STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO: 20260522 – IN0051845– D
DATE OF NOTICE: May 22, 2026
DATE RESPONSE DUE: June 22, 2026

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

MAJOR – RENEWAL:

American Electric Power - Rockport, Permit No. IN0051845, SPENCER COUNTY, 2791 North US Highway 231, Rockport, IN. The facility is a coal-fired steam electric generating plant. This facility discharges 12.1 MGD of non-process wastewater and process wastewater to the Ohio River via Outfall 001/Internal Outfall 201. Outfall 001 is located at Latitude: 37º 54' 27", Longitude: -87º 02' 0.08". The facility discharges stormwater runoff and landfill leachate from the plant landfill via Outfall 002 to the unnamed drain to Shafer Drain to Honey Creek to the Ohio River. Outfall 002 is located at Latitude: 37º 56' 47", Longitude: -87º 01' 18". There are 3 internal outfalls (located up-pipe from Outfalls 001 and 002) which all have specific effluent limits and monitoring requirements. The facility also has 21 stormwater outfalls which discharge to various receiving streams. Eight of those outfalls have been selected for representative sampling and reporting. Permit Manager: Kira Wren, 317/233-7090, KWren@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, 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 posted on IDEM's web

page for public notices and notifications will also be sent to those persons submitting comments and/or on the mailing list at least 30 days prior to the hearing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • Fax (317) 233-6647 • www.idem.IN.gov

Mike Braun
Governor

Clint Woods
Commissioner

May 22, 2026

VIA ELECTRONIC MAIL

Aimee Toole, Director Environmental Services
Indiana Michigan Power Company
1 Riverside Plaza
Columbus, OH 43215

Dear Ms. Toole:

Re: NPDES Permit No. IN0051845
Draft Permit
AEP Rockport Plant
Rockport, IN – Spencer 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 Kira Wren of my staff, at (317) 233-7090 or KWren@idem.IN.gov.

Sincerely,

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

Enclosures
cc: Spencer County Health Department
John F Trout III, Process Supervisor Sr., AEP
Chief, Permits Section, U.S. EPA, Region 5
Jeremy Ferguson, IDEM inspector

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,

AMERICAN ELECTRIC POWER
ROCKPORT PLANT

is authorized to discharge from the steam electric power generating facility that is located at 2791 North U.S. Highway 231, Rockport, Indiana, to receiving waters identified as an unnamed ditch to Shafer Drain to Honey Creek and the Ohio River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, and IV hereof. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date:_____

Expiration Date:_____

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

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

1. 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 37° 54' 27", Longitude -87° 02' 0.08". The discharge is limited to bottom ash transport water [18], cooling tower blowdown, alternate cooling tower blowdown, coal handling and coal storage area runoff, other storm water runoff, treated chemical metal cleaning waste, pyrites handling wastewater, fly ash silo pump discharge, demineralizer regeneration blowdown, coal conveyor and handling wastewater, steam generator blowdown, closed-cycle cooling water blowdown, cycle water condensate polisher cleaning water, floor drain runoff, and emergency discharge of landfill leachate and runoff from the Outfall 002 ponds. 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 Ohio River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3][4][5]
Outfall 001
Table 1

	Quantity or Loading			**Quality or Concentration**			**Monitoring Requirements**	
Parameter	**Monthly Average**	**Daily Maximum**	**Units**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
Flow [6]	Report	Report	MGD	--------	--------	--------	Continuous	24 Hr. Total
Cycles of Concentration	Report	Report	Number	--------	--------	--------	Daily	Report
TSS[7]	--------	--------	--------	30	100	mg/l	1 X Monthly	24-Hr. Comp.
Oil & Grease	--------	--------	--------	11.7	15.6	mg/l	1 X Monthly	Grab
Total Copper [8][11]	--------	--------	--------	0.033 [20]	0.067 [20]	mg/l	1 X Monthly	24-Hr. Comp.
Hex. Chromium[9][11]	--------	--------	--------	--------	Report	mg/l	1 X Quarterly [10]	Grab
Total Selenium [8][11]	--------	--------	--------	--------	Report	mg/l	1 X Quarterly [10]	24-Hr. Comp.
Mercury[8][11][12]	--------	--------	--------	Report	Report	ng/l	6 X Yearly	24-Hr. Comp.
CT-1300 [13]	--------	--------	--------	--------	0.05	mg/l	Daily [14]	4 Grabs [15]
Temperature	--------	--------	--------	Report	Report[16]	°F	1 X Weekly	Grab
TRC[11][17]	--------	--------	--------	0.02	0.04	mg/l	1 X Monthly	Grab
Total Phosphorus	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
TKN	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
Ammonia (as N)	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
Whole Effluent Toxicity Testing	See Part I.F							

Table 2

	Quality or Concentration				Monitoring Requirements	
Parameter	**Daily Minimum**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [19]	6.0	----	9.0	s.u.	1 X Weekly	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] The permittee shall post a permanent marker on the stream bank at each outfall discharging directly to the Ohio River.

The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the permit number, and the outfall number. The information shall be printed in letters not less than two inches in height.

The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above the ground.

[4] 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.

[5] See Parts III and IV of this Permit for additional requirements.

[6] Flow is to be measured continuously using an electric flow device. The permittee may use engineering calculations to measure flow if the flow measuring device becomes inoperative. Other means of flow determination may be used if approved by IDEM.

[7] An exceedance of either the monthly average or daily maximum concentration limitations for total suspended solids (TSS) which is demonstrated to have been caused by the presence of biological material (e.g. algae or bacteria) will not constitute a violation of the permit.

In such cases, the permittee must quantitatively demonstrate the presence of biological material using an appropriate method contained in 40 CFR 136 incorporated by reference in 327 IAC 5. The permittee must submit the lab results for both the TSS and volatile suspended solids test, as well as a letter of explanation that details the calculations used to determine the final TSS result to accompany monthly DMR forms.

[8] The permittee shall measure and report the identified metal as <u>total recoverable</u> metal.

[9] 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.

[10] Samples shall be taken once at any time during each of the four annual quarters:

(A) January-February-March;
(B) April-May-June;
(C) July-August-September; and
(D) October-November-December.

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

[11] 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.

Parameter	Test Method	LOD	LOQ
Mercury	1631E	0.2 ng/l	0.5 ng/l
Selenium	3113 B-2004 or 3114 B-2009	2 µg/l	6.4 µg/l
Selenium	200.8, Rev. 5.4 (1994)	2.1 µg/l	6.7 µg/l
Copper	200.8 Rev. 5.4 1994 SM	0.5 µg/l	1.6 µg/l
Hexavalent Chromium	218.6	0.2 µg/l	0.5 µg/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 µg/l	1.9 µg/l
Chlorine	4500-CI-D-2000, E-2000 or 4500-CI-G-2000, 4500-CIE-2011	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.

[12] Mercury monitoring shall be conducted 6 X annually in the months of February, April, June, August, October, and December of each year for the term of the permit using EPA Test Method 1631, Revision E.

[13] Whenever CT-1300 is applied to the cooling tower, the cooling tower discharge shall be terminated for a minimum of 24 hours. The final concentration of CT-1300 in the discharge shall be determined by analysis or by calculation based on the mass balance through the system. Any discharge of CT-1300 resulting from zebra mussel treatment shall be detoxified by bentonite clay (Betz DTG). The daily maximum limitation for CT-1300 is less than the LOD (0.2 mg/l) and the LOQ (0.6 mg/l). Compliance with the limitation will be demonstrated if the observed effluent concentration is less than the LOQ (0.6 mg/l).

Application of CT-1300 for zebra mussel control is limited to a maximum of twelve (12) hours duration. The twelve (12) hour time period shall begin when the CT-1300 feed concentration reaches a steady-state operation and shall end when the CT1300 feed valve is closed.

[14] Monitoring for CT-1300 is required daily during periods of expected discharge as a result of zebra mussel treatment.

[15] The required monitoring for CT-1300 following its use in treating zebra mussels shall be conducted at three (3) hour intervals for a period of twelve (12) hours beginning when the wastewater treatment ponds are opened to discharge through Outfall 001.

[16] If the permittee collects more than one grab sample on a given day for temperature, the values shall not be averaged for reporting daily maximums. The permittee must report the absolute maximum temperature value of any sample during the month on the Monthly Monitoring Report form.

[17] The water quality based effluent limit (WQBEL) for Total Residual chlorine (TRC) is less than the limit of quantitation (LOQ) as specified in footnote [11]. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ.

If the measured concentration of TRC is greater than the water quality based effluent limitations and above the respective LOD specified in footnote [11] 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 shall be increased to 1X weekly and remain at this increased sampling frequency until:

(a) The increased sampling frequency for TRC has been in place for at least 9 weeks;

(b) At least nine (9) samples have been taken under this increased sampling frequency; and

(c) The measured concentration of TRC is less than the LOD specified in footnote [11] in at least seven (7) out of the nine (9) most recent analyses.

[18] There shall be no discharge of pollutants in bottom ash transport water generated after December 31, 2028.

[19] 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.

[20] These limits will apply at Outfall 001 only during periods of metal cleaning waste activities.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 002, located at Latitude 37° 56' 47", Longitude -87° 01' 18". The discharge is limited to landfill leachate and runoff. 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 unnamed ditch that flows to Shafer Drain to Honey Creek. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3][4][5]
Outfall 002

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	**Monthly Average**	**Daily Maximum**	**Units**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
Flow [6]	Report	Report	MGD	--------	--------	--------	Daily	24 Hr. Total
Augmented Flow Groundwater[7] Stormwater [8]	 Report Report	 Report Report	 MGD MGD	 -------- ---------	 -------- --------	--------	 Daily Daily	 24-Hr. Total 24-Hr. Total
TSS[9]	--------	--------	--------	--------	50	mg/l	1 X Monthly	24-Hr. Comp.
Total Selenium[10][11] Interim Final[16]	 -------- --------	 -------- --------	 -------- --------	 0.029 0.0031	 0.057 0.0075	 mg/l mg/l	 1 X Monthly 1 X Monthly	 24-Hr. Comp. 24-Hr. Comp.
Total Lead[10][11]	--------	--------	--------	0.0084	0.017	mg/l	1 X Monthly	24-Hr. Comp.
Total Chromium[10]	--------	--------	--------	0.37	0.74	mg/l	1 X Monthly	24-Hr. Comp.
Fluoride [11]	--------	--------	--------	1.6	3.3	mg/l	1 X Monthly	24-Hr. Comp.
Sulfate [11]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Hex. Chromium [10][11][12]	--------	--------	--------	0.0087	0.017	mg/l	1 X Monthly	Grab
Total Copper [10][11]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Total Boron [10]	--------	--------	--------	Report	Report	mg/l	1 X Quarterly[13]	24-Hr. Comp.
Mercury[10][11] [14]	--------	--------	--------	Report	Report	mg/l	6 X Yearly	24-Hr. Comp.
Total Phosphorus	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
TKN	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
Ammonia (as N)	--------	--------	--------	--------	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	---------	---------	--------	--------	Report	mg/l	1 X Yearly	Grab
Aluminum [10]	--------	--------	--------	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
TDS	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Antimony [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Cadmium [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Cobalt [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Lithium [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Nickel [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Calcium	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Beryllium [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Radium 226 & 228 [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Thallium [10]	--------	--------	--------	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Zinc [10][11]	-------	---------	--------	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chloride	--------	---------	--------	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Vanadium [10]	-------	--------	------	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

Table 2

	Quality or Concentration				Monitoring Requirements	
Parameter	**Daily Minimum**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [15]	6.0	----	9.0	s.u.	1 X Weekly	Grab

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

[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: http://www.in.gov/idem/5157.htm.

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

[4] See Parts III and IV of this Permit for additional requirements.

[5] During periods of heavy wet weather, the leachate wastewater may also be discharged through a riprap lined ditch beside the main discharge location. This discharge recombines with the flow augmented leachate wastewater discharge prior to reaching the unnamed ditch that flows to Shafer Drain. Flow from this side stream shall be estimated using acceptable methods. The sampling location under this flow scenario shall be taken at a point representative of the discharge but prior to entry into the unnamed ditch that flows to Shafer Drain.

[6] Flow may consist of pond effluent or pond effluent flow augmented with groundwater and/or non-contact storm water. Total flow at the outfall is to be measured and reported.

[7] Total groundwater flow used for flow augmentation is to be measured and reported.

[8] Total non-contact stormwater flow used for flow augmentation is to be measured and reported.

[9] An exceedance of either the monthly average or daily maximum concentration limitations for total suspended solids (TSS) which is demonstrated to have been

caused by the presence of biological material (e.g. algae or bacteria) will not constitute a violation of the permit. In such cases, the permittee must quantitatively demonstrate the presence of biological material using an appropriate method contained in 40 CFR 136 incorporated by reference in 327 IAC 5. The permittee must submit the lab results for both the TSS and volatile suspended solids test, as well as a letter of explanation that details the calculations used to determine the final TSS result to accompany monthly DMR forms.

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

[11] 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.

Parameter	Test Method	LOD	LOQ
Mercury	1631E	0.2 ng/l	0.5 ng/l
Selenium	3113B-2004 or 3114B-2009	2 ug/l	6.4 ug/l
Selenium	200.8	2.1 ug/l	6.7 ug/l
Selenium	200.9	0.6 ug/l	1.9 ug/l
Copper	200.8 Rev. 5.4 1994 SM	0.5 µg/l	1.6 µg/l
Chromium	200.8 Rev. 5.4 1994 SM	0.07 µg/l	0.3 µg/l
Hexavalent Chromium	218.6	0.2 µg/l	0.5 µg/l
Zinc	200.8 Rev. 5.4 1994 SM	2 µg/l	5 µg/l
Lead	200.8 Rev. 5.4 1994 SM	0.05 µg/l	0.2 µg/l
Sulfate	300.1 Rev. 1.0 1997	0.02 µg/l	0.3 µg/l
Fluoride	300.1 Rev. 1.0 1997	0.01 µg/l	0.03 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.

[12] 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.

[13] Samples shall be taken once at any time during each of the four annual quarters:

(A) January-February-March;
(B) April-May-June;
(C) July-August-September; and
(D) October-November-December.

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

[14] Mercury monitoring shall be conducted 6 X annually in the months of February, April, June, August, October, and December of each year for the term of the permit using EPA Test Method 1631, Revision E.

[15] 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.

[16] The permittee has a 5-year schedule of compliance as outlined in Part I.G in which to meet the final effluent limitations for Total Selenium. The interim requirements for the parameter are applicable until completion of the compliance schedule for that parameter.

3. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 101, located at Latitude 37° 55' 02", Longitude -87° 02' 03". The discharge is limited to treated chemical metal cleaning wastewater [3]. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to mixing with other wastestreams discharging at Outfall 001. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]
Outfall 101

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	---------	---------	------	Daily	Estimate
TSS	---------	---------	------	30.0	100.0	mg/l	Daily	24-Hr. Composite
Oil & Grease	---------	---------	------	15.0	20.0	mg/l	Daily	Grab
Total Copper [2]	---------	---------	------	1.0	1.0	mg/l	Daily	24-Hr. Composite
Total Iron [2]	---------	---------	------	1.0	1.0	mg/l	Daily	24-Hr. Composite

[1] Monitoring requirements and effluent limitations apply daily during periods of discharge of chemical metal cleaning wastes.

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

[3] These limitations and monitoring requirements apply only during discharge of metal cleaning wastes. The term "metal cleaning wastes" means any wastewater (including chemical cleaning liquor, rinse water, and passivation solution) resulting from cleaning (with or without chemical compounds). For the purpose of this permit, air preheater wash, although defined under the new [USEPA] regulation (40 CFR 423.12(b)(5) November 19, 1982) as a metal cleaning waste, is to be considered as a low volume wastestream. This determination was made based on 'Jordan Memorandum' from the U.S. EPA Enforcement Office in Washington, dated July 17, 1975, which is supported by 47 FR 52,297 (November 19, 1982).

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 201, located at Latitude 37° 54' 27", Longitude -87° 02' 0.08". The discharge is limited to alternative 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 mixing with other wastestreams discharging at Outfall 001. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2]

Outfall 201

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	---------	---------	------	Daily	Estimate
Total Chromium [3]	---------	---------	------	0.2	0.2	mg/l	Daily	24-Hr. Composite
Total Zinc [3]	---------	---------	------	1.0	1.0	mg/l	Daily	24-Hr. Composite
Free Available Chlorine [4]	---------	---------	------	0.2	0.5	mg/l	Daily	Grab

[1] Monitoring requirements and effluent limitations apply daily during periods of discharge of alternative cooling tower blowdown.

[2] To ensure that the 126 priority pollutants listed in 40 CFR 423, Appendix A, are not present in the discharge at Outfall 201, the permittee shall provide 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 is required to submit engineering calculations to the IDEM, Office of Water Quality, Industrial NPDES Permit Section as part of the next permit renewal.

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

[4] Free available chlorine shall not be discharged from either unit for more than two hours in any one day and not more than one unit may discharge free available chlorine at any one time, unless the permittee can demonstrate to IDEM that the units cannot operate at or below this level of chlorination.

5. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 202, located at Latitude 37° 56' 47", Longitude -87° 01' 17". The discharge is limited to landfill leachate prior to flow augmentation. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to mixing with augmentation water and discharging at Outfall 002. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]

Outfall 202

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	---	---	------	Daily	Estimate
TSS[2]	---	---	------	30.0	100.0	mg/l	1 X Weekly	24-Hr. Composite
Oil & Grease	---	---	------	15.0	20.0	mg/l	1 X Weekly	Grab

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [3]	6.0	9.0	s.u.	1 X Weekly	Grab

[1] Monitoring requirements and effluent limitations apply daily during periods of discharge of landfill leachate.

[2] An exceedance of either the monthly average or daily maximum concentration limitations for total suspended solids (TSS), which is demonstrated to have been caused by the presence of biological material (e.g. algae or bacteria), will not constitute a violation of the permit. In such cases, the permittee must quantitatively demonstrate the presence of biological material using an appropriate method contained in 40 CFR 136 incorporated by reference in 327 IAC 5. The permittee must submit the lab results for both the TSS and volatile suspended solids test, as well as a letter of explanation that details the calculations used to determine the final TSS result to accompany monthly DMR 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.

6. The permittee is authorized to discharge storm water from the outfalls listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfalls 301, 303, 304, 305, 307, 308, 309, 310, 311, 313, 314, 316, 317, 318, 319, 320, 322, 323, 324, 325, and 326. Samples taken in compliance with the monitoring requirements below shall be taken from Outfalls 303, 304, 311, 314, 320, 322, 324, and 325 at a point representative of the discharge but prior to entry into Honey Creek, Vance Lake, the unnamed tributary to Shafer Drain to Honey Creek, and the Ohio River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3][4][5]

Outfalls 303, 304, 311, 314, 320, 322, 324, 325

			Monitoring Requirements	
	Daily		Measurement	Sample
Parameter	Maximum	Units	Frequency	Type
Flow	Report	MGD	1 X Yearly	Estimate
Total Suspended Solids	Report	mg/l	1 X Yearly	Grab
Oil & Grease	Report	mg/l	1 X Yearly	Grab
pH	Report	s.u.	1 X Yearly	Grab
COD	Report	mg/l	1 X Yearly	Grab
$CBOD_5$	Report	mg/l	1 X Yearly	Grab
TKN	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	Report	mg/l	1 X Yearly	Grab
Total Phosphorus	Report	mg/l	1 X Yearly	Grab

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

[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 Narrative Water Quality Standards.

[4] The permittee shall post a permanent marker on the stream bank at each outfall discharging directly to the Ohio River.

The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the permit number, and the outfall number.
The information shall be printed in letters not less than two inches in height.

The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above the ground.

[5] The above noted parameters are to be monitored once annually for first measurable (greater than 0.1-inch rainfall) precipitation event after April of each year. The results shall be recorded and reported annually to the Industrial NPDES Permits Section no later than the 28th day of August each year.

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 accurate 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 three (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 following the procedure as follows:

(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, IL 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, IN 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(s);

b. The person(s) who performed the sampling or measurement(s);

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 them 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 all of the following:

(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 and to the Compliance Branch at wwReports@idem.in.gov. The email subject line should include the NPDES Permit # and the type of report being submitted (Annual Stormwater Report). The permittee's first annual review report will be due twelve (12) months from the effective date of the permit. All subsequent annual review reports will be due no later than the anniversary of the effective date of the permit.

6. Corrective Actions – Conditions Requiring Review

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

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

(2) it is determined that your control measures are not stringent enough for the discharge to meet applicable water quality standards;

(3) it is determined in your routine facility inspection, an inspection by EPA or IDEM, comprehensive site evaluation, or the Annual Review required in Part D.5 that modifications to the control measures are necessary to meet the effluent limits in this permit or that your control measures are not being properly operated and maintained; or

(4) Upon written notice by the Commissioner that the control measures prove to be ineffective in controlling pollutants in stormwater discharges exposed to industrial activity.

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

7. Corrective Action Deadlines

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

8. Corrective Action Report

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

(1) Brief description of the condition triggering corrective action;

(2) Date condition identified; and

(3) How deficiency identified.

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

(1) Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.D.6.b.(1), where you determine that corrective action is not necessary, the basis for this determination).

(2) Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;

(3) Date corrective action initiated; and

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

9. Inspections

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

a. Monthly Site Compliance Inspection

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

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

b. Quarterly Routine Facility Inspections

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

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

2. Routine Facility Inspection Documentation – You must document the findings of each routine facility inspection performed and maintain this documentation within your SWPPP or have the on-site record keeping location referenced in the SWPPP. At a minimum, your documentation must include:

(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 acute whole effluent toxicity (WET) testing. Part I.F.1. of this permit describes the testing procedures and Part I.F.2. describes the toxicity reduction evaluation (TRE) which is only required if the effluent demonstrates toxicity in two (2) consecutive toxicity tests as described in Part I.F.1.g.

1. Whole Effluent Toxicity (WET) Tests

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

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

a. Toxicity Test Procedures and Data Analysis

(1) All test organisms, test procedures and quality assurance criteria used must be in accordance with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA-821-R-02-012, October 2002 (hereinafter “Acute 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 Acute Toxicity Test Method contained in this Part I.F. are provided for informational purposes. If the Acute Toxicity Test Method is updated, the corresponding provisions of that updated method would be applicable.

(2) Any circumstances not covered by the above methods, or that require deviation from the specified methods must first be

approved by the IDEM Office of Water Quality, Industrial NPDES Permits Section.

(3) The determination of acute endpoints of toxicity (LC_{50} values) must be made in accordance with the procedures in Section 11, "Acute Toxicity Data Analysis" for multi-effluent-concentration acute toxicity tests (see flowchart in Figure 6) of the Acute Toxicity Test Method.

b. Types of Whole Effluent Toxicity Tests

(1) Fathead Minnow Acute Toxicity Test: This test is a 96-hour definitive static-renewal LC_{50} toxicity test using Fathead Minnow (*Pimephales promelas*) as the test organism. The test must be conducted on a 24-hour composite sample of the final effluent. All test solutions must be renewed daily. Two effluent samples are to be collected on consecutive days. The first effluent sample will be used for test solution renewal on day 2. The second effluent sample will be used for test solution renewal on days 3 and 4. All other test conditions and test acceptability criteria for the Fathead Minnow acute toxicity test must be in accordance with the test requirements in Section 9, “Acute Toxicity Test Procedures”, Table 14, (Test Method 2000.0), of the Acute Toxicity Test Method.

(2) Daphnid - *Ceriodaphnia dubia*, *Daphnia pulex* and *Daphnia magna* Acute Toxicity Tests: These tests are 48-hour definitive static-renewal LC_{50} toxicity tests conducted using one or more daphnids (*Ceriodaphnia dubia, Daphnia pulex or Daphnia magna*) as the test organisms. The tests must be conducted on a 24-hour composite sample of final effluent. All test solutions must be renewed on day 2. All other test conditions and test acceptability criteria for the daphnid acute toxicity tests must be in accordance with the test requirements in Section 9, “Acute Toxicity Test Procedures”, Table 12 (Test Method 2002.0; *Ceriodaphnia dubia*) and Table 13 (Test Method 2021.0; *Daphnia pulex* and *Daphnia magna*), of the Acute Toxicity Test Method.

(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 concentration associated with the determination of acute toxicity provided in Part I.F.1.f.(1). Guidance on selecting effluent test concentrations is included in Section 9.3 of the

Acute Toxicity Test Method. The use of an alternate procedure for selecting test concentrations must first be approved by the IDEM Office of Water Quality, Industrial NPDES Permits Section.

(4) If, in any control group, more than 10% of the test organisms die in either the 96-hour Fathead Minnow or 48-hour daphnid species acute toxicity tests, respectively, that test is considered invalid and the respective toxicity test must be repeated.

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. For discharges of less than 24 hours in duration, composite samples must be collected for the duration of the discharge within a 24-hour period (see "24-hour composite sample" definition in Part I.C.3. of this permit).

(2) Chemical analysis must coincide with, and if test methods allow, be conducted on each effluent sample taken for toxicity testing, including each sample taken for the repeat testing as outlined in Part I.F.1.f.(2). The chemical analysis detailed in Part I.A.1 for TSS, copper, hexavalent chromium, and selenium 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 acute toxicity testing for Fathead Minnow (*Pimephales promelas*), *Ceriodaphnia dubia* and *Daphnia pulex*. The testing, including any repeat tests required under Part I.F.f.(2) must be conducted monthly for an initial period of three (3) consecutive months. *Daphnia magna* may be substituted for *Daphnia pulex*.

If no toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.g., with any species during these three (3) months of

testing, the permittee must then conduct acute toxicity testing for Fathead Minnow (*Pimephales promelas*), *Ceriodaphnia dubia* and *Daphnia pulex* once every six (6) months, as calculated from six (6) months after the effective date of the permit, for the duration of the permit. *Daphnia magna* may be substituted for *Daphnia pulex*.

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

If a TRE is initiated during the term of the permit, after receiving notification under Part I.F.1.e., the Compliance Data Section will suspend the toxicity testing requirements above for the term of the TRE schedule described in Part I.F.2. After successful completion of the TRE, the toxicity tests established under Part I.F.2.c.(4) must be conducted once every six (6) months, as calculated from the first day of the first month following successful completion of the post-TRE toxicity tests (see Part I.F.2.c.(4)), for the remainder of the permit term.

e. Reporting

(1) Requests to reduce the number of species tested to the one most sensitive to the toxicity in the effluent under Part I.F.1.d., or notifications of the failure of two (2) consecutive toxicity tests and the intent to begin the implementation of a toxicity reduction evaluation (TRE) under Part I.F.1.g. must be submitted in writing to the IDEM Office of Water Quality, Compliance Data Section.

(2) Results of all toxicity tests, including invalid tests, must be reported to IDEM according to the general format and content recommended in the Acute Toxicity Test Method, Section 12, “Report Preparation and Test Review”. However, only the results of valid toxicity tests are to be reported on the discharge monitoring report (DMR). For the initial three (3) months of testing, the results of the toxicity tests and laboratory report are due by the 28th day of the month following the fourth, fifth and sixth months, as calculated from the effective date of the permit. Thereafter, the results of the toxicity tests and

laboratory report are due by the earlier of 60 days after completion of the test or the 28th day of the month following the end of the testing period established in Part I.F.1.d.

(3) The full whole effluent toxicity (WET) test laboratory report must be submitted electronically as an attachment to an e-mail to the IDEM Office of Water Quality, Compliance Data Section at wwreports@idem.IN.gov. The results must also be submitted via NetDMR.

(4) For quality control and ongoing laboratory performance, the laboratory report must include results from appropriate standard reference toxicant tests for acute toxicity. This will consist of endpoints of acute toxicity (LC_{50} values) 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., the Graphical Method, the Spearman-Karber Method, the Trimmed Spearman-Karber Method and the Probit Method), including 95% confidence intervals used to evaluate acute endpoints of toxicity, must be described and included as part of the toxicity test laboratory report.

(6) For valid toxicity tests, the whole effluent toxicity (WET) test laboratory report must include a summary table of the results for each species tested as shown in the table presented below. This table will provide toxicity test results, reported in acute toxic units (TU_a), for evaluation under Part I.F.1.f. and reporting on the discharge monitoring report (DMR).

Test Organism [1]	Test Type	Endpoint	Units	Result	Compliance Limit [4]	Pass/ Fail [5]	Reporting
Ceriodaphnia dubia	48-hour Definitive Static-Renewal	48-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		Toxicity (acute) [2]	TU_a	Report [3]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61425)
Pimephales promelas	96-hour Definitive Static-Renewal	96-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		Toxicity (acute) [2]	TU_a	Report [3]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61427)
Daphnia magna	48-hour Definitive Static-Renewal	48-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		Toxicity (acute) [2]	TU_a	Report [3]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code TSA3C)
Daphnia pulex	48-hour Definitive Static-Renewal	48-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		Toxicity (acute) [2]	TU_a	Report [3]	1.0	Report	Laboratory report **and NetDMR** (Parameter Code TSA3D)

[1] For the whole effluent toxicity (WET) test laboratory report, eliminate from the table any species that was not tested.
[2] The toxicity (acute) endpoint for *Ceriodaphnia dubia*, *Daphnia magna* and *Daphnia pulex* is the 48-hr. LC_{50} result reported in acute toxic units (TU_a). The toxicity (acute) endpoint for *Pimephales promelas* is the 96-hr. LC_{50} result reported in acute toxic units (TU_a).
[3] Report the LC_{50} value determined in [2] for the corresponding species. These values are the ones that need to be reported on the discharge monitoring report (DMR).
[4] An exceedance of any of these values results in a demonstration of toxicity that requires the permittee to take the actions set forth in either Part I.F.1.f. or Part I.F.1.g., as applicable.
[5] If the toxicity result (in TUs) is less than or equal to the compliance limit, report “Pass”. If the toxicity result (in TUs) exceeds the compliance limit, report “Fail”.

f. Demonstration of Toxicity

(1) Toxicity (acute) will be demonstrated if the effluent is observed to have exceeded 1.0 TU_a (acute toxic units) in 48 hours for *Ceriodaphnia dubia,* 48 hours for *Daphnia pulex,* 48 hours for *Daphnia magna*, or 96 hours for *Pimephales promelas*. For the purpose of selecting test concentrations under Part I.F.1.b.(3), the effluent concentration associated with acute toxicity is 100%.

(2) If toxicity (acute) is demonstrated in any of the tests specified above, a repeat acute 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 acute toxicity test failure, or as soon thereafter as practicable. During the sampling for any repeat tests, the permittee must also collect and preserve sufficient effluent samples for use in any toxicity identification evaluation (TIE) and/or toxicity reduction evaluation (TRE), if necessary.

g. Requirement to Conduct a Toxicity Reduction Evaluation

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

h. Definitions

"Acute toxic unit" or "TUa" is defined as $100/LC_{50}$ where the LC_{50} is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.

2. <u>Toxicity Reduction Evaluation (TRE) Schedule</u>

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

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

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

a. Development of TRE Plan

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

(1) Methods for Aquatic Toxicity Identification Evaluations:

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

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

Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081), September 1993.

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

(3) 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 three (3) test species *Ceriodaphnia dubia*, *Daphnia pulex* and Fathead Minnow (*Pimephales promelas*) for a period of three (3) consecutive months. *Daphnia magna* may be substituted for *Daphnia pulex*.

(2) If the three (3) monthly tests demonstrate no toxicity with any test species as described in Part I.F.1.f.(1), 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 acute toxicity tests required in Part I.F.1. The permittee may request in the final TRE report under Part I.F.2.d.(2) a reduction in the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. IDEM will then make a determination on species sensitivity to effluent toxicity and notify the permittee of its decision as part of the TRE approval. The established starting date for the frequency in Part I.F.1.d. is the first day of the first month following successful completion of the post-TRE toxicity tests.

d. Reporting

(1) Progress reports must be submitted every 90 days to the IDEM Office of Water Quality, Compliance Data Section beginning six (6) months from the date of two (2) consecutive failed toxicity tests (i.e., the date of termination of the second test). Each TRE progress report must include a listing of proposed activities for the next quarter and a schedule to reduce toxicity in the effluent discharge to acceptable levels through control of the toxicant source or treatment of whole effluent.

(2) Within 90 days of successfully completing the TRE, including the three (3) consecutive monthly tests required as part of the post-TRE toxicity testing requirements in Part I.F.2.c., the permittee must submit to the IDEM Office of Water Quality, Compliance Data Section a final TRE Report that includes the following:

(A) A discussion of the TRE results.
(B) The starting date established under Part I.F.2.c.(4) for the continuation of the toxicity testing required in Part I.F.1.
(C) If applicable, 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.g.

G. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for Selenium at Outfall 002 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) twelve (12) months from the effective date of this permit. The progress report shall include a description of the method(s) selected for meeting the newly imposed limitation for Selenium, in addition to any other relevant information. The progress report shall also include a specific time line specifying when each of the steps will be taken. The new effluent limits for Selenium are deferred for the term of this compliance schedule, unless the new effluent limits can be met at an earlier date. The permittee shall notify the Compliance Data Section of OWQ as soon as the newly imposed effluent limits for Selenium can be met. Upon receipt of such notification by OWQ, the final limits for Selenium will become effective, but no later than sixty (60) 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 twenty-four (24) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the timeline set out in the initial progress report.

c. The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than thirty-six (36) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the timeline set out in the initial progress report.

d. The permittee shall submit a subsequent progress report to the Compliance Data Section of OWQ no later than forty-eight (48) months from the effective date of this permit. This report shall include detailed information on the steps the permittee has taken to achieve compliance with the final effluent limitations and whether the permittee is meeting the timeline set out in the initial progress report.

e. Within thirty (30) days of completion of construction, the permittee shall file with the Industrial NPDES Permits Section of OWQ a notice

of installation for the additional pollutant control equipment and a design summary of any modifications.

f. The permittee shall comply with the final effluent limitations for Selenium no later than sixty (60) months from the effective date of this permit.

2. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the Compliance Data Section of the OWQ stating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final effluent limitations.

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. This includes but is not limited to any revisions needed to reflect a change in the selected impingement mortality BTA.

5. to include any new limitations or requirements as the result of any newly promulgated Federal Effluent Limitation Guidelines for Steam Electric Generating Stations under 40 CFR 423.

6. to incorporate BAT limitations determined by IDEM on a case-by-case basis pursuant to 327 IAC 5-2-10 and 5-5 (which implement 40 CFR 122.44, 125.3, and Section 402(a)(1) of the Clean Water Act (CWA)) or EPA-established BAT limitations, if EPA promulgates BAT limitations for combustion residual leachate.

7. to revise or remove conditions allowing for a subtraction of volatile suspended solids from total suspended solids after review of the report required in Part III.B. of this Permit.

8. 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

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

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

Pursuant to 327 IAC 5-23-6(4)(A), the permittee shall notify IDEM when there is a change in the person serving as the certified operator in responsible charge of the wastewater treatment facility. The notification shall be made no later than thirty (30) days after a change in the operator and submitted via e-mail to the Compliance Data Section of the Office of Water Quality at WWReports@idem.IN.gov.

14. Construction Permit

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

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

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

15. Inspection and Entry

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

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept pursuant to the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

c. Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit; and

d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

16. New or Increased Discharge of Pollutants

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.

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, Selenium, Lead, Total Chromium, and Hexavalent Chromium.

The permittee can make the oral reports by calling (317)232-8670 during regular business hours and asking for the Compliance Data Section or by calling (317) 233-7745 ((888)233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a “Bypass/Overflow Report” (State Form 48373) or a “Noncompliance 24-Hour Notification Report” (State Form 52415), whichever is appropriate, to IDEM at (317) 232-8637 or wwreports@idem.in.gov. If a complete e-mail submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the email report will satisfy both the oral and written reporting requirements.

4. Other Compliance/Noncompliance Reporting

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

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

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

5. Other Information

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

6. Signatory Requirements

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

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

(1) For a corporation: by a responsible corporate officer. A "responsible corporate officer" means either of the following:

(A) A president, secretary, treasurer, any vice president of the corporation in charge of a principal business function, or any other person who performs similar policymaking or decision-making functions for the corporation; or

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

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

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a Federal, State, or local governmental body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.

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

A. Polychlorinated Biphenyl

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

Parameter	Test Method	LOD	LOQ
*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.

Part IV
Cooling Water Intake Structures

A. Best Technology Available (BTA) Determination

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

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

Impingement is the process by which fish and other aquatic organisms are trapped and often killed or injured when they are pulled against the cooling water intake structures (CWIS's) outer structure or screens as water is withdrawn from a water body. 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 the 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 permittee's design intake flow (DIF) rate is 57.6 MGD, and approximately 79% 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 mortality 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).

Based on available information, IDEM has determined that the facility employs impingement mortality BTA alternative 1, closed cycle recirculating system consistent with the federal regulations, and is therefore in compliance with the BTA to minimize adverse environmental impact from impingement.

Further, IDEM has determined that the existing facility meets BTA for entrainment. Primary in this entrainment BTA determination is the use of a CCRS via natural draft cooling towers, the use of wedgewire screens with a 3.2 mm slot size located in an area with ambient sweeping velocities, and the anticipated closure of the facility by the end of 2028.

B. Permit Requirements

The permittee must comply with the requirements below:

1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

2. The permittee must at all times properly operate and maintain the cooling water intake structure and associated intake equipment.

3. The permittee must inform IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.

4. Any discharge of intake screen backwash must meet the Minimum Narrative Limitations contained in Part I.B of the permit. There must be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.

5. The permittee must either conduct visual inspections or employ remote monitoring devices during the period where the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather).

6. In accordance with 40 CFR 125.97(c), by January 31 of each year, the permittee must submit to the Industrial NPDES Permit Section IDEM-OWQ an annual certification statement for the preceding calendar year signed by the responsible corporate officer as defined in 40 CFR 122.22 (see 327 IAC 5-2-22) subject to the following:

    a. If the information contained in the previous year's annual certification is still pertinent, you may simply state as such in a letter to IDEM and the letter, along with any applicable data submission requirements specified in this section shall constitute the annual certification.

b. If you have substantially modified operation of any unit at your facility that impacts cooling water withdrawals or operation of your cooling water intake structures, you must provide a summary of those changes in the report. In addition, you must submit revisions to the information required at 40 CFR 122.21(r) in your next permit application.

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

8. The permittee must monitor and report its cycles of concentration 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.

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

10. 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.

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

National Pollutant Discharge Elimination System
Fact Sheet for
American Electric Power – Rockport Plant
Draft: May 2026

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

Permittee:	American Electric Power 2791 North US Highway 231 Rockport, Indiana 47635
Existing Permit Information:	Permit Number: IN0051845 Expiration Date: November 30, 2025
Facility Contact:	Aimee R. Toole, Environmental Director (614) 716-1786, artoole@aep.com
Facility Location:	2791 North US Highway 231 Rockport, Indiana Spencer County
Receiving Stream(s):	Unnamed ditch to Shafer Drain to Honey Creek The Ohio River
GLI/Non-GLI:	Non-GLI
Proposed Permit Action:	Renewal
Date Application Received:	April 10, 2025
Source Category:	NPDES Major – Industrial
Permit Writer:	Kira Wren (317) 233-7090, KWren@idem.IN.gov

Table of Contents

1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from American Electric Power on April 10, 2025.

In accordance with 327 IAC 5-2-6(a), the current five-year permit was issued with an effective date of December 1, 2020. The permit was subsequently modified on April 22, 2021, to incorporate applicable provisions of the Steam Electric Effluent Limitations Guidelines Reconsideration Rule (Reconsideration Rule) that became effective on December 14, 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) Sections 124.8 and 124.56, as well as Title 327 of the Indiana Administrative Code (IAC) Article 5-3-8, a Fact Sheet is required for certain NPDES permits. This document fulfills the requirements established in these regulations. This Fact Sheet was prepared in order to document the factors considered in the development of NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, receiving water conditions, Indiana water quality standards-based wasteload allocations, and other information available to IDEM. Decisions to award variances to Water Quality Standards or promulgated effluent guidelines are justified in the Fact Sheet where necessary.

2.0 FACILITY DESCRIPTION

2.1 General

American Electric Power (AEP) – Rockport Plant is classified under Standard Industrial Classification (SIC) Code 4911-Electric Services.

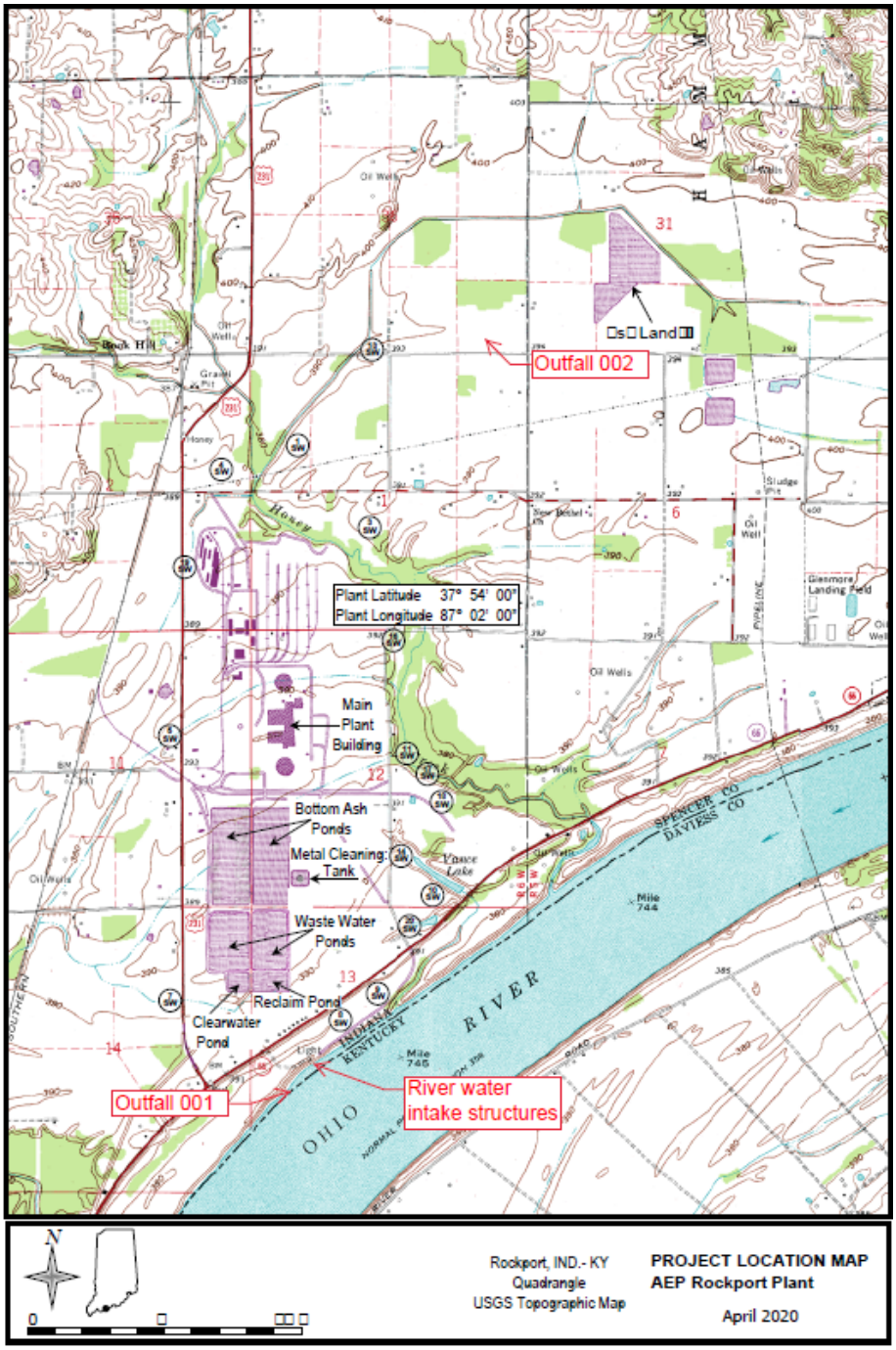
The facility is a coal-fired steam electric generating plant located on the bank of the Ohio River in Rockport. The Rockport Plant consists of two 1300 MW units. Wastewater generated from the operation of these units discharges through Outfall 001 to the Ohio River. The facility also discharges stormwater runoff and landfill leachate from the Plant landfill at Outfall 002 to the unnamed drain to Shafer Drain to Honey Creek. The landfill is a Restricted waste Type I landfill that accommodates fly ash and the solid byproduct from a Dry Sorbent Injection process used to remove air pollutants.

There are three internal outfalls at the facility. Internal Outfall 101 is the discharge of chemical metal cleaning wastes to the wastewater treatment ponds, Internal Outfall 201 is an alternate cooling tower blowdown to the Ohio River, and Internal Outfall 202 is the landfill leachate prior to flow augmentation.

The facility also discharges stormwater runoff from 21 outfalls. The AEP – Rockport Plant is subject to the federal effluent guidelines of 40 CFR 423 – Steam Electric Generating Point Source Category. The source water for the facility is the Ohio River.

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

Figure 1: Facility Location



2791 North U.S. Highway 231
Rockport, IN – Spencer County

2.2 Outfall Locations

Outfall 001/ Internal Outfall 201	Latitude: 37º 54' 27" Longitude: -87º 02' 0.08"
Outfall 002	Latitude: 37º 56' 47" Longitude: -87º 01' 18"
Internal Outfall 101	Latitude: 37º 55' 02" Longitude 87 º 02' 03"
Internal Outfall 202	Longitude: 37º 56' 47" Longitude: -87º 01' 17"

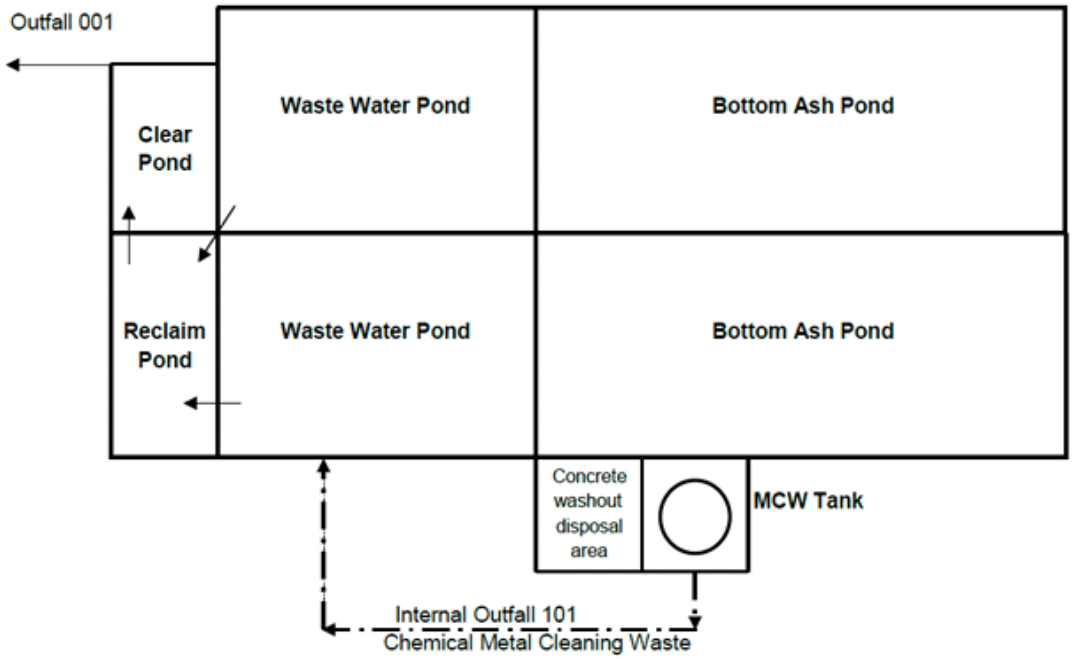
2.3 Descriptions of Outfalls and Wastewater Treatment

Outfall 001

The source of process and non-process wastewater discharged at 001 (excluding stormwater) is surface water from the Ohio River. The wastewater discharged through 001 is comprised of bottom ash transport water, cooling tower blowdown, coal storage area runoff, other storm water runoff, treated chemical metal cleaning wastewater (via Internal Outfall 101), and low volume waste sources. Low volume waste sources contributing to Outfall 001 include pyrites handling wastewater, fly ash silo pump discharge, demineralizer regeneration blowdown, coal conveyor and handling wastewater, steam generator blowdown, closed-cycle cooling water blowdown, cycle water condensate polisher cleaning water, and floor drain runoff.

The bottom ash transport wastewater, pyrites handling wastewater, fly ash silo pump discharge, coal storage area runoff, and other storm water are directed to one of two bottom ash ponds where sedimentation occurs. All other wastewater, including treated metal cleaning wastes, is directed to one of two wastewater treatment ponds where sedimentation and neutralization occur. The wastewater from these ponds is discharged to a reclaim pond for additional clarification. At this point, much of the treated wastewater will be recycled to the plant. The excess wastewater from the reclaim pond is directed to a clearwater pond prior to discharging to Outfall 001. A wastewater pond system diagram showing this process is included as Figure 2. Figure 3 is a water flow schematic showing the design flow in million gallons of water per day.

Figure 2: Process Wastewater Pond System Diagram



Outfall 001: The wastewater treatment system has an average discharge of approximately 14.54 MGD.

Figure 3: Water Flow Schematic

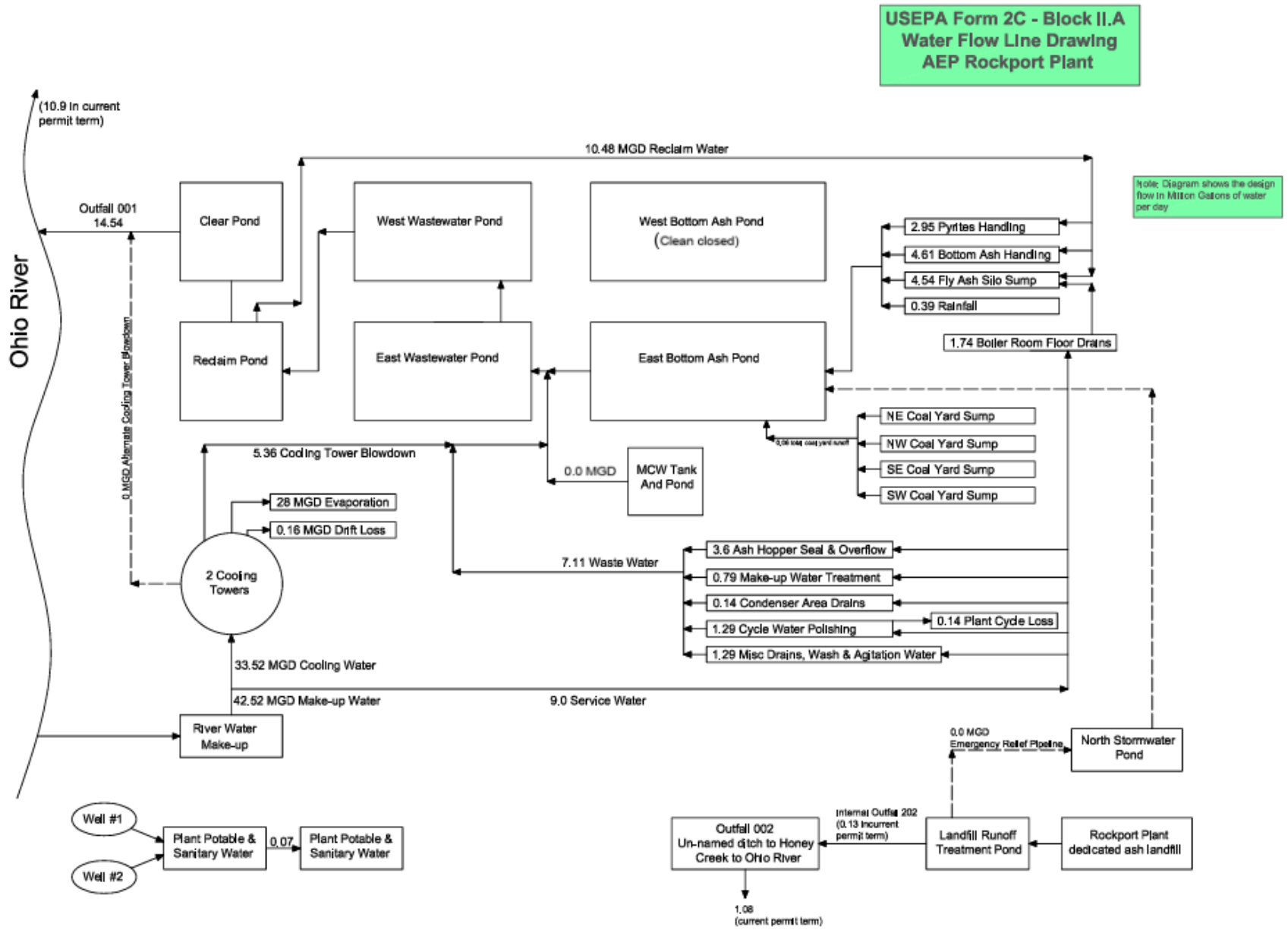


Figure 3: Diagram shows the design flow in Million Gallons of water per day for Outfall 001 and Outfall 002.

Outfall 002

Rockport Plant operates a Type I Restricted Waste landfill located approximately 2.5 miles northeast of the plant. The landfill design and operation are permitted by IDEM Solid Waste Facility Permit FP 74-02. The landfill site is contained within approximately 1,100 acres of which 606 acres are permitted for waste disposal. The landfill is permitted to accept fly ash and the solid byproduct of the Dry Sorbent Injection system that is used for air emissions control. Currently, these wastes are transported by truck from the Rockport Plant to the landfill. The waste is conditioned by adding a small amount of water to facilitate compaction. Then the waste is placed in 12" lifts and compressed into one of the landfill cells. Direct rainfall, as well as stormwater from the slopes surrounding the landfill, is conveyed to either of two runoff ponds (The North Pond or the West Pond) which collect both leachate and runoff from different portions of the landfill.

Both the North Pond and the West Pond discharge into the Final Treatment Pond. Suspended solids settle in the treatment pond. The outlet of the final treatment pond is identified as Internal Outfall 202. The discharge is flow-augmented with groundwater and discharges via Final Outfall 002 to an unnamed ditch. The unnamed ditch flows to Shafer Drain, then to Honey Creek, then to the Ohio River.

Managing stormwater runoff from the landfill consists of directing surface water toward a series of chimney drains in the active cells. The chimney drains provide a means for contact stormwater runoff to drain down to the leachate collection system. The combined stormwater runoff and leachate discharge to either the North Pond or West Pond. A diagram of the Outfall 002 pond system is included as Figure 4 below.

Figure 4: Outfall 002 Pond System

Outfall 002: The average daily discharge from Outfall 002 to the unnamed ditch to Shafer Drain is 1.08 MGD.

Internal Outfall 101

Steam generators periodically require chemical cleaning to remove deposits in the steam tubes. The frequency of cleaning is determined by cutting a sample of a tube and analyzing it for deposits. Typically, the time between cleanings is about 10 years. The most recent chemical metal cleaning was done at Rockport Plant in 2013. As of the date of this application, there is no future cleaning planned at Rockport Plant; however, if a cleaning is required, the waste would be treated as follows.

Waste from periodic chemical metal cleaning activities is collected in a 1.5-million-gallon tank. Chemical metal cleaning wastes are defined as any wastewater resulting from cleaning with chemical cleaning compounds any metal process equipment including, but not limited to, boiler tube cleaning. This wastewater is regulated by federal effluent guidelines of 40 CFR 423.13(e). Metals precipitation and coagulation are performed before the supernatant is decanted to the receiving wastewater pond for final treatment and discharge through Outfall 001.

Internal Outfall 201

Outfall 201 regulates the discharge of alternate cooling tower blowdown, which rarely occurs under specific circumstances. While there is no treatment of this wastestream when a discharge occurs, the use of biocides in the treatment of the cooling water is suspended during periods of alternate blowdown to ensure that the chemical is consumed prior to discharging to the Ohio River.

Internal Outfall 202

Internal Outfall 202 regulates the discharge of landfill leachate. Specifically, Internal Outfall 202 refers to the internal sampling location at a point after the wastewater discharges from the Final Treatment Pond, but prior to mixing with other wastestreams and/or flow augmentation water.

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-23-6.

IDEM has given the permittee a Class D industrial wastewater treatment plant classification based on the information submitted by the permittee.

2.4 Changes in Operation

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

2.5 Facility Stormwater

Water from existing stormwater collection ponds is discharged to the Process Wastewater Treatment Ponds then to the Ohio River through Outfall 001. There are currently 21 existing storm water outfalls that are grouped below. These remaining outfalls are generally in remote areas of Rockport Plant where there is a minimal potential for contamination from plant processes. A description of each stormwater outfall's location, pollutant sources, area drained, and control measures is included in Appendix A at the end of this Fact Sheet.

Storm water outfalls
Outfall 303 (representative of Outfall 316)
Outfall 304 (representative of Outfall 305, 313)
Outfall 311 (representative of Outfall 317, 318)
Outfall 314 (representative of Outfall 301, 307, 308, 310, 319)
Outfall 320 (representative of Outfall 309)
Outfall 322
Outfall 324 (representative of Outfall 323)
Outfall 325 (representative of Outfall 326)

3.0 PERMIT HISTORY

3.1 Compliance History

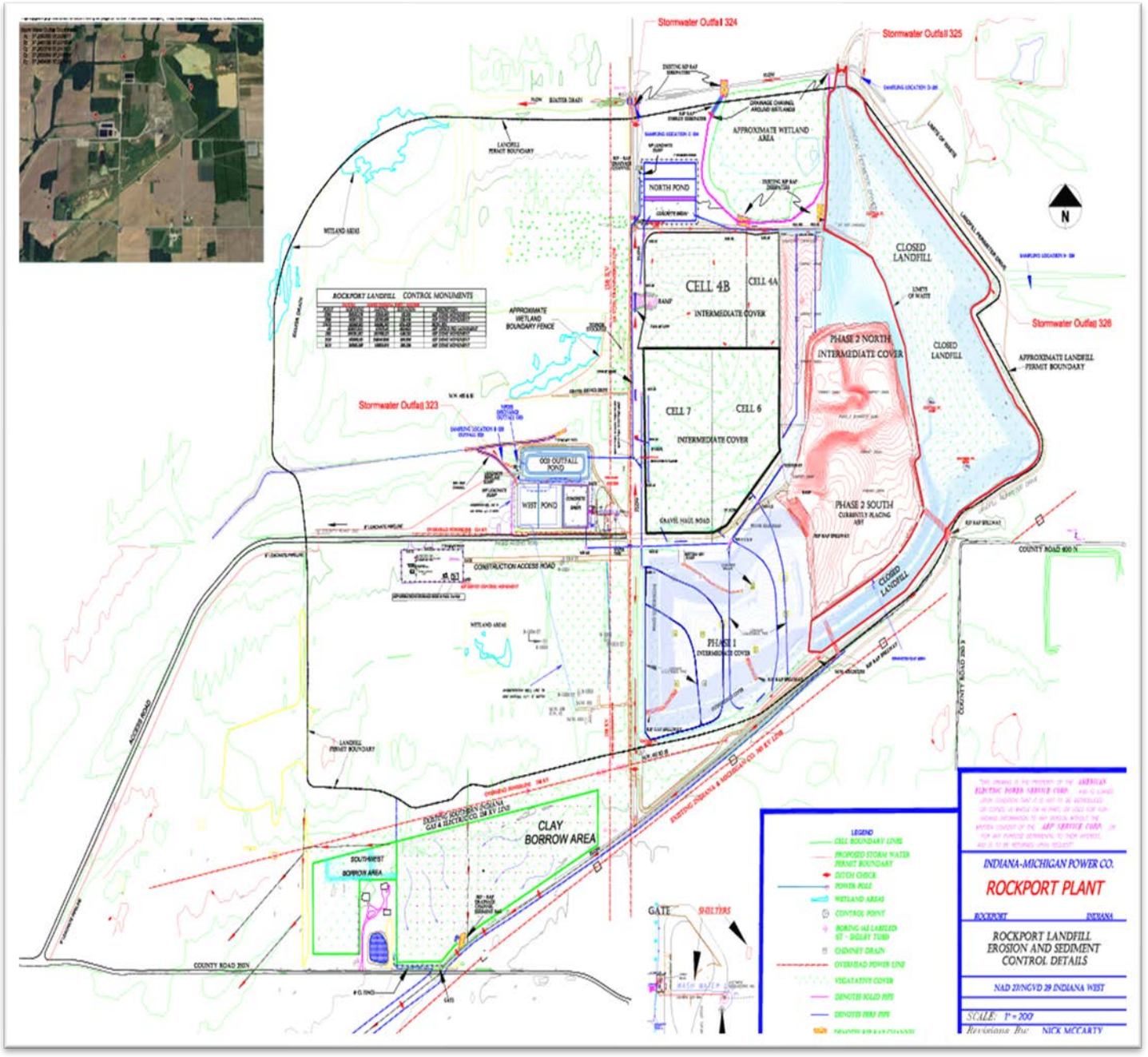
A review of this facility's discharge monitoring data was conducted for compliance verification and shows no permit limitation violations at Outfall 001 and Outfall 002 between January 2022 and January 2025. There are no pending or current enforcement actions regarding this NPDES permit.

4.0 LOCATION OF DISCHARGE/RECEIVING WATER USE DESIGNATION

The receiving stream for Outfall 001 is the Ohio River, which has a $Q_{7,10}$ low flow value of 11,000 cfs. The receiving stream for Outfall 002 is an unnamed ditch to Shafer Drain to Honey Creek, which has a $Q_{7,10}$ low flow value of 0.0 cfs. Both the Ohio River and the unnamed ditch to Shafer Drain 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 the Ohio River and an unnamed ditch to Shafer Drain to Honey Creek—waters of the state that are not within the Great Lakes system. Therefore, they are 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. The discharge from Outfall 001 is also subject to the Pollution Control Standards for Discharges to the Ohio River as established by the Ohio River Valley Water Sanitation Commission (ORSANCO). A Site Map has been included as Figure 5.

Figure 5: Site Map



4.1 Total Maximum Daily Loads (TMDLs)

Section 303(d) of the Clean Water Act requires states to identify waters, through their Section 305(b) water quality assessments, that do not or are not expected to meet applicable water quality standards with federal technology-based standards alone. States are also required to develop a priority ranking for these waters taking into account the severity of the pollution and the designated uses of the waters. Once this listing and ranking of impaired waters is completed, the states are required to develop TMDLs for these waters in order to achieve compliance with the water quality standards. Indiana's 2024 303(d) List of Impaired Waters was developed in accordance with Indiana's Water Quality Assessment and 303(d) Listing Methodology for Waterbody Impairments and Total Maximum Daily Load Development for the 2024 Cycle.

The Ohio River, Assessment-Unit INH6_05, is on the 2024 303(d) list for *E. coli*, dioxins, PCBs, and mercury in water. Shafer Drain and Honey Creek, Assessment-Units INE0181_T1005 and INE0181_03, are not on the 2024 303(d) list for impairments. A TMDL for the Ohio River or Shafer Drain and Honey Creek has not been developed, and one isn't currently planned.

5.0 PERMIT LIMITATIONS

5.1 Technology-Based Effluent Limits (TBELs)

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

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

The applicable technology-based standards for the facility are contained in 40 CFR 423 – Steam Electric Point Source Category.

Applicable ELG Subparts

Outfall	Subpart	Description
Outfall 001	40 CFR 423.12(b)(3) 40 CFR 423.12(b)(4) 40 CFR 423.12(b)(7) & (8) 40 CFR 423.12(b)(9) & (10)	Low Volume Waste Fly Ash and Bottom Ash Transport Water Cooling tower blowdown Coal pile runoff
Internal Outfall 101 to Outfall 001	40 CFR 423.12(b)(5) 40 CFR 423.13(e)	Chemical Metal Cleaning Wastewater
Internal Outfall 201 to Outfall 001	40 CFR 423.12(b)(7) & (8) and 40 CFR 423.13(d)	Cooling tower blowdown
Internal Outfall 202 to Outfall 002	40 CFR 423.12(b)(11) and 40 CFR 423.13(l)	Combustion Residual Leachate

Requirements applicable to all wastewater streams:

1. pH control- 40 CFR 423.12(b)(1), the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 s.u. (BPT)
2. Polychlorinated biphenyl (PCB)- 40 CFR 423.12(b)(2) and 40 CFR 423.13(a), there shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. (BPT)

Bottom Ash Transport Water

In accordance with 40 CFR 423.19(g), for sources seeking to qualify as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, a Notice of Planned Participation (NOPP) shall be made to the permitting authority no later than June 27, 2023.

The permittee submitted a NOPP letter dated October 11, 2021, to IDEM, which commits to retiring the units by December 31, 2028. Therefore, in accordance with 40 CFR 423.13(k)(2), and the current permit as modified on April 22, 2021, there shall be no discharge of bottom ash transport water as soon as possible but no later than December 31, 2028.

Combustion Residual Leachate

The US EPA finalized the 2024 Final Rule to strengthen certain discharge limitations in the Steam Electric Power Generating category. The rule required changes to the combustion residual leachate wastestreams generated at Steam Electric facilities. The permittee has indicated that they plan to permanently cease combustion of coal by December 31, 2028. Therefore, this permit will apply the BPT TSS and Oil & Grease Limits established in the previous permit for the combustion residual leachate wastestream. After December 31, 2028, there shall be no discharge of combustion residual leachate.

Building Block Approach

Total Suspended Solids and Oil and Grease are parameters subject to technology-based effluent limitations found in 40 CFR 423. The current permit required the permittee to provide an evaluation of alternate limitations using the modified combined wastestream formula (CWF) or building block approach. As part of this renewal application, the permittee provided the requested evaluation. IDEM utilized the building block approach with the information provided (Appendix C).

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).

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 the most stringent of the following for each pollutant:

a) 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; or
b) Water quality criteria established by the Ohio River Valley Water Sanitation Commission or ORSANCO, (ORSANCO “Pollution Control Standards for Discharges to the Ohio River”, 2019 Revision), including the water quality criteria under Chapter 3 of these standards or developed under the procedures described in the Appendix of these standards and implementation procedures in these standards and 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, 002)

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.

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). Additionally, the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 s.u. pursuant to 40 CFR 423.12(b)(1).

5.3.2 Outfall 001

Posting of Outfall Marker

Under Chapter 5 of the ORSANCO "Pollution Control Standards for Discharges to the Ohio River", 2019 Revision, a marker must be posted on the stream bank at each outfall discharging directly to the Ohio River. The marker shall include the name of the permittee, the permit number, and the outfall number printed in letters not less than 2 inches in height and this marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet about ground level.

Cycles of Concentration (COC)

The cycles of concentration must be measured at a minimum frequency of daily. The definition at 40 CFR 125.92 requires makeup flows to be minimized. COC serve as an indicator of minimized makeup flows and thus may be used by IDEM when assessing performance of a particular closed-cycle recirculating cooling system (CCRS).

Temperature

Based on the effluent temperature data provided by the permittee, temperature limits will not be applied at this time, however monitoring for temperature will be retained in this renewal based on the thermal component of the discharge.

Total Suspended Solids (TSS)

TSS is a parameter subject to technology-based effluent limitations found in 40 CFR 423. Wastestreams that contribute to this outfall that have an ELG for TSS include low volume waste (40 CFR 423.12(b)(3)), bottom ash transport water (40 CFR 423.12(b)(4)), and coal pile runoff (40 CFR 423.12(9) and (10)). The current permit required the permittee to provide an evaluation of alternate limitations for TSS using the modified combined wastestream formula (CWF) or building block approach. As part of this renewal application, the permittee provided the requested evaluation. IDEM utilized the building block approach with the information provided (Appendix C). TSS limitations of 100 mg/l daily maximum and 30 mg/l monthly average have been included in this permit.

IDEM included a provision for Outfall 001 relating to the presence of volatile suspended solids (VSS) and the effect on total suspended solids (TSS) results. As part of that inclusion, the permittee was required as part of the previous permit to submit a detailed report that provided information on how the permittee would determine when the TSS values are influenced by VSS, the test methods that will be utilized to quantify the VSS and TSS, and the procedure the permittee would follow to calculate a final TSS result. IDEM received that report on February 26, 2021.

Oil and Grease (O & G)

O&G is a parameter subject to technology-based effluent limitations found in 40 CFR 423. Wastestreams that contribute to this outfall that have an ELG for O&G include low volume waste (40 CFR 423.12(b)(3)) and bottom ash transport water (40 CFR 423.12(b)(4)). The current permit required the permittee to provide an evaluation of alternate limitations for O&G using the modified combined wastestream formula (CWF) or building block approach. As part of this renewal application, the permittee provided the requested evaluation. IDEM utilized the building block approach with the information provided (Appendix C). The O&G limitations of 15.6 mg/l daily maximum and 11.7 mg/l monthly average have been retained in this permit.

Total Copper

As part of this permit renewal, Total Copper was evaluated for reasonable potential to exceed (RPE) a water quality criterion. The results of the RPE analysis showed Total Copper does not have reasonable potential to exceed a water quality criterion. However, internal outfall 101 contains a TBEL that, if discharged that limit, would cause an RPE. Therefore, effluent limitations have been retained from the previous permit.

Hexavalent Chromium & Total Selenium

Based on data submitted by the permittee for this renewal, there is no reasonable potential to exceed a water quality criterion for these pollutants; however, monitoring for hexavalent chromium and total selenium is being retained in this permit in conjunction with other facilities discharging coal combustion residuals due to the source and nature of the discharge.

CT-1300

Betz CT-1300 is a biocide used regularly for controlling microfouling in the cooling towers and is used periodically for zebra mussel control. Monitoring requirements and effluent limitations are applicable during those periods when CT-1300 is expected to be present in the discharge at Outfall 001. The 0.05 mg/l Daily Maximum limitation was established in the 2003 permit renewal based on toxicity data and is being retained here. In addition, application of CT-1300 is limited to 12 hours in duration and cooling tower discharge is prohibited whenever CT-1300 is applied to the cooling tower to ensure complete consumption of the product prior to discharge of the wastestream.

Mercury

Mercury is identified as a pollutant of concern discharged at Outfall 001. Coal ash, bottom ash and coal pile runoff at facilities with similar discharge have been found to contain mercury. Based on data submitted by the permittee for this renewal, there is no reasonable potential to exceed a water quality criterion for mercury; however, monitoring requirements are being retained in this permit due to the source and nature of the discharge.

Total Residual Chlorine (TRC)

The cooling towers are typically treated twice per week by shock chlorinating with bleach. Due to the presence of cooling tower blowdown in the discharge contributing to Outfall 001, the water quality-based effluent limitations of 0.04 mg/l Daily Maximum and 0.02 mg/l Monthly Average have been retained from the previous permit.

Phosphorus, Total Kjeldahl Nitrogen (TKN), Ammonia (as N), Nitrate+Nitrite Nitrogen

Annual monitoring for these parameters is being retained from the previous permit as they are commonly present in stormwater discharges.

5.3.3 Outfall 002

Augmented Flow

Flow augmentation has been approved for this outfall and will be retained for this renewal. The Rockport Plant may use groundwater and/or non-contact storm water for flow augmentation in accordance with 327 IAC 5-5-2(d). The permittee is required to report the amount of flow augmentation using groundwater and/or non-contact stormwater daily***.***

Total Suspended Solids (TSS)

The effluent limitation of 50 mg/l Daily Maximum has been retained from the previous permit. This limitation was established in the 1984 permit based on BPJ and is retained in this proposed permit due to antibacksliding regulations found at 327 IAC 5-2-10.

IDEM included a provision for Outfall 002 relating to the presence of volatile suspended solids (VSS) and the effect on total suspended solids (TSS) results. As part of that inclusion, the permittee was required as part of the previous permit to submit a detailed report that provided information on how the permittee would determine when the TSS values are influenced by VSS, the test methods that will be utilized to quantify the VSS and TSS, and the procedure the permittee would follow to calculate a final TSS result. IDEM received that report on February 26, 2021.

Total Selenium

As part of this permit renewal, Total Selenium was evaluated for reasonable potential to exceed (RPE) a water quality criterion. The results of the RPE analysis showed Total Selenium does have reasonable potential to exceed a water quality criterion. These results are documented in the Wasteload Allocation (WLA) report attached in appendix D. The rulemaking to update the selenium criterion was finalized with EPA approval in February 2022. Therefore, in this permit renewal, a 3.1 ug/l monthly average and 7.5 ug/l daily maximum effluent limitations will be applied.

Lead

Effluent limitations and monitoring requirements for lead have been retained from the previous permit. The limitations of 0.017 mg/l Daily Maximum and 0.0084 mg/l Monthly Average are based on Indiana water quality standards and the calculations are documented in a Wasteload Allocation (WLA) report dated June 16, 2010.

Fluoride

Effluent limitations and monitoring requirements for fluoride have been retained from the previous permit. The limitations of 3.3 mg/l Daily Maximum and 1.6 mg/l Monthly Average are based on Indiana water quality standards and the calculations are documented in a Wasteload Allocation (WLA) report dated June 16, 2010.

Total Chromium

Effluent limitations and monitoring requirements for total chromium have been retained from the previous permit. The limitations of 0.74 mg/l Daily Maximum and 0.37 mg/l Monthly Average are based on Indiana water quality standards, and the calculations are documented in a Wasteload Allocation (WLA) report dated June 16, 2010.

Hexavalent Chromium

Effluent limitations and monitoring requirements for hexavalent chromium were established in the permit modification issued March 20, 2019. The limitations of 0.017 mg/l Daily Maximum and 0.0087 mg/l Monthly Average are based on Indiana water quality standards, and the calculations are documented in a Wasteload Allocation (WLA) report dated December 17, 2018.

Mercury

Mercury is identified as a pollutant of concern discharged at Outfall 002. Coal ash, bottom ash, and coal pile runoff at other facilities have been found to contain mercury. Based on data submitted by the permittee for this renewal, there is no reasonable potential to exceed a water quality criterion for mercury; however, monitoring requirements are being retained in this permit due to the source and nature of the discharge.

Chloride, Sulfate, Aluminum, Boron, Copper, Zinc, Total Dissolved Solids (TDS), Antimony, Cadmium, Cobalt, Lithium, Nickel, Calcium, Beryllium, Radium 226 & 228, and Thallium

In conjunction with other facilities discharging coal combustion residuals, chloride, sulfate, aluminum, boron, copper, zinc, total dissolved solids, antimony, cadmium, cobalt, lithium, nickel, calcium, beryllium, radium 226 & 228, and thallium were selected for monitoring based on the list of constituents for detection monitoring of CCR contaminants found in 40 CFR 257 Appendix III.

Vanadium

Monitoring requirements for vanadium are being retained from the previous permit based on a review of the data submitted by the permittee.

Phosphorus, Total Kjeldahl Nitrogen, Ammonia (as N), Nitrate+Nitrite Nitrogen

Annual monitoring for these parameters is being retained from the previous permit as they are commonly present in storm water discharges.

5.3.4 Internal Outfall 101

Total Suspended Solids (TSS), Oil & Grease, Total Iron, Total Copper

Effluent limitations and monitoring requirements for the above parameters have been retained from the previous permit. These limitations are based on 40 CFR 423.12(b)(5). These effluent limitations are effective only during periods of discharge of treated chemical and non-chemical metal cleaning wastewaters.

5.3.5 Internal Outfall 201

Total Chromium, Total Zinc, Free Available Chlorine

Effluent limitations and monitoring requirements for the above-mentioned parameters are retained from the previous permit. These limitations are based on 40 CFR 423.13(d)(1). 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.

126 Priority Pollutants

40 CFR 423.13(d)(1) prohibits the discharge of the 126 priority pollutants (listed in Appendix A of the regulations) in detectable amounts. 40 CFR 423.13(d)(3) states that at the permitting authority's discretion, instead of the monitoring specified in 40 CFR 122.11(b) compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

5.3.6 Internal Outfall 202

Total Suspended Solids (TSS) and Oil & Grease

Effluent limitations and monitoring requirements for TSS and Oil & Grease are being retained from the permit modification issued April 16, 2020. These limitations are based on 40 CFR 423.12(b)(11).

IDEM included a provision for Outfall 001 relating to the presence of volatile suspended solids (VSS) and the effect on total suspended solids (TSS) results. As part of that inclusion, the permittee was required as part of the previous permit to submit a detailed report that provided information on how the permittee would determine when the TSS values are influenced by VSS, the test methods that will be utilized to quantify the VSS and TSS, and the procedure the permittee would follow to calculate a final TSS result. IDEM received that report on February 26, 2021.

pH

Pursuant to 40 CFR 423.12(b)(1), the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0. 327 IAC 5-5-2(d) states that “Technology based treatment requirements cannot be satisfied through the use of nontreatment techniques such as flow augmentation and instream mechanical aerators.” In order to ensure that pH limitations are being met prior to flow augmentation, these limitations are included at Internal Outfall 202.

5.3.7 Stormwater Outfalls 303, 304, 311, 314, 320, 322, 324, 325

Flow, TSS, Oil & Grease, pH, COD, CBOD5, Total Kjeldahl Nitrogen (TKN), Nitrate+Nitrite, Total Phosphorus

Monitoring requirements for the above parameters are being retained from the previous permit. These pollutants are included because they are commonly associated with industrial facilities that discharge stormwater of a similar nature.

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

5.5 Antibacksliding

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

Under 327 IAC 5-2-10(a)(11), unless an exception under 327 IAC 5-2-10(a)(11)(B) applies, a permit may not be renewed, reissued or modified to contain effluent limitations that are less stringent than the comparable effluent limitations in the previous permit. For effluent limitations based on Indiana water quality or treatment standards, less stringent effluent limitations may also be allowed if they are in compliance with Section 303(d)(4) of the CWA.

Under 40 CFR 122.44(l)(1), a permit may not be renewed or reissued to contain less stringent interim effluent limitations, standards or conditions than the final effluent limitations, standards or conditions in the previous permit unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR 122.62.

The limitations in the permit for O & G at Outfall 001 are less stringent than the comparable limitations for those parameters in the previous permit. Under 327 IAC 5-2-10(a)(11)(B)(ii)(AA), these less stringent limitations do not violate the antibacksliding requirements since information became available for this permit renewal that was not available at the time of the previous permit issuance. Updated wastestream sampling data was provided as part of this permit renewal that resulted in less stringent technology-based limits for O & G at Outfall 001 using the building block formula.

5.6 Antidegradation

Indiana's Antidegradation Standards and Implementation procedures are outlined in 327 IAC 2-1.3. The antidegradation standards established by 327 IAC 2-1.3-3 apply to all surface waters of the state. The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless information is submitted to the commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality, or an antidegradation demonstration submitted and approved in accordance 327 IAC 2-1.3-5 and 2-1.3-6.

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

5.7 Stormwater

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

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

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

According to 40 CFR 122.26(b)(14) and 327 IAC 15-6-2 facilities classified under Standard Industrial Classification (SIC) Code 4911, are considered to be engaging in “industrial activity” for purposes of 40 CFR 122.26(b). Therefore, the permittee is required to have all stormwater discharges associated with industrial activity permitted. Treatment for stormwater discharges associated with industrial activities is required to meet, at a minimum, best available technology economically achievable/best conventional pollutant control technology (BAT/BCT) requirements. EPA has determined that non-numeric technology-based effluent limits have been determined to be equal to the best practicable technology (BPT) or BAT/BCT for stormwater associated with industrial activity.
Stormwater associated with industrial activity must also be assessed to ensure compliance with all water quality standards. Effective implementation of the non-numeric technology-based requirements should, in most cases, control discharges as necessary to meet applicable water quality standards. Violation of any of these effluent limitations constitutes a violation of the permit.

Additionally, IDEM has determined that with the appropriate implementation of the required control measures and Best Management Practices (BMPs) found in Part I.D. of the permit, the discharge of stormwater associated with industrial activity from this facility will meet applicable water quality standards and will not cause a significant lowering of water quality.

Therefore, the stormwater discharge is in compliance with the antidegradation standards found in 327 IAC 2-1.3-3, and pursuant to 327 IAC 2-1.3-4(a)(5), an antidegradation demonstration is not required.

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

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

The permittee must control its discharge as necessary to meet applicable water quality standards. It is expected that compliance with the non-numeric technology-based requirements should ensure compliance with applicable water quality standards. However, if at any time the permittee, or IDEM, determines that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective actions, and conduct follow-up monitoring and IDEM may impose additional water quality-based limitations.

“Terms and Conditions” to Provide Information in a Stormwater Pollution Prevention Plan (SWPPP)

Distinct from the effluent limitation provisions in the permit, the permit requires the discharger to prepare a SWPPP for the permitted facility. The SWPPP is intended to document the selection, design, installation, and implementation (including inspection, maintenance, monitoring, and corrective action) of control measures being used to comply with the effluent limits set forth in Part I.D. of the permit.

In general, the SWPPP must be kept up-to-date, and modified, when necessary, to reflect any changes in control measures that were found to be necessary to meet the effluent limitations in the permit.

The requirement to prepare a SWPPP is not an effluent limitation. Rather, it documents what practices the discharger is implementing to meet the effluent limitations in Part I.D. of the permit. The SWPPP is not an effluent limitation because it does not restrict quantities, rates, and concentrations of constituents which are discharged. Instead, the requirement to develop a SWPPP is a permit "term or condition" authorized under sections 402(a)(2) and 308 of the Act. Section 402(a)(2) states, "[t]he Administrator shall prescribe conditions for [NPDES] permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." The SWPPP requirements set forth in this permit are terms or conditions under the CWA because the discharger is documenting information on how it intends to comply with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit. Thus, the requirement to develop a SWPPP and keep it up-to-date is no different than other information collection conditions, as authorized by 327 IAC 5-1-3 (see also CWA section 402(a)(2)).

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

Public availability of documents

Part I.E.2.d(2) of the permit requires that the permittee retain a copy of the current SWPPP at the facility and make it immediately available, at the time of an onsite inspection or upon request, to IDEM. When submitting the SWPPP to IDEM, if any information in the SWPPP is considered to be confidential, that information shall be submitted in accordance with 327 IAC 12.1. Interested persons can request a copy of the SWPPP through IDEM. Any information that is confidential pursuant to Indiana law will not be released to the public.

5.8 Water Treatment Additives

In the event that changes are to be made in the use of water treatment additives that could significantly change the nature of or increase the discharge concentration of any of the additives contributing to an outfall governed under the permit, the permittee must apply for and obtain approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) available at: https://www.in.gov/idem/forms/idem-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. A list of water treatment additives currently approved for use at the facility is included in Appendix B at the end of this Fact Sheet.

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), current ORSANCO requirements, 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.

Nothing has changed to warrant modifying the monitoring conditions.

Outfall 001:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Continuous	24-Hr. Total
Cycles of Concentration	Report	Report	Number	Daily	Report
TSS	30	100	mg/l	1 X Monthly	24-Hr. Comp.
Oil and Grease	11.7	15.6	mg/l	1 X Monthly	Grab
Total Copper	0.033	0.067	mg/l	1 X Monthly	24-Hr. Comp.
Hex. Chromium	-----	Report	mg/l	1 X Quarterly	Grab
Total Selenium	-----	Report	mg/l	1 X Quarterly	24-Hr. Comp.
Mercury	Report	Report	ng/l	6 X Yearly	24-Hr. Comp.
CT-1300	-----	0.05	mg/l	Daily	4 Grabs
Temperature	Report	Report	°F	1 X Weekly	Grab
TRC	0.02	0.04	mg/l	1 X Monthly	Grab
Total Phosphorus	-----	Report	mg/l	1 X Yearly	Grab
Total Kjeldahl Nitrogen	-----	Report	mg/l	1 X Yearly	Grab
Ammonia (as N)	-----	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	-----	Report	mg/l	1 X Yearly	Grab
Whole Effluent Toxicity Testing					

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

Outfall 002:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	24-Hr. Total
Augmented Flow Groundwater Stormwater	 Report Report	 Report Report	 MGD MGD	 Daily Daily	 24-Hr. Total 24-Hr. Total
TSS	----	50	mg/l	1 X Monthly	24-Hr. Comp.
Total Selenium Interim Final	 0.029 0.0031	 0.057 0.0075	 mg/l mg/l	 1 X Monthly 1 X Monthly	 24-Hr. Comp. 24-Hr. Comp.
Total Lead	0.0084	0.017	mg/l	1 X Monthly	24-Hr. Comp.
Total Chromium	0.37	0.74	mg/l	1 X Monthly	24-Hr. Comp.
Fluoride	1.6	3.3	mg/l	1 X Monthly	24-Hr. Comp.
Sulfate	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Hex Chromium	0.0087	0.017	mg/l	1 X Monthly	Grab
Total Copper	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Total Boron	Report	Report	mg/l	1 X Quarterly	24-Hr. Comp.
Mercury	Report	Report	ng/l	6 X Yearly	24-Hr. Comp.
Total Phosphorus	-----	Report	mg/l	1 X Yearly	Grab
Total Kjeldahl Nitrogen	-----	Report	mg/l	1 X Yearly	Grab
Ammonia (as N)	-----	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	-----	Report	mg/l	1 X Yearly	Grab
Aluminum	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
TDS	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Cobalt	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Lithium	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Nickel	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Calcium	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Beryllium	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Radium 226 & 228	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Thallium	Report	Report	mg/l	1 X monthly	24-Hr. Comp.
Zinc	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chloride	Report	Report	mg/l	1 X Monthly	24-Hr. Comp.
Vanadium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

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

Outfall 101:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	Estimate
TSS	30.0	100.0	mg/l	Daily	24-Hr. Comp.
Oil and Grease	15.0	20.0	mg/l	Daily	Grab
Total Copper	1.0	1.0	mg/l	Daily	24-Hr. Comp.
Total Iron	1.0	1.0	mg/l	Daily	24-Hr. Comp.

Outfall 201:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	Estimate
Total Chromium	0.2	0.2	mg/l	Daily	24-Hr. Comp.
Total Zinc	1.0	1.0	mg/l	Daily	24-Hr. Comp.
Free Available Chlorine	0.2	0.5	mg/l	Daily	Grab
126 Priority Pollutants	No detectable limit				

Outfall 202:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	Daily	Estimate
TSS	30.0	100.0	mg/l	1 X Weekly	24-Hr. Comp.
Oil and Grease	15.0	20.0	mg/l	1 X Weekly	Grab

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

Stormwater Outfalls 303, 304, 311, 314, 320, 322, 324, 325

Parameter	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	MGD	1 X Yearly	Estimate
TSS	Report	mg/l	1 X Yearly	Grab
Oil and Grease	Report	mg/l	1 X Yearly	Grab
pH	Report	s.u.	1 X Yearly	Grab
COD	Report	mg/l	1 X Yearly	Grab
$CBOD_5$	Report	mg/l	1 X Yearly	Grab
Total Kjeldahl Nitrogen	Report	mg/l	1 X Yearly	Grab
Nitrate+Nitrite	Report	mg/l	1 X Yearly	Grab
Total Phosphorus	Report	mg/l	1 X Yearly	Grab

6.2 Schedule of Compliance

New, more stringent effluent limitations for selenium apply at Outfall 002. Therefore, the permittee could qualify for a schedule of compliance pursuant to 327 IAC 5-2-12. The schedule of compliance shall require compliance as soon as reasonably possible, but not later than five (5) years from the effective date of this permit.

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

6.3.1 Introduction

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

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

Impingement is the process by which fish and other aquatic organisms are trapped and often killed or injured when they are pulled against the CWIS's outer structure or screens as water is withdrawn from a waterbody. Entrainment is the process by which fish larvae and eggs and other aquatic organisms in the intake flow enter and pass through a CWIS and into a cooling water system, including a condenser or heat exchanger, which often results in the injury or the death of the organisms (see definitions at 40 CFR 125.92(h) and (n)).

The design intake flow (DIF) for the permittee is 57.6 MGD. The actual intake flow (AIF), as defined under 40 CFR 125.92(a), is the average volume of water withdrawn on an annual basis by the cooling water intake structures over the past five years. The actual intake flow for the facility over this period is 27.4 MGD. 79% is used for cooling purposes.

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

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

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 May 13, 2025.

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

6.3.2 Facility and Cooling Water Intake Structure (CWIS) Description

A. Detailed Description

The Rockport Plant is located near Rockport, Indiana on the Ohio River at Ohio River Mile 745. The facility and its cooling water system are intended for year-round, 24 hours/day operation, with the exception of down time due to outages. The facility has two identical water intake structures that serve its two generating units (Unit 1 capacity is 1,320 MW, and Unit 2 is 1,300 MW). The Rockport Plant utilizes natural draft cooling towers on closed loop systems. The cooling towers are presently operating at an average of 2.2-2.7 cycles of concentration and provide 97.1-97.5% flow reduction as compared to a once through cooling system. Since 2021, the facility has continued to use the cooling system less than 220 days out of the year and currently averages 12 start-ups across both units, annually. The plant anticipates closure activities to be completed on December 31, 2028.

The Rockport Plant's two identical intake structures are located approximately 640 feet apart at Ohio River Miles 745.0 and 745.2, respectively. There is a 36-inch crosstie between the two units in case one of the makeup pump houses or caissons is out of service. The normal pool elevation of the Ohio River at the river water intake is 358.0 ft. For each unit, the river water intake structure consists of a 37 ft-1 1/4-inch diameter by 67 ft deep circular caisson which sits under a 48 ft by 77 ft-6-inch pump house. To supply river water to the caisson, three 36-inch intake pipes extend from the caisson below grade out into the river (approximately 310 ft for Unit 1 and 325 ft for Unit 2) at Elevation 336 ft (22 ft below normal pool elevation). Perpendicularly connected to the river end of each intake pipe, parallel to the riverbank, are two 48-inch diameter intake screens.

There are six submerged Johnson wedge wire intake screens on each unit, for a total of twelve, with each screen measuring 4 ft diameter by roughly 16 ft long with 1/8-inch-wide slot openings at Elevation of 337 ft-7 inch on the centerline of the screens. These screens are located approximately 40 meters from the bank of the Ohio River. Each screen is rated at 10,000 GPM (i.e. design capacity) with 62 percent slot opening area (POA). The calculated design through-slot velocity (TSV) of 0.32 fps assuming uniform TSV over the entire length of the screen. This calculation is included in Section 5.2 of the permittee's April 2020 316(b) application and is as follows:

v = (10,000 gal/min) x (1 min/60 sec) x (0.1337 ft3/gal) x (1/π) x (1/4 ft diameter) x (1/9 ft wedgewire screen mesh) x (1/0.62 POA).

v = 0.32 fps

A 4-inch air line is connected to each intake screen to air burst the screen and to keep it free from trash and debris. A gage indicates the difference in level between the river and the water in the caisson and gives an indication of the cleanliness of the intake screens. An annunciator is energized when the water level in the caisson drops approximately 2 feet below river level. Sequencing controls are supplied to allow automatic air-bursting of the intake screens. When the intake screen air burst time sequence control is on automatic, the intake screens will be air burst automatically at a predetermined interval.
Automatic air bursting is used only during flood conditions when there should be no small craft on the river. Small craft near the intake screens during air backwashing may be swamped or capsized. Otherwise, an operator goes to the river water makeup pump house and manually backwashes the intake screens after determining that there are no boats on the river near the screens.

Each of the three vertical, double-suction, single-stage river water makeup pumps at each Unit is rated at 20,000 GPM, 165 ft Total Dynamic Head (TDH), and is driven by 1,000 hp, 1,200 rpm, 4kV motors. One pump has sufficient capacity to supply the estimated average unit makeup requirement of 18,000 GPM, and two pumps can supply the estimated maximum requirement of 32,000 GPM. The discharge of each pump flows through a 30-inch motor-operated butterfly valve into a common 48-inch discharge header. The pumps can be controlled either from control switches in the plant's main control room, or from a subpanel in the river water makeup pump house. To assure the minimum flow requirement of 8,000 GPM for each pump is met, each pump is provided with a 12-inch recirculation line which discharges back to the bottom of the caisson.

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

At design and actual intake flows, the maximum percent of the Ohio River flow withdrawn by the CWIS is 0.17% and 0.09%, respectively.

Regarding Through Screen Velocity, the river water makeup pump capacity at Rockport Plant is 32,000 GPM with two pump operation at each Unit and the estimated average makeup requirement for each Unit is only 18,000 GPM. Therefore, the estimated TSV would be approximately 0.17 fps using the maximum pump capacity of 32,000 GPM. Using the average makeup requirement of 18,000 GPM, the estimated design TSV would be approximately 0.10 fps.

The area of influence (AOI) is generally thought of as the portion of water subject to the forces of the intake structure such that a particle within the area is likely to be pulled into the intake structure. The permittee interprets the extent of the Area of Influence (AOI) to be an area delineated by the 0.5 fps velocity contour from the CWIS. The permittee notes that this approach has been utilized by other dischargers on the Ohio River. As the TSV at Rockport Plant at maximum pumping capacity (0.17 fps) is less than the 0.5 fps, the AOI at the Rockport Plant for impingement would be negligible.

The permittee further argues that the AOI for entrainment would be limited to a region near the intakes due to river velocities and the magnitude of the intake flow relative to the river flow. AEP states in their report that the wedgewire screens are deployed in such a way that they are swept by ambient river currents and that the ambient currents are likely to equal or exceed the TSV.

6.3.3 Source Water Biological Characterization

Fish sampling conducted by the Ohio River Valley Water Sanitation Commission (ORSANCO) in the Newburgh pool consisted of nighttime boat-based electrofishing (ORSANCO 2017). Sampling was conducted in July and October in 2012 and 2017 when water levels were near normal flat pool elevations and Secchi depths were greater than 0.3 meters. Table 2 below lists the top ten abundant fish species found within the Newburgh pool in combined 2012 and 2017 sampling efforts by ORSANCO. This Table was taken directly from the report submitted by AEP. These species account for 93.9% of the overall total of fishes surveyed within the pool. A total of 16,132 fish were collected by electrofishing. More information regarding the electrofishing conducted by ORSANCO in 2012 and 2017 is available in the 316(b)-report submitted by AEP Rockport.

ORSANCO assesses the condition of the Ohio River to determine the capability of the river to maintain fish and other aquatic life every two years as states are required by Section 305(b) of the Clean Water Act. ORSANCO utilizes data from multiple programs including metals sampling, fish population, and macroinvertebrate data to make the assessment. The assessments of fish surveys from 2014-2018 and macroinvertebrates surveys from 2015-2018 showed that the entirety of the Ohio River was fully supporting aquatic life use. The Newburgh pool was given a fish assemblage index score of “Good” during the 2017 sampling event (ORSANCO 2020).

Table 2: Top Ten Fish Collected in Combined ORSANCO Newburgh Pool Electrofishing, 2012 and 2017

Rank	Scientific Name	Common Name	Percent Composition (%)
1	*Dorosoma cepedianum*	Gizzard Shad	68.5%
2	*Notropis atherinoides*	Emerald Shiner	5.7%
3	*Notropis wickliffi*	Channel Shiner	5.5%
4	*Aplodinotus grunniens*	Freshwater Drum	4.1%
5	*Morone* sp.	Morone sp.	2.5%
6	*Lepomis megalotis*	Longear Sunfish	2.0%
7	*Micropterus punctulatus*	Spotted Bass	1.9%
8	*Ictalurus punctatus*	Channel Catfish	1.8%
9	*Carpiodes carpio*	River Carpsucker	1.2%
10	*Lepomis macrochirus*	Bluegill	0.8%
		Total	**93.9%**

6.3.4 Impingement and Entrainment– Aquatic Life Studies

Biological studies have been conducted on the Ohio River by organizations like ORSANCO and the Ohio River Ecological Research Program (ORERP). These datasets and a literature review on life history traits were used to determine the fish species likely to be susceptible to impingement and entrainment. The data from the ORERP study were collected at intakes which withdraw a larger proportion of river flow and have higher through-screen velocities than those at the Rockport Plant. While the general conclusions are likely still relevant, the rates of impingement and entrainment at the plants represented in the ORERP study are likely higher than those at the Rockport Plant.

In 2005 and 2006, ORERP conducted a study near 15 Ohio River power plants, monitoring fish species composition and relative abundance of the Ohio River and comparing it to fish that are impinged at intake structures. This study found that impinged fishes did not represent the full species assemblage in the Ohio River. The study evaluated potential explanations for the presence, absence, or disproportionate occurrence of fishes impinged at intake structures. While the abundance of some species varied significantly over the length of the river, Clupeids dominated the impingement collections at disproportionately higher numbers than their composition of the Ohio River community. Forage species including Emerald Shiner and Channel Shiner, were under-represented in the impingement collections.

During the two-year impingement study, 32 species were encountered in the ambient river surveys that were not impinged, and 13 species were impinged that were not encountered during the river surveys. The impingement study suggests that several species in the Ohio River

may not be susceptible to impingement because their behavior, habitat preferences, or low population levels – reducing the likelihood of impingement. This was demonstrated in species groups including Carps and Minnows (Cyprinidae), Darters (Percidae), and Redhorse (*Moxostoma* spp.). Abundant, pelagic schooling Clupeids were occasionally impinged at very high rates, often during periods with declining water temperatures. Freshwater Drum (*Aplodinotis grunniens*) and Channel Catfish (*Ictalurus punctatus*) were also impinged at much higher rates than would be expected based on their abundance in the river collections (King et al. 2011).

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

All the species present within the Newburgh Pool have the potential to be affected by impingement and entrainment. AEP Rockport included a table that integrates the observations on species-specific impingement rates from King et al. (2011) and observations on life history and behaviors of the species (full table of species provided upon request). Potential for impingement of juveniles and adults is assumed to be unlikely for all species due to a small area of influence, through-screen velocity of less than 0.5 fps, and use of wedgewire screens at Rockport plant.

Based on life history, feeding and spawning habits, species abundance, and previously collected fisheries data, twelve species are considered either to be likely or have potential to be entrained during early life stages. Of those, four species with the highest likelihood of entrainment at the Rockport Plant include: Gizzard Shad, Emerald Shiner, Freshwater Drum, and White Bass. These species are known to gather in large schools and are predominately pelagic spawners with either demersal adhesive or semi-buoyant demersal eggs. The broadcast spawners in this group exert no parental investment, increasing the likelihood of entrainment during the juvenile stage.

6.3.5 Protected Species Susceptible to Impingement and Entrainment

The Ohio River at the Rockport facility is bound by Indiana to the north and west and Kentucky to the south and east, so the threatened and endangered species lists for both states were reviewed. The State of Indiana includes 10 endangered fish species and 23 State and Federally-listed freshwater mussel species. Federally, there are four endangered fish species, and one threatened in Kentucky. The Kentucky Wildlife Action Plan identifies 301 Species of Greatest Conservation Need including 46 mussel species and 64 fish species. Fish species from these combined lists that have the potential to be present near the Rockport Plant intake include: Black Buffalo (*Ictiobus niger*) and Paddlefish (*Poloydon spathula*). Both species were collected in the Newburgh Pool in 2012 by ORSANCO, and Paddlefish were collected in 2017, but neither species is Federally listed.

Because the through-screen velocity at the Rockport Plant is less than 0.5 fps, which is well below the sustained swim speed of juvenile and adult fish, impingement impacts are minimized.

Paddlefish prefer pools and backwaters where they filter feed and there is no such habitat immediately adjacent to the intake. Similarly, Black Buffalo juvenile and adults prefer slow pools in low flow areas, which is not typical in the straight section of the Newburgh Pool. Both species prefer submerged gravel and cobble bars for spawning. ORSANCO lists the Newburgh Pool substrate as 40% boulder/cobble/gravel, 31.4% sand, 16.4% fines, and 12.2% hardpan/other (ORSANCO 2017). The permittee states that submerged gravel and cobble bars are not expected in the Newburgh Pool.

Direct impingement or entrainment of mussels either as adults or as larvae independent of the fish host is not expected to be significant. The Ohio River in the vicinity of the Rockport Plant contains habitat for the Federally-endangered Orangefoot Pimpleback (*Plethobasus cooperianus*), the Federally-endangered Sheepnose (*Plethobasus cyphyus*), and the Federally threatened Rabbitsfoot (*Quadrula cylindrica cylindrica*). A survey was conducted by Eco-Tech consultants in 2011 and two Sheepnose (*Plethobasus cyphyus*) mussels were found, one upstream and one downstream of the Plant. Subfossil remnants of two Federally-endangered species, the Ring Pink (*Obovarioa retusa*) and Tubercled Blossom (*Epioblasma torulosa torulosa*) also were found. The Ring Pink and the Tubercled Blossom are extirpated from the lower Ohio River and not expected near the facility.

The U.S. Fish and Wildlife Service has reviewed AEP's submission and the response received from the Service stated, "their [AEP Rockport Plant] analysis was thorough and we [USFWS] concur with their findings in regard to federally threatened and endangered species."

6.3.6 Best Technology Available (BTA) Determinations

A. Impingement BTA

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

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

AEP Rockport has chosen both impingement mortality alternative 1, operate a closed-cycle recirculating system, and alternative 2, operate a CWIS that has a maximum design through-screen intake velocity of 0.5 fps for compliance with the impingement mortality standard.

For Alternative 1, the permittee must operate a closed-cycle recirculating system as defined at 40 CFR 125.92. The permittee must also continue monitoring and reporting the cycles of concentration at a minimum frequency of daily.

As specified previously, the permittee utilizes natural draft cooling towers on closed loop systems. The cooling towers are presently operating an average of approximately 2.2-2.7 cycles of concentration and provide about 97.1-97.5% flow reduction compared to a once-through cooling system. While the facility is barely achieving 97.5% flow reduction and operating at lower cycles of concentration (compared to 3-5 COCs last renewal), this is due to the units not operating as much as the facility prepares for closure of the units by December 31, 2028. Therefore, based on the information provided by the permittee, IDEM agrees that the facility employs a closed cycle recirculating system (CCRS) consistent with the federal regulations.

Furthermore, the permittee has provided information demonstrating that the design through-screen velocity is 0.32 fps assuming uniform velocity over the entire length of the screen. Thus, IDEM agrees that the facility also maintains a design intake velocity under 0.5 fps.

B. Entrainment BTA

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

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

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

In these regulations EPA identified closed-cycle recirculating cooling systems (CCRS) as the best performing technology for entrainment (See EPA Technical Development Document for the Final Section 316(b) Existing Facilities Rule, May 2014 at page 7-6). However, despite numerous retrofits of existing units to closed cycle cooling, EPA rejected this technology as

the basis for a uniform national entrainment standard because, among other things, it is not nationally available. Also, in some instances, it has unacceptable non-water quality impacts. 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 from a water of the United States 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. 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. If waters of the United States 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, the Director (IDEM) may determine a cooling system is a closed-cycle recirculating system if the facility demonstrates to the satisfaction of the Director 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 cooling 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. COCs 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 represent the accumulation of dissolved minerals in the recirculated cooling water.

While EPA has determined that a COC of 3.0 for freshwater facilities 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. These flow reductions and COC serve as indicators of minimized makeup flows and thus may be 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 would review the information provided by the facility and determine if the facility's configuration and operation are otherwise consistent with the definition of a closed-cycle cooling system in the final rule.

The Unit 1 cooling tower at Rockport Plant operates at an average of 2.7 COC and provides a reduction in flow of 97.5% relative to a once-through cooling system, while the Unit 2 cooling tower operates at an average of 2.2 COC and provides a reduction in flow of 97.1% relative to a once-through cooling system. The makeup flow calculations are provided below:

Makeup flow = Evaporation + Drift + Blowdown

Where:

Evaporation (E) = 0.0008 x condenser temperature delta T (°F) x condenser cooling water flow rate (GPM)
Drift (D) = Drift eliminator efficiency x condenser cooling water flow rate (GPM)
Blowdown (B) = [E-((COC-1) x D)] / (COC-1)

Unit 1 cooling tower:

Using the cooling tower flow of 600,000 GPM, delta T of 20°F, drift eliminator efficiency of 0.01%, and 2.7 COC, the calculations for evaporation, drift, and blowdown are:

E = 0.0008 x 20°F x 600,000 GPM = 9,600 GPM
D = 0.0001 x 600,000 GPM = 60 GPM
B = [9,600 GPM-((2.7-1) x 60)] / (2.7-1) = 5,587 GPM

The makeup flow can be calculated as:

Makeup flow = 9,600 GPM + 60 GPM + 5,587 GPM = 15,247 GPM

Unit 2 cooling tower:

Using the cooling tower flow of 600,000 GPM, delta T of 20°F, drift eliminator efficiency of 0.01%, and 2.2 COC, the calculations for evaporation, drift, and blowdown are:

E = 0.0008 x 20°F x 600,000 GPM = 9,600 GPM
D = 0.0001 x 600,000 GPM = 60 GPM
B = [9,600 GPM-((2.2-1) x 60)] / (2.2-1) = 7,940 GPM

The makeup flow can be calculated as:

Makeup flow = 9,600 GPM + 60 GPM + 7,940 GPM = 17,600 GPM

Comparing the calculated makeup flow to a once-through cooling system (600,000 GPM) yields a reduction in flow of 97.5% for the Unit 1 cooling tower and 97.1% for the Unit 2 cooling tower.

Based on the above, IDEM has determined that the design and operation of the closed cycle cooling system meet the federal rule definition of a CCRS. Although the facility is slightly below a COC of 3.0 and the reduction in flow compared to a once-through cooling system is barely

97.5%, this is due to the units not operating as much as they did in previous years. IDEM believes this is still a well-operated cooling system.

In addition, the facility utilizes wedgewire screens in combination with a low TSV and the presence of an ambient sweeping current, which leads to a reduction in entrainment. The facility also plans to close by December 31, 2028.

After considering the above and 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.

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);

Rockport plant utilizes two natural draft cooling towers on closed loop systems. These towers operate on 2.2-2.7 cycles of concentration. The use of slightly offshore wedge wire screens with an ambient sweeping velocity along the screens likely reduces entrainment over what would be observed with a shoreline intake.

Black Buffalo and Paddlefish have the potential to be present near the Rockport intake; however, due to the low through-screen velocity (less than 0.5 fps) impingement is improbable. AEP believes the habitat near the Rockport intake is not the preferred habitat for spawning of these species so entrainment of their eggs and larvae is unlikely.

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

The Rockport Plant currently utilizes a closed loop cooling system with two natural draft cooling towers.

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

The Rockport Plant already utilizes a closed loop recirculating cooling system.

iv. Remaining useful plant life; and

The Rockport Plant plans to complete closure activities by December 28, 2028.

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

The Rockport Plant already utilizes a closed loop recirculating cooling system. No evaluation of quantified and qualitative social benefits and costs of available entrainment technologies was performed by AEP Rockport.

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

i. Entrainment impacts on the waterbody;

As discussed above, the use of offshore wedge wire screens with an ambient sweeping velocity and the closed-cycle cooling system at the facility result in minimal entrainment impacts.

ii. Thermal discharge impacts;

The thermal discharge is expected to have minimal impacts on the receiving waters as the facility is required to meet water quality standards for temperature, and that the facility utilizes cooling towers and on-site retention basins.

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

This factor was not considered due a lack of information.

v. Impacts on water consumption; and

The use of a closed-cycle cooling system provides a flow reduction of 97.1%-97.5% compared to a once-through system.

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

AEP Rockport already utilizes a closed-cycle cooling system at the Rockport Plant.

6.3.7 BTA Impingement and Entrainment Determination Summary

For Rockport Generating Station, IDEM has determined that the permittee's selection of impingement mortality BTA alternative 1, closed cycle recirculating system (CCRS) consistent with the federal regulations will result in compliance with the BTA to minimize adverse environmental impact from impingement. Further, IDEM has determined that the existing facility meets BTA for entrainment. Primary in this entrainment BTA determination is the use of a CCRS via natural draft cooling towers, the use of wedgewire screens with a 3.2 mm slot size located in an area with ambient sweeping velocities, and the anticipated closure of the facility by the end of 2028.

6.3.8 Permit Conditions

The permittee shall comply with requirements below:

1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

2. The permittee must at all times properly operate and maintain the cooling water intake structure and associated intake equipment.

3. The permittee must inform IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.

4. Any discharge of intake screen backwash must meet the Minimum Narrative Limitations contained in Part I.B of the permit. There must be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.

5. The permittee must either conduct visual inspections or employ remote monitoring devices during the period where the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather).

6. In accordance with 40 CFR 125.97(c), by January 31 of each year, the permittee must submit to the Industrial NPDES Permit Section IDEM-OWQ an annual certification statement for the preceding calendar year signed by the responsible corporate officer as defined in 40 CFR 122.22 (see 327 IAC 5-2-22) subject to the following:

    a. If the information contained in the previous year's annual certification is still pertinent, you may simply state as such in a letter to IDEM and the letter, along with any applicable data submission requirements specified in this section shall constitute the annual certification.

    b. If you have substantially modified operation of any unit at your facility that impacts cooling water withdrawals or operation of your cooling water intake structures, you must provide a summary of those changes in the report. In addition, you must submit revisions to the information required at 40 CFR 122.21(r) in your next permit application.

7. BTA determinations for entrainment mortality and impingement mortality at cooling water intake structures will be made in each permit reissuance in accordance with 40 CFR 125.90-98. The permittee must submit all the information required by the applicable

provisions of 40 CFR 122.21(r)(2) through (r)(8) with the next renewal application. Since the permittee has submitted the studies required by 40 CFR 122.21(r), the permittee may, in subsequent renewal applications pursuant to 40 CFR 125.95(c), request to reduce the information required if conditions at the facility and in the waterbody remain substantially unchanged since the previous application so long as the relevant previously submitted information remains representative of the current source water, intake structure, cooling water system, and operating conditions. Any habitat designated as critical or species listed as threatened or endangered after issuance of the current permit whose range of habitat or designated critical habitat includes waters where a facility intake is located constitutes potential for a substantial change that must be addressed by the owner/operator in subsequent permit applications, unless the facility received an exemption pursuant to 16 U.S.C. 1536(o) or a permit pursuant to 16 U.S.C. 1539(a) or there is no reasonable expectation of take. The permittee must submit the request for reduced cooling water intake structure and waterbody application information at least **two years and six months** prior to the expiration of the NPDES permit. The request must identify each element in this subsection that it determines has not substantially changed since the previous permit application and the basis for the determination. IDEM has the discretion to accept or reject any part of the request.

8. The permittee must monitor and report its cycles of concentration 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.

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

10. 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.

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

6.4 Polychlorinated Biphenyl (PCB)

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

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

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

6.5 Spill Response and Reporting Requirement

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

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

6.6 Permit Processing/Public Comment

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

Appendix A
Stormwater Outfall Information

A. Outfall Number	B. Latitude	C. Longitude	D. Receiving Water
301	N 37° 56' 07.9"	W 87° 02' 11.8"	Honey Creek
303	N 37° 56' 05.1"	W 87° 01' 54.4"	Honey Creek
304	N 37° 56' 11.1"	W 87° 02' 21.7"	Honey Creek
305	N 37° 55' 23.1"	W 87° 02' 24.4"	Ohio River
307	N 37° 54' 41.9"	W 87° 02' 20.4"	Ohio River
308	N 37° 54' 42.7"	W 87° 01' 48.6"	Ohio River
309	N 37° 54' 39.9"	W 87° 01' 36.9"	Ohio River
310	N 37° 55' 04.5"	W 87° 01' 27.7"	Vance Lake, then Ohio River
311	N 37° 55' 26.9"	W 87° 01' 37.8"	Honey Creek
313	N 37° 56' 41.1"	W 87° 01' 45.7"	Honey Creek
314	N 37° 55' 08.6"	W 87° 01' 31.6"	Vance Lake, then Ohio River
316	N 37° 55' 51.0"	W 87° 01' 37.6"	Honey Creek
317	N 37° 55' 23.5"	W 87° 01' 32.1"	Honey Creek
318	N 37° 55' 16.3"	W 87° 01' 23.6"	Honey Creek
319	N 37° 56' 02.2"	W 87° 02' 25.6"	Honey Creek
320	N 37° 54' 55.7"	W 87° 01' 32.1"	Ohio River
322	N 37° 56' 10.5"	W 87° 01' 37"	Unnamed tributary to Honey Creek
323	N 37° 56' 48"	W 87° 01' 18"	Unnamed tributary to Honey Creek
324	N 37° 57' 8.5"	W 87° 01' 4"	Unnamed tributary to Honey Creek
325	N 37° 57' 11"	W 87° 0' 42"	Unnamed tributary to Honey Creek
326	N 37° 56' 58"	W 87° 0' 27"	Unnamed tributary to Honey Creek

Appendix B
Water Treatment Additives

Process	Chemical	Use	Dosing		Ultimate disposition
			Lbm/day	Lbm/year	
Cooling tower blowdown	GE Betz Depositrol BL5400	Corrosion and scale inhibitor	181.5		Discharge through Outfall 001
	GenGard GN7004	Dispersant	56.6		Discharge through Outfall 001
	Betz AZ8104	Corrosion inhibitor	75.4		Discharge through Outfall 001
	CT-1300	Biocide	961.4		Neutralized in wastewater treatment ponds
	Sodium hypochlorite (12.5%)	Biocide	380		Dissociates in water.
	Sulfuric acid (98%)	Scale inhibitor	4,524		Dissociates in water.
Zebra mussel treatment	CT-1300	Biocide	4,005		Discharge through Outfall 001
	Betz DTG (bentonite clay)	Biocide detoxification	2,000		Discharge through Outfall 001 - measured as TSS
Demineralizer regeneration	Sodium hydroxide (50%)	Regeneration of anion resin			Dissociates in water.
	Sulfuric acid (98%)	Regeneration of cation resin			Dissociates in water.
Boiler water pretreatment	KlarAid CDP1304	Flocculant (alum-based polymer)	1,076	392,943	Discharge through Outfall 001
	Sodium hypochlorite (12.5%)	Biocide			Dissociates in water.
Cycle water chemical control	Aqua ammonia (19%)	pH adjustment			Dissociates in water.
Clarite filters	Solka Floc (cellulose)	Filtration aid	n/a		Discharge through Outfall 001 - measured as TSS [wood fiber]
Closed-cycle cooling	MD4100	Corrosion inhibitor	2	700	No discharge
	Spectrus NX1106	Slimacide	0.1	35	No discharge
Coal yard	PC1192	Settling agent (runoff collection ponds)	100		Discharge through Outfall 001
	CoalTrol 60	Dust suppressant for conveyors	356	130,000	Incinerated in boiler
	Ethylene glycol	Conveyor belt deicer	As needed		Incinerated in boiler
	BT-210 W	Dust suppressant for conveyors barge unloaders	As needed		Incinerated in boiler
Drinking water treatment	Rock salt	Water softener regenerant			Dissociates in water.
	Sodium hypochlorite (5%)	Biocide			Dissociates in water. Discharges to POTW
Chemical metal cleaning waste	Hydroxy acetic acid	Cleaning solvent			Dissociates in water.
	Formic acid	Cleaning solvent			Dissociates in water.
	Ammonium bifluoride	Cleaning solvent - inhibitor			Dissociates in water.
	Sodium hydroxide	pH adjustment			Dissociates in water.
	Calcium oxide	pH adjustment			Dissociates in water.
	Hydrochloric acid	pH adjustment			Dissociates in water.
Fire System Water	Scaletrol PDC9325	Deposit control agent			
Reverse Osmosis Unit	Hypersperse MDC775	Antiscalent & antifoulant	30.0		Discharge through Outfall 001
	Biomate MBC2881	Biocide	18.0		Discharge through Outfall 001
	Solisep MPT100	Filter aid	17.9		Discharge through Outfall 001
	Kleen MCT515	High pH liquid cleaner	208.6		Discharge through Outfall 001
	50% NaOH	High pH liquid cleaner			Dissociates in water.

Appendix C
Building Block Calculations

Total Suspended Solids

WASTESTREAM	DESIGNATION	AVERAGE FLOW	TSS Allocation		CiFi			
		gpd	Avg	Max	Avg	Max		
Bottom ash transport water	Regulated	4,610,000	30	100	138,300,000	461,000,000		
Coal storage area runoff	Regulated	60,000	30	50	1,800,000	3,000,000		
Low-volume wastewaters	Regulated	14,600,000	30	100	438,000,000	1,460,000,000		
Cooling tower blowdown	Unregulated	5,360,000	30	100	160,800,000	536,000,000		
Demineralizer backwash	Regulated	9,900	30	100	297,000	990,000		
Landfill runoff	Dilution	0	0	0	0	0		
Plant area	Dilution	0	0	0	0	0		
Boiler blowdown	Dilution	0	0	0	0	0		
Landfill leachate	Dilution		0	0	0	0		
	F_T:	24,639,900				$\Sigma C_i F_i$:	739,197,000	2,460,990,000
						C_T AVG (mg/L) =		30.0
						C_T MAX (mg/L) =		99.9

Appendix C (cont.)
Building Block Calculations

Oil and Grease

WASTESTREAM	DESIGNATION	AVERAGE FLOW	O & G Allocation		CiFi			
		gpd	Avg	Max	Avg	Max		
Bottom ash transport water	Regulated	4,610,000	15	20	69,150,000	92,200,000		
Coal storage area runoff	Unregulated	60,000	15	20	900,000	1,200,000		
Low-volume wastewaters	Regulated	14,600,000	15	20	219,000,000	292,000,000		
Cooling tower blowdown	Dilution	5,360,000	0	0	0	0		
Demineralizer backwash	Dilution	0	0	0	0	0		
Landfill runoff	Dilution	1	0	0	0	0		
Plant area	Dilution	0	0	0	0	0		
Boiler blowdown	Dilution	0	0	0	0	0		
Landfill leachate	Regulated	0	15	20	2	3		
	F_T:	24,630,002				$\Sigma C_i F_i$:	289,050,002	385,400,003
						C_T AVG (mg/L) =		11.7
						C_T MAX (mg/L) =		15.6

Appendix D
Waste Load Allocation