensure that the technology-based requirements are relatively accurately applied to the regulated wastestreams when those wastestreams are combined with other unregulated/dilute wastestreams. To achieve this goal, the actual loading of each wastestream and the removal provided by the treatment system were considered in the determination of the appropriate limit. To account for actual loading, the percentage of flow that each wastestream contributes to the final discharge at Outfall 001 was provided. The discharge at Outfall 001 is estimated to be comprised of 10 percent stormwater, 72 percent cooling tower blowdown, and 18 percent low volume wastewater.

Duke Energy submitted their proposed alternative limits for TSS and Oil & Grease, calculated using the building block approach, with their permit renewal application. These proposed alternate limits were developed using monitoring data and efficiency of the treatment units to provide a best estimation of the wasteload allocation for the unregulated wastestreams.

IDEM reviewed these proposed limits and determined that the 4.0 mg/L adjustment the permittee proposed for their TSS monthly average limit was not necessary, as the influent TSS is accounted for in the calculations. IDEM has determined the unadjusted TSS and O&G limits proposed by the permittee may be applied at Outfall 001. The final proposed limits have been rounded to two significant figures.

TOTAL SUSPENDED SOLIDS						
WASTESTREAM	DESIGNATION	FLOW (MGD)	CONCENTRATION (mg/L)		C <sub>i</sub> F <sub>i</sub>	
			Avg	Max	Avg	Max
Low Volume Waste	Regulated Flow	0.035	30	100	1.05	3.50
Cooling Tower-Outfall 201	Unregulated Flow	0.138	4.90	20.88	0.68	2.88
Stormwater	Unregulated Flow	0.02	15.12	21.60	0.30	0.43
$\Sigma C_i F_i$ :					2.03	6.81

Total Flow: 0.193

Monthly Avg. Limit (mg/L)	11
Daily Max Limit (mg/L)	35

OIL & GREASE						
WASTESTREAM	DESIGNATION	FLOW (MGD)	CONCENTRATION (mg/L)		CiFi	
			Avg	Max	Avg	Max
Low Volume Waste	Regulated Flow	0.035	15	20	0.53	0.70
Cooling Tower-Outfall 201	Unregulated Flow	0.138	5.76	15.1	0.79	2.08
Stormwater	Unregulated Flow	0.02	4.13	4.13	0.08	0.08

ΣCiFi: 1.40 2.86

Total Flow: 0.193

Monthly Avg. Limit (mg/L)	7.3
Daily Max Limit (mg/L)	15

### **Removal of Total Residual Oxidants (Bromine)**

The permit issued in 2018 contained a Total Residual Oxidant (TRO) limit of 0.06 mg/l which was applicable at any time bromine was used or could be present in the discharge. TRO will be limited in the permit whenever bromine or bromine compounds are used in the water or wastewater streams contributing to this outfall. The facility does not brominate, and bromine or bromine compounds are not used in the water or wastewater streams contributing to this outfall. Therefore, TRO limits have been removed from the permit.

### **5.3.3 Outfall (201)**

#### **Flow**

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

#### **pH**

The discharge is limited to the range of 6.0-9.0 s.u., in accordance with 40 CFR 423.15(a)(2).

#### **Temperature**

Effluent Limitations for temperature are based on the criteria established in 327 IAC 2-1-6(b)(4).

#### **Chromium**

In accordance with 40 CFR 423.15(a)(10)(i), the Chromium limitations are 0.2 mg/l Monthly Average and Daily Maximum. These limits have been retained from the previous permit.

## **Zinc**

In accordance with 40 CFR 423.15(a)(10)(i), the Zinc limitations are 1.0 mg/l Monthly Average and Daily Maximum. These limits have been retained from the previous permit.

### **126 Priority Pollutants**

In accordance with 40 CFR 423.15(a)(10)(i) there shall be no detectable amount of the 126 priority pollutants (Appendix A to 40 CFR 423) contained in chemicals added for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR 136.

The permittee provided a statement that safety data sheets for each water treatment additive were reviewed, and none were found to contain priority pollutants. IDEM believes that this statement is inadequate to address the presence/absence of the priority pollutants in the additives, as it does not meet the requirements set forth in 40 CFR 423.15(a)(10)(iii).

To fulfill the requirements of 40 CFR 423.13(a)(10)(iii), the permit will require the permittee to either provide sample data for the discharge from the cooling tower blowdown (prior to commingling with other wastestreams) showing that the 126 priority pollutants are not detectable in the cooling tower blowdown by the most sensitive analytical methods in 40 CFR 136; or provide the certified analytical contents of all chemicals used for cooling tower maintenance and engineering calculations demonstrating that any of the priority pollutants present in the maintenance chemicals would not be detectable in the cooling tower discharge. Chromium and zinc are excluded from this requirement.

### **Free Available Chlorine/Total Residual Chlorine (TRC)**

Instead of applying the federal BPT and BAT effluent limitations guidelines (ELGs) for free available chlorine at 40 CFR 423.12(b)(7) and 40 CFR 423.15(a)(10)(i); more stringent water quality-based effluent limits for total residual chlorine limits will be applied at the final outfall (Outfall 001).

Under the federal effluent limitations guidelines (TBELs) applicable to this facility (cooling tower blowdown discharged from existing plants with a total electric generating capacity of 25 or more megawatts), under both 40 CFR 423.12(b)(8) and 40 CFR 423.15(a)(10)(ii), total residual chlorine may not be discharged from any single generating unit for more than two hours (120 minutes) per day (the "Duration") and not more than one unit in any plant may discharge total residual chlorine at any one time unless the discharger demonstrates that the unit cannot operate at or below this level of chlorination.

### ***Oil and Grease (O&G) and Total Suspended Solids (TSS)***

Outfall 001 has alternative limits for TSS and O&G, based on the loading of both parameters in the contributing wastestreams. To aid in future alternative limit calculations, monitoring requirements for TSS and O&G are being added for Outfall 201.

#### **5.3.4 Outfall (101)**

##### ***TSS, pH, Oil & Grease, COD, CBOD<sub>5</sub>, Total Kjeldahl Nitrogen (TKN), Nitrate plus Nitrite Nitrogen (NO<sub>3</sub>/NO<sub>2</sub>), and Total Phosphorus***

The above identified parameters are typically associated with stormwater discharges and are consistent with other similarly issued permits. The monitoring requirements for these parameters have been retained from the previous permit.

#### **5.3.5 Outfall (005)**

##### ***Iron***

A Wasteload Analysis (WLA002360) report was completed on November 27, 2018, and evaluated iron for reasonable potential to exceed (RPE) a water quality criterion. The results of the initial RPE analysis showed that iron has reasonable potential to exceed based on estimated effluent concentrations in the form of total recoverable metal.

According to 327 IAC 2-1-8.1(b), the use of dissolved metal to set and measure compliance with water quality standards for aquatic life is the recommended approach because dissolved metal more closely approximates the bioavailable fraction of metal in the water column than does total recoverable metal. A procedure to conduct the reasonable potential analysis using effluent data in the form of dissolved metal was developed by best professional judgment based on the procedure in 327 IAC 5-2 11.5(b)(1)(D). The results of the analysis showed that there is not a reasonable potential to exceed a water quality criterion for iron based on estimated effluent concentrations in the form of dissolved metal.

With the additional analysis based on dissolved metal, it was concluded that the proposed discharge does not have a reasonable potential to exceed a water quality criterion for any of the pollutants of concern considered in the analysis. Monitoring requirements for total iron and dissolved iron are included and are the same as the previous permit.

##### ***Boron***

Monitoring requirements for boron are implemented due to the elevated boron levels being addressed in a compliance plan with OLQ, and the presence of downstream public water system intakes.

***Calcium, Fluoride, Sulfate, Total Dissolved Solids (TDS), Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, and Radium 226 and 228 combined***

The facility converted its fuel source from coal to natural gas in 2003. There is known infiltration of boron from the historic ash piles to groundwater; therefore, other pollutants historically contributed by coal ash could be present in groundwater. Monitoring is being added in this permit to evaluate the presence of these pollutants, and data collected will be used to determine if any of the pollutants have reasonable potential to exceed (RPE) water quality criteria, where available. Calcium, fluoride, sulfate, and total dissolved solids (TDS) were selected for monitoring based on the list of constituents for detection monitoring of CCR contaminants found in 40 CFR 257 Appendix III.

Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 and 228 combined were selected for monitoring based on the list of constituents for assessment monitoring of CCR contaminants found in 40 CFR 257 Appendix IV.

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

Whole effluent toxicity (WET) test requirements are included in the NPDES permit to monitor compliance with the narrative water quality criteria under 327 IAC 2-1-6(a)(1)(E) and (a)(2). 327 IAC 2-1-6(a)(1)(E) requires all surface waters at all times and all places, including the mixing zone, to be free from substances, materials, etc. which are in amounts sufficient to be acutely toxic to or to otherwise severely injure or kill aquatic life, other animals, plants, or humans. 327 IAC 2-1-6(2) requires that all waters outside the mixing zone be free of 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. In addition, under 327 IAC 5-2-11.1(h), IDEM is required to determine whether the discharge causes, or has the reasonable potential to cause or contribute to a violation of these narrative water quality criteria.

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**

Pursuant to 327 IAC 5-2-10(a)(11), unless an exception 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. None of the limits included in this permit 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).

## 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), February 2009, to assist facilities in developing a SWPPP. The guidance contains worksheets, checklists, and model forms that should assist a facility in developing a SWPPP.

### **Public availability of documents**

Part I.E.2.d(2) of the permit requires that the permittee retain a copy of the current SWPPP at the facility and 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-agency-forms/> 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.

The following is a list of water treatment additives currently approved for use at the facility:

<u>Supplier</u>	<u>WTA</u>	<u>Outfall</u>	<u>Purpose</u>	<u>Date of Approval</u>
ChemTreat	BL152	001	HRSG boiler water pH control and corrosion protection	6-11-2024
ChemTreat	CL243	201 to 001	cooling water defoamer	6-11-2024
ChemTreat	CL-1355	001		2003
ChemTreat	CL-4073	001		2003
ChemTreat	CL7023	201 to 001	cooling water scaling inhibitor	04-2022
ChemTreat	CL5683	201 to 001	cooling water corrosion inhibitor	04-2022

<u>Supplier</u>	<u>WTA</u>	<u>Outfall</u>	<u>Purpose</u>	<u>Date of Approval</u>
ChemTreat	CL4512	201 to 001	cooling water treatment dispersant	04-2024
ChemTreat	BL8401	001	HRSB boiler water oxygen scavenger	04-2022
ChemTreat	RL124	001	RO system dechlorination	04-2022
ChemTreat	RL1700	001	RO treatment	6-11-2024
ChemTreat	RL2016	001	RO treatment	6-11-2024
ChemTreat	RL9004	001	RO system scaling inhibitor	04-2022
ChemTreat	RL9904	001	RO treatment	04-2024
ChemTreat	CL206	001	RO system microbiocide	04-2022
ChemTreat	P8007L	001	copper/metals removal from ponds	04-2022
ChemTreat	P891L	001	Pond solid treatment	09-30-2024
ChemTreat	PT7920	001	Pond solid treatment	09-30-2024
Depositrol	BL5400	001	Prevention of metallic oxide deposits	04-11-2011
GE Betz	Metclear MR2405	001	Metal precipitation	04-11-2011
GE Betz	Hypersperse MSI410	001	Membrane deposit control agent	12-03-2012
GE Betz	Biomate MBC2881	001	Biocide	12-03-2012
GE Betz	Betzdearborn DCL30	001	Dechlorinating agent	12-03-2012
Nalco	Nalmet 1689	001	Metal precipitation	06-09-2015
BioSafe Systems LLC	GreenClean Liquid 5.0	001	Algaecide	08-12-2015

<u>Supplier</u>	<u>WTA</u>	<u>Outfall</u>	<u>Purpose</u>	<u>Date of Approval</u>
Anodamine	HPFG	001	Oxygen scavenger	10-16-2015
NALCO	3D TRASAR 3DT487	001 & 002	Cooling water scaling inhibitor	06-26-2019
NALCO	3D TRASAR 3DT397	001 & 002	Cooling water copper corrosion inhibitor	06-26-2019
NALCO	7408	001	RO process dechlorination	03-20-2020
NALCO	PermaTreat PC-191T	001	RO antiscalant	03-20-2020
NALCO	PermaClean PC-11	001	RO microbicide	03-20-2020
NALCO	71D5 PLUS	001	Antifoaming agent	06-30-2021
Weas	C-4250	001	Copper control	09-29-2010

## 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.

Outfall 201: TSS and O&G monitoring requirements were added.

#### Outfall 001:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
<b>Flow</b>					
Effluent	Report	Report	MGD	1 X Daily	24 Hr. Total
Intake Interim Final	---- Report	---- Report	---- MGD	---- 1 X Daily	---- 24 Hr. Total
Cycles of Conc. (COC)	Report	Report	Number	1 X Daily	Report
Copper	0.04	0.1	mg/l	2 X Month	Grab
TSS	11	35	mg/L	2 X Month	Grab
Oil and Grease	7.3	15	mg/l	2 X Month	Grab
TRC Continuous	0.02	0.04	mg/l	1 X Daily	Grab
TRC Intermittent	----	0.2	mg/l	1 X Daily	Grab
Frequency	----	4	Times/day	1 X Daily	Report
Dose Duration	----	40	Minutes/dose	1 X Daily	Report
<b>Temperature</b>					
Upstream (Intake) Interim Final	Report Report	Report Report	°F °F	1 X Daily Hourly	Grab Grab
Effluent	Report	Report	°F	Continuous	Report
Mixed River Interim Final	Report Report	Report Report	°F °F	1 X Daily 1 X Daily	Report Report
Hours above max	----	87.6	Hours	1 X Daily	Report
<b>Whole Effluent Toxicity Testing</b>					

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

**Outfall 201:**

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Daily	24 Hr. Total
Total Chromium	0.2	0.2	mg/l	2 X Month	Grab
Zinc	1.0	1.0	mg/l	2 X Month	Grab
Oil and Grease	Report	Report	mg/l	2 X Month	Grab
TSS	Report	Report	mg/l	2 X Month	Grab
TRC	Report	Report	mg/l	1 X Daily	Grab
Chlorination Duration/Day	120	----	Minutes/Day	1 X Daily	Report
126 Priority Pollutants [*]					

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

[\*] In accordance with 40 CFR 423.15(a)(10)(i) there shall be no detectable amount of the 126 priority pollutants (Appendix A to 40 CFR 423) contained in chemicals added for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR 136. Calculations shall be submitted with each permit renewal application.

**Outfall 101:**

Parameter	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	MGD	Annually	Estimate Total
Total Suspended Solids	Report	mg/l	Annually	Grab
pH	Report	mg/l	Annually	Grab
Oil & Grease	Report	mg/l	Annually	Grab
COD	Report	mg/l	Annually	Grab
CBOD <sub>5</sub>	Report	mg/l	Annually	Grab
Total Kjeldahl Nitrogen	Report	mg/l	Annually	Grab
Nitrate plus Nitrite Nitrogen	Report	mg/l	Annually	Grab
Total Phosphorus	Report	mg/l	Annually	Grab

**Outfall 005:**

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Daily	24 Hr. Total
Boron	Report	Report	mg/l	2 X Month	Grab
Total Iron	Report	Report	mg/l	2 X Month	Grab
Dissolved Iron	Report	Report	mg/l	2 X Month	Grab
Antimony	Report	Report	mg/l	2 X Monthly	Grab
Arsenic	Report	Report	mg/l	2 X Monthly	Grab
Barium	Report	Report	mg/l	2 X Monthly	Grab
Beryllium	Report	Report	mg/l	2 X Monthly	Grab
Cadmium	Report	Report	mg/l	2 X Monthly	Grab
Calcium	Report	Report	mg/l	2 X Monthly	Grab
Hexavalent Chromium	Report	Report	mg/l	2 X Monthly	Grab
Cobalt	Report	Report	mg/l	2 X Monthly	Grab
Fluoride	Report	Report	mg/l	2 X Monthly	Grab
Lead	Report	Report	mg/l	2 X Monthly	Grab
Lithium	Report	Report	mg/l	2 X Monthly	Grab
Mercury	Report	Report	ng/l	6 X Yearly	Grab
Molybdenum	Report	Report	mg/l	2 X Monthly	Grab
Selenium	Report	Report	mg/l	2 X Monthly	Grab
Thallium	Report	Report	mg/l	2 X Monthly	Grab
Radium 226 and 228 combined	Report	Report	pCi/L	1 X Monthly	Grab

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	2 X Month	Grab

**6.2 Schedule of Compliance**

The draft permit contains new requirements for daily intake flow monitoring and hourly upstream (intake) river temperature monitoring to obtain data for the new mixed river temperature equation for Outfall 001. In accordance with 327 IAC 5-2-12 (see also 40 CFR 122.47(a)), a schedule of compliance is allowed in an NPDES permit when requested and justified by the permittee, but only when appropriate and when the schedule of compliance requires achievement of compliance “as soon as possible” and meets other specified conditions. Before a schedule of compliance can be included in a permit, the permittee must submit a request for the schedule to IDEM and demonstrate that they meet the requirements for such a schedule pursuant to 327 IAC 5-2-12.

On July 12, 2024, the permittee requested a schedule of compliance for the daily intake flow and hourly upstream (intake) river temperature monitoring requirements. They have already begun evaluating existing conditions and compliance requirements. The permittee justified the need for a 24-month compliance schedule pursuant to 327 IAC 5-2-12(a)(3) to comply with the

new daily intake flow monitoring and increased monitoring frequency for upstream (intake) river temperature to calculate the mixed river temperature each hour at Outfall 001. They also provided a schedule of compliance chart to support a 24-month request.

This requested timeframe is to allow the permittee to complete evaluations of options for piping modifications and new equipment, gather data and perform sampling, inspections, and analysis as needed, generate engineering drawings and specifications for installations, evaluate feasible alternatives, review construction cost estimates, procure equipment and materials, construct and install the new equipment, and develop procedures/training for operation and maintenance of the new equipment. The permittee shall achieve compliance with the daily intake flow and hourly upstream (intake) river temperature monitoring requirements, and utilize the new mixed river temperature equation, as soon as possible but no later than twenty-four (24) months from the effective date of this permit.

The permittee will be required to report interim progress at least every 9 months per 327 IAC 5-2-12(b). In addition, the permittee can request a modification to the compliance schedule per 327 IAC 5-2-12(d), if needed, to address allowable changes in the schedule outlined in this permit.

### **6.3. Clean Water Act Section 316(b) Cooling Water Intake Structure(s) (CWIS)**

#### **6.3.1 Introduction**

Section 316(b) of the Clean Water Act requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) 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)).

The Noblesville Generating Station commenced operations in 1950 as a coal-fired facility with once-through cooling and a total capacity of approximately 106 MW. A repowering project was completed during 2003 that resulted in the retirement of the coal-fired boilers and the addition of

three natural gas-fired combustion turbines exhausting to three heat recovery steam generators that provide steam to the two existing steam turbines. The repowered facility has a total capacity of approximately 310 MW and has closed-cycle cooling using a mechanical draft cooling tower.

Cooling tower makeup water for the facility is withdrawn from the West Fork of the White River via an existing water intake structure (see Figure 2-1, below). The cooling water intake structure features an intake canal that supplies makeup cooling water using gravity. The intake canal inlet is shoreline attached and perpendicular to the river flow. All of the water obtained from the intake canal is used for cooling tower makeup except for the traveling screen wash pump (see Figure 2 in Section 2.3 of this Briefing Memo for the water balance diagram) during typical operations; however, the water treatment system can also withdraw from the intake canal flow as dictated by plant operations. See Figure 3-2, below, for an aerial image of the makeup and circulating water systems.

The water intake system consists of gravity fed intake canal, one bar rack, one traveling screen, and one screen wash pump. Makeup water is withdrawn from the West Fork of the White River via the intake canal after passing through a bar rack and a single traveling screen.

The permittee has stated that the maximum design intake flow (DIF) is 2,390 gpm (3.44 MGD). However, the permittee has not provided any substantive documentation, engineering calculations or any other information which supports this design intake flow value. In this permit renewal, IDEM did use this value as the design intake flow; however, in the proposed permit, IDEM is requiring the permittee to provide engineering calculations and/or a study sufficient to verify the actual design intake flow for the facility.

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. Based on intake flow data submitted by the permittee on March 3, 2023, the actual intake flow for the facility over this period is approximately 0.69 MGD as shown in the table below:

<b>Year</b>	<b>Annual Average Flow (MGD)</b>
2018	0.36
2019	0.92
2020	1.34
2021	0.47
2022	0.37
Intake Average:	0.69

Approximately 76% of the water withdrawn 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). However, pursuant to 40 CFR 125.95(c) and its NPDES permit, the permittee submitted a letter dated December 28, 2020 requesting approval to submit a reduced 316(b) application for this renewal. In a letter dated April 25, 2022, IDEM approved in part and rejected in part the permittee's request to submit a reduced 316(b) application.

The permittee submitted a 316(b) application with the permit renewal application on December 29, 2022. The permittee submitted supplemental 316(b) information on March 3, 2023, and submitted a revised 316(b) application (dated May 2023) on June 5, 2023. The permittee did not include all of the information specified in IDEM's April 25, 2022 reduced application response letter in its application or supplemental information.

The regulation also established requirements that build on existing CWA requirements to coordinate with the U.S. Fish and Wildlife Service 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 January 11, 2023. A response was received on January 11, 2023, stating that there are no federal endangered species impacted by the permittee's cooling water intake structure 316(b) operations.

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

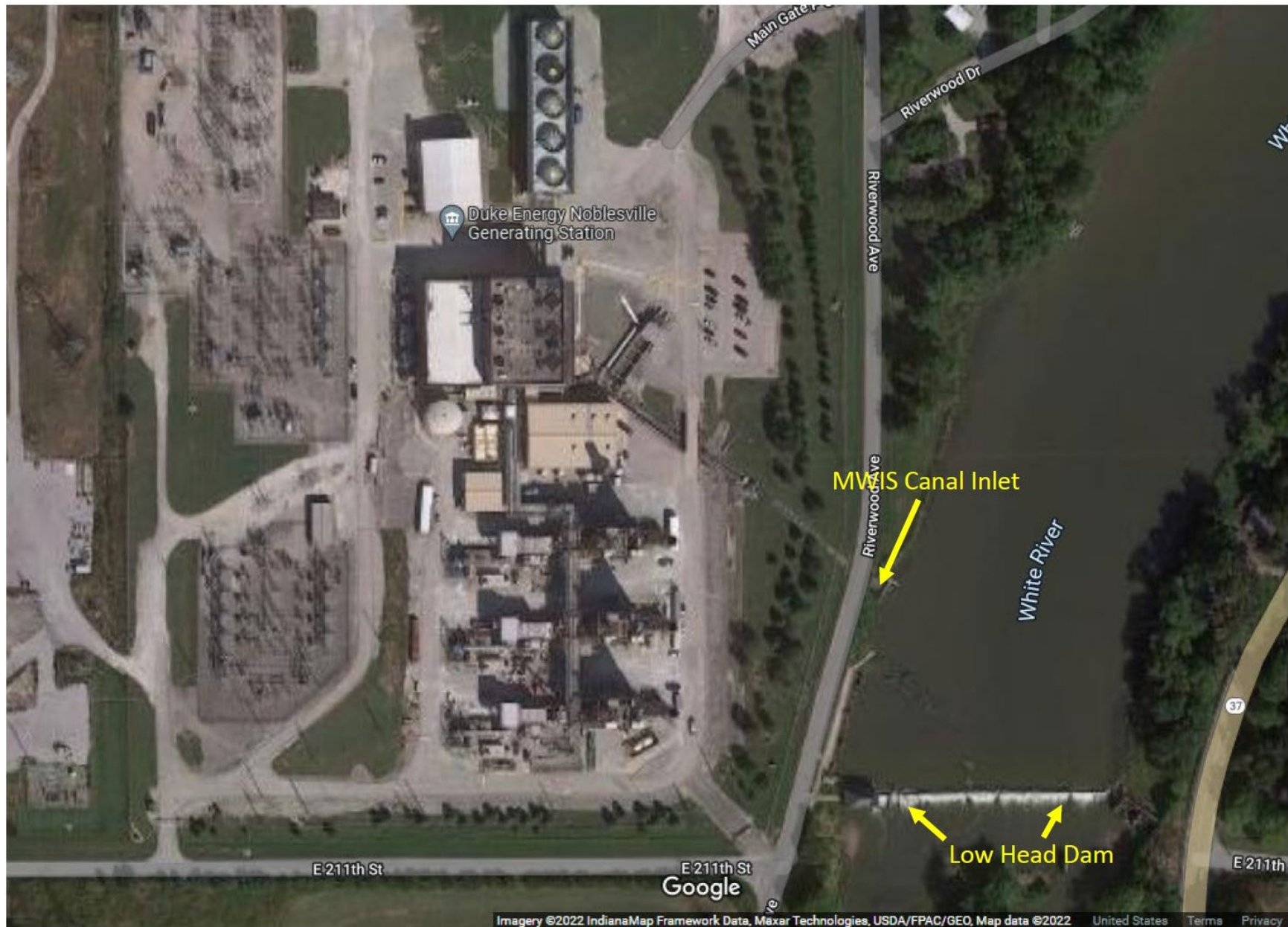


Figure 2-1. NGS aerial depicting approximate MWIS Canal Inlet and Low Head Dam locations (Google Earth, modified).



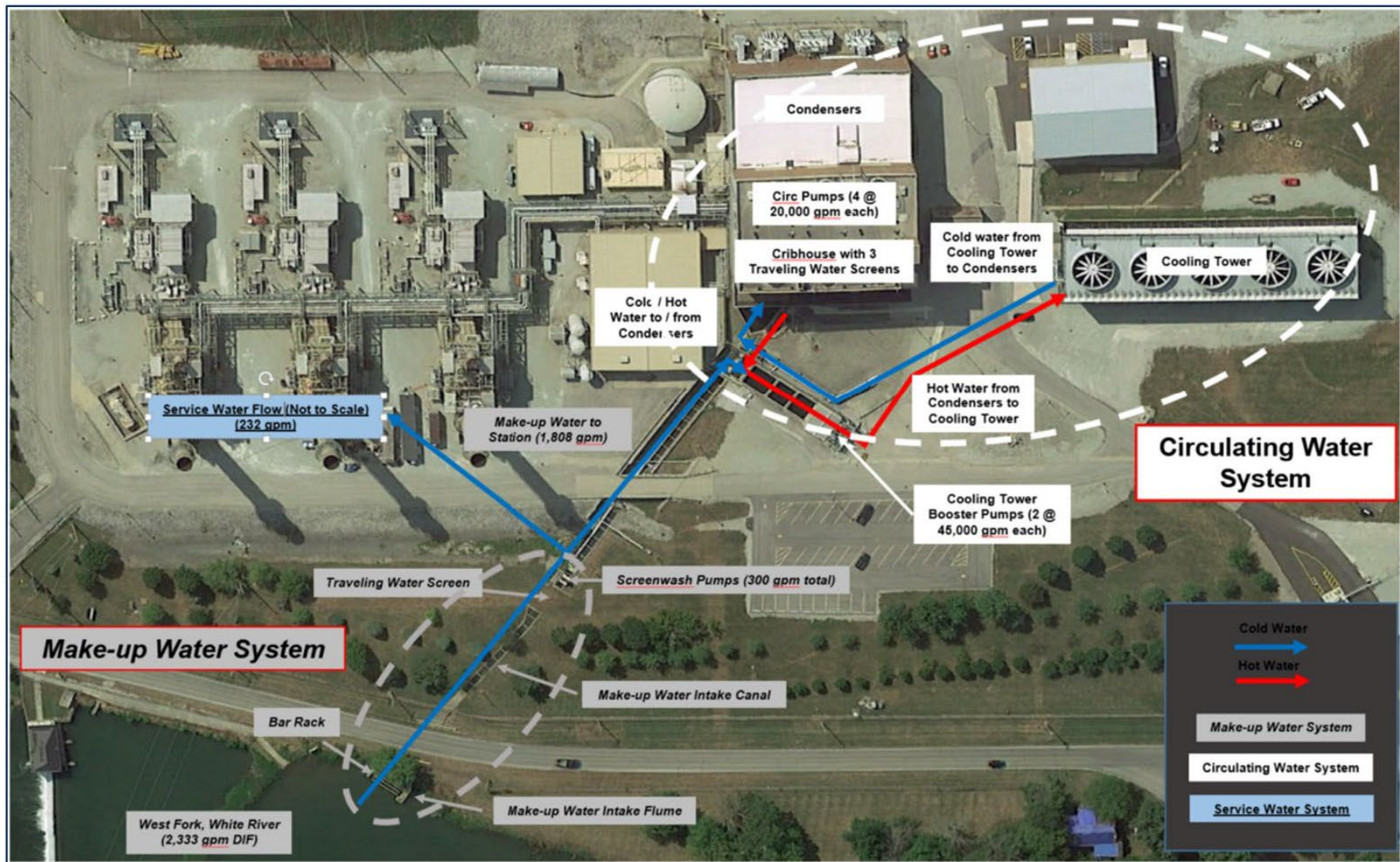


Figure 3-2. NGS Makeup and Circulating Water Systems (HDR, 2017)

### **6.3.2 Previous NPDES Permit Best Technology Available Determinations**

In the NPDES permit issued April 30, 2018, IDEM determined that the existing cooling water intake structure at this facility represented the best technology available (BTA) to minimize adverse environmental impact in accordance with Section 316(b) of the Clean Water Act based on information available at that time.

For compliance with the impingement mortality BTA requirement, IDEM determined that the facility operated a closed cycle mechanical recirculating system as specified by 40 CFR 125.94(c)(1) and that the maximum design through screen intake velocity did not exceed 0.5 fps as specified by 40 CFR 125.94(c)(2).

For compliance with the entrainment mortality BTA requirement, IDEM considered the factors that IDEM must and may consider in its entrainment determination and determined that the existing intake was entrainment mortality BTA, primarily because the facility operated a closed cycle recirculating system.

### **6.3.3 Facility and Cooling Water Intake Structure (CWIS) Description**

#### **A. Detailed Description**

Cooling tower makeup water for the facility is withdrawn from the West Fork of the White River via an existing water intake structure (see Figure 2-1, above).

The water intake system consists of gravity fed intake canal, one bar rack, one traveling screen, and one screen wash pump.

The mouth of the intake canal is 32 feet wide at the withdrawal point. The intake canal reduces to 6 feet wide shortly after the withdrawal point and it is approximately 230 feet from the withdrawal point to the traveling screen. The bottom elevation of the intake canal provides for a submerged depth of 7 feet at normal source waterbody elevation and approximately 4 feet at a low head dam crest.

The single traveling water intake screen has a 4-foot, 10-inch basket width with 3/8-inch square wire mesh. The screen is located in a pit that is approximately 6-feet, 6-inches wide and is 3 feet deeper than the intake canal which provides for a submerged depth of 10 feet at normal source waterbody elevation or 7 feet at a low head dam crest. The screen has a high-pressure spray wash system to remove debris from the screen. This single screen wash pump, with a design flow of 300 gpm, is operated when the traveling screen is rotated to remove accumulated debris.

After the traveling screen, the screened water travels by gravity an additional 235 feet (approximate) to the cooling tower booster pump basin. This basin provides suction for the cooling tower booster pumps and makeup for cooling tower evaporation and blowdown losses. See Figure 3-2, above.

The circulating water system is a closed-loop system with cooling water recycled and reused in the steam turbine condenser. The purpose of the circulating water system is to supply cooling water to the main and auxiliary steam condensers, and to be used as service water for various

plant uses such as fire system water, boiler area wash water, and makeup water to the heat recovery steam generator. The service water system is typically supplied by groundwater wells; however, the service water pumps can also take suction from the cooling water intake structure as dictated by plant operations. The heat transferred to the circulating water in the condenser is rejected to the atmosphere by the evaporation process in the cooling tower. Approximately 76 percent of water withdrawn by the cooling water intake structure is used for cooling tower makeup (86 percent when the service water system is supplied by groundwater wells).

Four vertical circulating water pumps, two for each main condenser, each rated at 28.8 MGD (20,000 gpm) supply cooling water to the two main condensers and additional circulating water to the auxiliary cooling water heat exchangers. The circulating water pumps suction is from the intake bay where water is supplied by gravity to the circulating water pit. Heated water from the main condenser and other systems is returned to a condenser booster pump pit where two pumps rated at 64.8 MGD (45,000 gpm) each conveys the heated water to the cooling tower. The heated circulating water is cooled by the cooling tower and then collected in the cooling tower basin where it flows by gravity to the intake bay, and the cycle is repeated. The facility has one mechanical draft counterflow cooling tower equipped with five cells, motor-driven fans with two speeds, and a collection basin to return the cooled water to the circulating water pumps.

The cooling tower is always in operation whenever one of the two steam turbines is in operation. The cooling tower is designed to operate with at least four of the five cells in operation. Typically, during the warmer months of the year (mid-May to mid-October) all five cells of the cooling tower are in service.

Most of water losses in the circulating water system is through evaporation in the cooling tower. Evaporation does not carry away solids in the water such as mud, silt, or dissolved solids; therefore, it is necessary to continuously discharge some of the circulating water to prevent a buildup of solids in the circulating water. This discharge, called blowdown, is routed to Internal Outfall 201.

The cooling tower has five main components:

1. the blower type fans which direct the airflow upward,
2. the heat transfer section commonly called the "fill",
3. the water distribution system,
4. the drift eliminator section, and
5. the concrete basin which collects water for return to the main condenser and other plant purposes.

## **B. Intake Flows, Velocity of Intake Flows Through Traveling Screen, Area of Influence and Closed Cycle Cooling**

Withdrawal from the West Fork, White River is dependent on makeup water demand to replace cooling tower water losses due to evaporation, drift, and chemistry parameter control (blowdown). Because makeup water demand is directly related to the operation of generating units and in turn, the cooling water system, operation generally follows a base load pattern. Operation of the cooling water intake system is nearly continuous. During the 2017-2021 period, it was operated an average of approximately 17.2 hours each day with source waterbody withdrawal.

The permittee has stated that the maximum design intake flow (DIF) is 2,390 gpm (3.44 MGD). However, the permittee has not provided any documentation, engineering calculations or any other information which supports this design intake flow value. In this permit renewal, IDEM did use this value as the design intake flow; however, during this permit term, IDEM is requiring the permittee to provide engineering calculations and/or a study sufficient to verify the value of the maximum design intake flow for the facility.

Using a low water level resulting in a screen wetted depth of 7 feet, a screen width of 4.83 feet, a screen frame factor of 1.125, a 0.375 inch mesh openings with a wire dimension of 0.0641 inches, and the stated design intake flow of 2,390 gpm, the through screen velocity at the traveling screen is approximately 0.28 fps.

At the intake itself and in the canal, the velocities at the stated design intake flow are approximately as follows:

- Intake: 0.04 fps (32 feet width and 4 feet deep)
- Canal: 0.22 fps (6 feet width and 4 feet deep).

In IDEM's April 25, 2022 letter, approving in part and rejecting in part the permittee's request to reduce the information required to be submitted with its 316(b) application, IDEM specifically required the submission of the following information:

- The daily intake flow data for each intake for the 5 years preceding the submission of the application. These flow data should be provided in an excel spreadsheet. If flow measurement devices were not used to obtain this daily flow data, the permittee shall also provide the engineering calculations prepared by a qualified professional and supporting data to support the information.
- The permittee shall include velocity calculations for the intake screen and all inputs and equations used in these calculations. Any drawings or diagrams needed to explain the inputs or calculations shall also be included. These calculations shall be performed, at a minimum, using the maximum daily intake flow and the design intake flow at minimum ambient source water surface elevations.

The permittee did not provide the 5 years of daily intake flow data and did not provide the engineering calculations prepared by a qualified professional and supporting data to support the flow data. In addition, the permittee did not calculate the velocity using the maximum daily intake flow. The permittee did not provide IDEM with the maximum daily intake flow, so IDEM could not calculate this velocity.

### **Closed Cycle Recirculating System (CCRS)**

The Duke Noblesville Generating Station updated its operations from once-through to closed-cycle cooling in 2003. In the 2018 permit renewal, IDEM determined that the facility operates a closed-cycle recirculating system, based on the reduction in intake flow and information provided by the permittee. After this designation, the permittee began submitting annual summaries containing daily cooling water COC measurements. IDEM has daily COC data from July 2018 to December 2022 for the facility. The annual average COC for the facility is 3.9 and the lowest monthly average COC, excluding August and September 2022, is 3.1. The monthly

averages for August and September of 2022 dropped to 2.4 and 2.6, respectively. As per the permittee, this drop in COC is attributed to operational issues that were rectified during a subsequent outage. Despite these low readings, the annual average COC for 2022 was 3.4.

Under the 316(b) rules, a closed-cycle recirculating system (CCRS) means a system designed and properly operated using minimized make-up and blowdown flows withdrawn to support contact or non-contact cooling uses within a facility. A closed-cycle recirculating system passes cooling water through the condenser and other components of the cooling system and reuses the water for cooling multiple times. A properly operated and maintained closed-cycle recirculating system withdraws new source water (make-up water) only to replenish losses that have occurred due to blowdown, drift, and evaporation from the cooling system.

If waters are withdrawn for purposes of replenishing losses to a closed-cycle recirculating system other than those due to blowdown, drift, and evaporation from the cooling system, IDEM may determine a cooling system is a closed-cycle recirculating system if the facility demonstrates to the satisfaction of IDEM that make-up water withdrawals attributed specifically to the cooling portion of the cooling system have been minimized.

The EPA Technical Development Document (TDD) and Essay 17A: Closed-Cycle Recirculating Cooling (EPA Response to Public Comment: National Pollutant Discharge Elimination System Final Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities (40 CFR Parts 122 and 125) Docket # EPA-HQ-OW-2008-0667) provide additional discussion on what constitutes a closed cycle recirculating system (CCRS) under the rule. The TDD developed by USEPA provides record support for the rule and describes the methods used by EPA to analyze various options in the rule. Essay 17A was developed by USEPA to address public comments about the definition of a CCRS under the rule.

Generally, two operating parameters are used to evaluate proper operation of a closed cycle recirculating system, cycles of concentration (COC) and reduction in flow (RIF). The RIF is the percent reduction in water use versus water use at a facility with once through cooling. Cycles of concentration can be measured as the ratio of chloride levels in the recirculated water or blowdown relative to the chloride levels in the source water, or makeup water. Cycles of concentration represents the accumulation of dissolved minerals in the recirculated cooling water.

While EPA has determined that a COC of 3.0 and a RIF approximately equivalent to a percent reduction in flow of 97.5% is indicative of a well-operated cooling system (i.e., one that truly minimizes makeup withdrawals), EPA decided not to include a minimum COC (or RIF) requirement as part of the definition for closed-cycle systems. Instead, the definition at 40 CFR 125.92 requires makeup flows be minimized. The flow reductions of 97.5% and COC of 3.0 serve as indicators of minimized makeup flows, and thus are used by IDEM when assessing performance of a particular CCRS.

Regardless of whether facilities achieve either these levels of COC or reductions in flow, IDEM is responsible for determining whether such facilities in fact are operating as a close-cycle recirculating cooling system. IDEM reviews the information provided by the facility and

determines if the facility's configuration and operation are otherwise consistent with the definition of a closed-cycle cooling system in the 316(b) regulations.

Based on the reported COC annual averages reported by the facility, the COC of the closed-cycle recirculating system at the facility is in the range of 3 -6, which is typical of a well operated facility. The reported reduction in flow (RIF) appears to be above 97% depending on how RIF is determined and therefore consistent with the reduction in flow expected from a well operated facility. The facility therefore appears to operate and meet the criteria necessary to be designated as a closed cycle recirculating system (CCRS) under the federal rules.

### **6.3.4 Source Water Biological Characterization**

Forty-seven fish species, representing nine families have been documented in the White River by Duke Energy or the IDNR Division of Fish and Wildlife since 2000 (Table 2). Numerous species are represented in these collections, which indicate a diverse fish fauna. Due to a 1999 widespread fish kill from an upstream industrial discharge which resulted in a substantial change in the White River fish community including the segment containing the permittee's cooling water intake structure (Clark and Kolaks, 2012), the fish listed in this table are from collections since 1999. Electrofishing techniques were used for each of the studies in Table 2. None of these species are state or federally protected.

**Table 2. Fish species collected by Duke Energy or IDNR in the vicinity of the permittee's intake since 1999.**

Scientific Name	Common Name	Percentage of Fish Collected (%)					
		2000 <sup>1</sup>	2001 <sup>2</sup>	2002 <sup>3</sup>	2003 <sup>4</sup>	2011 <sup>5</sup>	2018-2021 <sup>6</sup>
<i>Ameiurus melas</i>	Green Sunfish	0.3	-	-	-	-	-
<i>Pomoxis nigromaculatus</i>	Black Crappie	1.0	-	-	3.5	-	0.5
<i>Moxostoma duquesni</i>	Black Redhorse	-	-	-	-	0.4	0.3
<i>Fundulus notatus</i>	Blackstripe Topminnow	-	0.3	-	-	-	0.1
<i>Lepomis machrochirus</i>	Bluegill	11.7	7.2	15.9	8.8	12.6	5.1
<i>Pimephales notatus</i>	Bluntnose Minnow	-	0.9	1.4	3.2	22.4	3.3
<i>Labidesthes sicculus</i>	Brook Silverside	0.7	-	0.7	-	-	-
<i>Campostoma anomalum</i>	Central Stoneroller	2.8	-	-	-	1.5	-
<i>Ictalurus punctatus</i>	Channel Catfish	-	-	0.4	-	3.8	-
<i>Cyprinus carpio</i>	Common Carp	9.7	10.6	3.2	2.8	0.4	2.2
<i>Lepomis cyanellus</i>	Black Bullhead	0.3	-	-	-	-	-
<i>Erimyzon oblongus</i>	Creek Chubsucker	-	3.1	-	1.1	-	-
<i>Pimephales promelas</i>	Fathead Minnow	-	-	-	1.1	-	-
<i>Pylodictis olivaris</i>	Flathead Catfish	-	-	-	0.4	-	0.1
<i>Dorosoma cepedianum</i>	Gizzard Shad	1.0	0.3	-	1.1	2.3	3.4
<i>Moxostoma erythrurum</i>	Golden Redhorse	0.3	8.7	20.8	8.4	6.1	30.3
<i>Notemigonus crysoleucas</i>	Golden Shiner	1.4	8.4	11.7	0.4	-	0.1
<i>Esox vermiculatus</i>	Grass Pickerel	3.8	4.0	2.1	1.4	-	0.8
<i>Lepomis cyanellus</i>	Green Sunfish	-	4.7	7.4	10.2	-	3.8
<i>Carpiodes velifer</i>	Highfin Carpsucker	-	-	-	-	0.4	-
<i>Etheostoma nigrum</i>	Johnny Darter	-	-	-	-	-	0.1
<i>Micropterus salmoides</i>	Largemouth Bass	22.4	5.3	1.8	5.6	0.4	5.1
<i>Percina caprodes</i>	Logperch	-	-	-	-	-	0.3
<i>Lepomis megalotis</i>	Longear Sunfish	0.3	9.7	9.5	22.8	13.7	14.4
<i>Hypentelium nigricans</i>	Northern Hogsucker	-	-	-	-	1.5	-
<i>Lepomis gibbosus</i>	Pumpkinseed	-	0.9	0.4	0.4	-	-
<i>Carpiodes cyprinus</i>	Quillback	-	0.3	-	-	-	3.3



**Table 2. Fish species collected by Duke Energy or IDNR in the vicinity of the permittee’s intake since 1999.**

Scientific Name	Common Name	Percentage of Fish Collected (%)					
		2000 <sup>1</sup>	2001 <sup>2</sup>	2002 <sup>3</sup>	2003 <sup>4</sup>	2011 <sup>5</sup>	2018-2021 <sup>6</sup>
<i>Lepomis microlophus</i>	Redear Sunfish	-	-	0.4	0.7	-	1.9
<i>Esox americanus</i>	Redfin Pickerel	-	-	-	-	0.4	-
<i>Lythrurus umbratilis</i>	Redfin Shiner	2.4	0.3	0.4	-	-	-
<i>Carpeiodes carpio</i>	River Carpsucker	-	-	-	-	4.2	0.3
<i>Ambloplites rupestris</i>	Rockbass	-	0.3	-	0.4	8.4	0.6
<i>Notropisstramineus</i>	Sand Shiner	-	-	-	-	0.4	1.6
<i>Sander canadensis</i>	Sauger	-	-	0.7	0.4	-	-
<i>Moxostoma macrolepidotum</i>	Shorthead Redhorse	-	-	-	-	-	0.1
<i>Notropis photogenis</i>	Silver Shiner	7.9	3.4	0.4	-	0.8	1.4
<i>Micropterus dolomieu</i>	Smallmouth Bass	0.3	1.6	1.1	3.2	2.7	2.5
<i>Cyprinella spiloptera</i>	Spotfin Shiner	2.4	6.2	3.5	2.8	11.0	3
<i>Micropterus punctulatus</i>	Spotted Bass	-	-	-	-	-	0.1
<i>Minytrema melanops</i>	Spotted Sucker	13.8	19.9	16.6	7.0	3.0	11.9
<i>Phenacobius miribilis</i>	Suckermouth Minnow	-	-	-	-	0.4	-
<i>Lepomis sp.</i>	Sunfish	-	-	-	1.4	0.4	-
<i>Lepomis hybrid</i>	Sunfish (Hybrid)	-	-	-	-	-	0.1
<i>Lepomis golosus</i>	Warmouth	0.3	0.3	0.4	1.8	-	0.1
<i>Morone chrysops</i>	White Bass	-	-	-	-	-	0.3
<i>Pomoxis annularis</i>	White Crappie	1.7	-	0.4	8.4	-	-
<i>Catostomus commersoni</i>	White Sucker	15.2	3.1	0.7	2.8	2.3	2.7
<i>Ameiurus natalis</i>	Yellow Bullhead	0.3	0.3	0.4	0.4	0.8	0.1
Total Number of Individuals Collected		290	321	283	285	263	732
Total Number of Species Represented		21	23	233	26	34	32

<sup>1</sup>Lewis et al, 2001; <sup>2</sup>Lewis et al, 2002; <sup>3</sup>Lewis et al, 2003; <sup>4</sup>Lewis et al, 2004; <sup>5</sup>Clark and Kolaks, 2012; <sup>6</sup>Duke Energy, 2022

### **6.3.5 Impingement and Entrainment– Aquatic Life Studies**

The withdrawal of water from rivers has the potential to impact fishes through impingement and entrainment. The degree of vulnerability to impingement exhibited by adult and juvenile fish species depends upon biological and behavioral factors including seasonal fish community structure, swimming speed, spawning effects on distribution, habitat surrounding intake structures, high flow events, fish health, water withdrawal rate, and attraction to the flow associated with the intakes themselves. In addition, intake velocity, screen mesh size, trash rack spacing, and intake configuration can also affect the susceptibility of fishes to impingement.

Historically, the permittee withdrew cooling water from the West Fork of the White River through an intake structure with a mean intake velocity of 2.07 fps, which ranged up to 2.79 fps. Historical impingement and entrainment data were collected at the Station in 1977 (Swallow and Evarts 1978). However, the facility was repowered in 2003 from a gas-fired to a coal fired generating facility and closed-cycle cooling was added. With the closed cycle cooling, the facility withdraws much smaller volumes of water than would be needed for a facility with a once-through system.

#### **A. Impingement**

Historical impingement and entrainment data were collected at the facility in 1977 (Swallow and Evarts 1978). However, the facility was repowered in 2003 from a gas-fired to a coal fired

generating facility and closed-cycle cooling was added. The design through screen velocity is now approximately 0.28 fps which is substantially less than the velocity at the intake in 1977.

## **B. Entrainment**

The habitat near the permittee's intake and life history characteristics of fish potentially present near the intake flume, as well as characteristics of the intake such as angle of the of the intake canal inlet were considered for the entrainment analysis. Habitat near the intake canal is lacustrine with a relatively slow current, the substrate is rocky with a heavy silt overlay and the entire shoreline lined with riprap (Lewis et al. 2004), which has influenced fish distribution and abundance (Lewis et al. 2001, 2002, 2003, 2004). Fish that are broadcast spawners were considered to be more susceptible to entrainment because their eggs can drift in the current; therefore, life history information of fish found in the West Fork of the White River near the intake flume was considered for entrainment analysis (See Table 2, above). The intake canal has a floating boom at the inlet that could reduce entrainment of potentially entrainable buoyant eggs and larvae.

The facility utilizes a closed-cycle recirculating system, which significantly reduces the volume of water being withdrawn and the number of organisms being entrained in comparison to a facility that does not use a closed-cycle recirculating system. However, any organisms which are entrained likely do not survive. No site-specific entrainment performance studies (such as studies evaluating biological efficacy of specific entrainment reducing technologies or through-facility entrainment survival) have been conducted for the repowered facility.

### **6.3.6 Protected Species Susceptible to Impingement and Entrainment**

EPA's regulations require the permittee to document the presence of federally listed species and designated critical habitat in the action area (see 40 CFR 125.95[f]) and requires IDEM to transmit the permit application to the USFWS and/or National Marine Fisheries Service for review prior to issuance of the draft permit (see 40 CFR 125.98[h]).

The USFWS IPaC database (USFWS 2022a) and USFWS Federally Listed Threatened, Endangered, Proposed, and Candidate Species for Hamilton County, Indiana (USFWS 2022b) indicate that no federally listed aquatic species occur within two miles of the Noblesville intake flume or within Hamilton County, Indiana.

A review of the IDNR Endangered, Threatened and Rare Species List for Hamilton County (IDNR 2022) indicates that seven listed mussel species have the potential to occur in Hamilton County. However, the habitat at the cooling water intake structure is a lacustrine environment and the substrate is predominantly gravel covered with a thick layer of silt, suggesting poor quality habitat for rare mussels (Lewis et al, 2004). No live specimens of the listed mussels were observed during the 1989-1991 surveys at any site in the West Fork of the White River or in a survey conducted in 2000 just downstream of the Clare Dam, which is downstream of the intake (Cummings et al. 1992; IDNR 2000). During the 2000 IDNR survey, of the 23 species of mussels identified, the only live specimens collected were White Heelsplitter, a common and broad-ranging species (IDNR 2000). As such, it was determined that the mussel species listed in Table 4-3 of the permittee's 316(b) application are unlikely to occur in the vicinity of the intake flume.

The species included in this Table 4-3 were identified from the Indiana Department of Natural Resources Endangered, Threatened and Rare Species List for Hamilton County (IDNR 2022). These species were not identified in the vicinity of the Noblesville intake in the IPaC database (USFWS 2022a) or the USFWS Federally Listed Threatened, Endangered, Proposed, and Candidate Species for Hamilton County, Indiana (USFWS 2022b).

Based on a review of the permittee's 316(b) application, Dan Sparks with the U.S. Fish and Wildlife Service provided comments to IDEM on January 11, 2023, concluding that there are no federal endangered species impacted by the permittee's cooling water intake structures.

### **6.3.7 Best Technology Available (BTA) Determinations**

#### **A. Impingement BTA**

Under 40 CFR 125.94(c) existing facilities 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 both alternative 1 and 2, above.

Under alternative 1 (40 CFR 125.94(c)(1)), the permittee must operate a closed-cycle recirculating system as defined at 40 CFR 125.92. In addition, the permittee must monitor the actual intake flows at a minimum frequency of daily. The monitoring must be representative of normal operating conditions, and must include measuring cooling water withdrawals, make-up water, and blowdown volume. In addition, this permit requires monitoring of the cycles of concentration at a minimum frequency of daily.

Based on the reported COC annual averages reported by the facility, the COC of the closed-cycle recirculating system at the facility is in the range of 3 -6, which is typical of a well operated facility. The reported reduction in flow (RIF) appears to be above 97% depending on how RIF is determined and therefore consistent with the reduction in flow expected from a well operated facility. The facility therefore appears to operate and meet the criteria necessary to be designated as a closed cycle recirculating system (CCRS) under the federal rules.

Under alternative 2 (40 CFR 125.94(c)(2)), 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 provided by the permittee, if the design intake flow is correct, the maximum design through-screen intake velocity is approximately 0.28 fps, which is less than the regulatory maximum velocity of 0.5 fps.

Based on the information submitted by the permittee, IDEM has determined that:

- (1) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(1) by operating a closed cycle recirculating system as defined at 40 CFR 125.92; and
- (2) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(2) by operating an intake that has a maximum design through-screen intake velocity that does not exceed 0.5 fps.

Both of these determinations are based, at least in part, on the premise that the design intake flow is 3.44 mgd. However, the permittee has not provided any substantive documentation, engineering calculations or any other information which supports this design intake flow value. Therefore, during this permit term, IDEM is requiring the permittee to provide engineering calculations and/or a study sufficient to prove the value of the maximum design intake flow for the facility.

## **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 best technology available 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))

After considering all the factors that must and may be considered by the federal rules (see discussion below) IDEM finds that the existing facility meets BTA for entrainment, based primarily on the following factors:

- (1) The facility uses a closed-cycle recirculating system which significantly reduces the amount of water withdrawn and number organisms entrained in comparison to facility with a comparable generating capacity without a closed-cycle recirculating system; and
- (2) The design intake flow of 3.44 MGD is between 0.13 to 3.6% of the monthly average flow in the White River. (From USGS Station 03349000, located about 5 miles downstream of the facility; January 2012 through June 2022).

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 permittee operates a closed-cycle recirculating system, which significantly reduces the number of organisms entrained by the intake. No federally listed aquatic species or designated critical habitat are in the area in which the intake is located.

No site-specific entrainment studies have been performed at the facility; however, an entrainment analysis of previous fishery studies in the West Fork of the White River and near the intake was performed.

Based on habitat and life history characteristics, gizzard shad and quillback could spawn near the intake. To a lesser extent, spotted sucker may be present as well, based on spawning behavior, but not as likely as gizzard shad or quillback due to lack of available preferred spawning habitat. Based on previous fish survey data collected near the intake flume, gizzard shad and quillback are not abundant near the Station. Gizzard shad were caught during each sampling event, except the 2002 study, but only comprised from 0.3 to 3.4 percent of the catch. Quillback were caught during the 2018-2021 surveys and only comprised 3.3 percent of the catch. Both species combined comprised less than 0.012 percent of fish caught across surveys conducted since 2021.

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

The permittee is currently operating closed-cycle recirculating mechanical draft cooling towers and there are no plans or requirements to install any additional entrainment technologies. The facility is currently permitted under a Part 70 Operating

Permit, Operation Permit No. T057-30434-00004, by the Office of Air Quality (OAQ) of IDEM.

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

The cooling tower is already in place. Therefore, land availability is not an issue.

iv. Remaining useful plant life; and

The power plant was converted from a coal powered generating facility to a gas-powered generating facility in 2003. According to the Duke Energy Indiana Integrated Resource Plan, the projected retirement date of the facility is 2034.

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.

The facility operates a closed-cycle cooling system and has substantially reduced the volume of intake flow required by a facility of this generating capacity and therefore the numbers of organisms potentially entrained. Additional upgrades and evaluation of further control alternatives are not warranted at this time.

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

i. Entrainment impacts on the waterbody;

The permittee currently operates a closed cycle recirculating system which significantly reduces the amount of water being withdrawn and the number of organisms which would be entrained.

ii. Thermal discharge impacts;

The permittee currently operates a closed cycle recirculating system. No additional entrainment technologies are being considered; therefore, no additional thermal discharge impacts are expected.

iii. Credit for reductions in flow associated with the retirement of units occurring within the ten years preceding October 14, 2014 or this permit renewal;

The facility did not retire any units in the 10 years preceding October 14, 2014 or the 10 years preceding this permit renewal.

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

The permittee already operates a closed-cycle recirculating system (cooling towers). No additional entrainment technologies are being considered; therefore, no impacts on the reliability of energy delivery are expected.

*v. Impacts on water consumption; and*

The permittee already operates a closed-cycle recirculating system. No additional entrainment technologies are being considered; therefore, no impacts on water consumption are expected.

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

The permittee operates a closed-cycle recirculating system.

### **6.3.8 Best Technology Available (BTA) Impingement and Entrainment Determination Summary**

**Impingement Mortality BTA:** IDEM has determined that the current cooling water intake structure at this facility is the best technology available to minimize impingement mortality based on the following:

- (1) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(1) by operating a closed cycle recirculating system as defined at 40 CFR 125.92; and
- (2) The permittee's cooling water intake structure meets the impingement mortality BTA under 40 CFR 125.94(c)(2) by operating an intake that has a maximum design through-screen intake velocity that does not exceed 0.5 fps.

Both of these determinations are based, at least in part, on the premise that the design intake flow is 3.44 mgd. However, the permittee has not provided any substantive documentation, engineering calculations or any other information which supports this design intake flow value. Therefore, during this permit term, IDEM is requiring the permittee to provide engineering calculations and/or a study sufficient to verify the value of the maximum design intake flow for the facility.

**Entrainment Mortality BTA:** After considering all the factors that must and may be considered : IDEM has determined that the current cooling water intake structure at this facility is the best technology available to minimize entrainment mortality based on the following:

- (1) The facility uses a closed-cycle recirculating system which significantly reduces the amount of water withdrawn and number organisms entrained in comparison to facility with a comparable generating capacity without a closed-cycle recirculating system; and

- (2) The design intake flow of 3.4 MGD is approximately between 0.13 to 3.6% of the monthly average flow in the White River.

### **6.3.9 Permit Conditions**

The permittee shall comply with the following cooling water intake structure requirements:

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 (CWIS) 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 monitor the intake flow at a minimum frequency of daily. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the actual intake flows measured at a minimum frequency of daily. If a flow measurement device was not used to obtain this daily flow data, the annual report shall also include the engineering calculations prepared by a qualified professional and supporting data to support the flow data determinations.
6. The permittee must monitor and report its cycles of concentration at its cooling tower at a minimum frequency of daily. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the cycles of concentration measured at a minimum frequency of daily.
7. 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).
8. Within six months of the effective date of the permit, the permittee shall submit to IDEM engineering calculations and/or a study sufficient to verify the value of the maximum design intake flow for the facility.



9. 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.
10. 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.
11. The permittee shall submit and maintain all the information required by the applicable provisions of 40 CFR 125.97.
12. 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.

13. 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](mailto:OWQWWPER@idem.in.gov) and the Compliance Branch at [wwReports@idem.in.gov](mailto:wwReports@idem.in.gov).

## 6.4 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

## 6.5 Spill Response and Reporting Requirement

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

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

## 6.6 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.