

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO: 20261007 – IN0050296 – D + ATEL
DATE OF NOTICE: October 7, 2026
DATE RESPONSE DUE: November 6, 2026

The Office of Water Quality proposes the following draft NPDES permit including renewal of the facility's Section 316(a) Alternate Thermal Effluent Limits (ATEL):

MAJOR NPDES PERMIT and ATEL RENEWAL:

Hallador Power Company LLC, Permit No. IN0050296, SULLIVAN COUNTY, 5500 West Old Highway 54, Sullivan, IN. The permittee has submitted renewal applications for its NPDES permit and also for its Section 316(a) variance under the Clean Water Act and in accordance with 327 IAC 5-7 for the thermal component of its discharge. The permittee operates a coal-fired steam electric generating plant consisting of two (2) units with a total output capacity of 1,094 megawatts. The facility discharges 401 MGD of treated sanitary wastewater, non-process wastewater, process wastewater and stormwater via the following existing permitted outfalls.

Outfall No	Latitude	Longitude	Receiving Waters
001	39° 05' 09"	-87° 30' 32"	Turtle Creek Reservoir
002	39° 02' 37"	-87° 31' 30"	Turtle Creek
001S	39° 04' 17"	-87° 30' 56"	Turtle Creek Reservoir
002S	39° 03' 52"	-87° 30' 58"	Turtle Creek Reservoir
003S	39° 03' 39"	-87° 31' 00"	Turtle Creek Reservoir
005S	39° 04' 15"	-87° 31' 03"	Turtle Creek Reservoir
006S	39° 04' 52"	-87° 30' 39"	Turtle Creek Reservoir

Thermal Effluent Limitations

The thermal component of the permittee's discharge (noncontact cooling water) is subject to effluent limitations under Section 301 of the Clean Water Act. Section 316(a) of the CWA authorizes the NPDES permitting authority to impose alternative effluent thermal limitations for the control of the thermal component of a discharge in lieu of the effluent limits that would otherwise be required under Section 301 of the CWA. IDEM is proposing to include monitoring and reporting requirements for temperature at Outfall 001 and temperature effluent limitations at Outfall 002 based on 327 IAC 2-1-6(b)(4).

In the absence of a 316(a) thermal variance, in addition to the narrative requirements under 327 IAC 2-1-6(b)(4), the water quality criteria for temperature under 327 IAC 2-1-6(b)(4) would apply to the discharge from Outfall 001. In part, these criteria are as follows:

Water temperatures shall not exceed the maximum limits in the following table during more than one percent (1%) of the hours in the twelve (12) month period ending with any month. At no time shall the water temperature at such locations exceed the maximum limits in the following table by more than three (3) degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius).

Water Quality Based Thermal Effluent Limitations Table

Month	Temperature °F(°C)
January	50 (10.0)
February	50 (10.0)
March	60 (15.6)
April	70 (21.1)
May	80 (26.7)
June	90 (32.2)
July	90 (32.2)
August	90 (32.2)
September	90 (32.2)
October	78 (25.6)
November	70 (21.1)
December	57 (14.0)

Alternate Thermal Effluent Limitations: The permittee has requested that the alternate thermal limitations developed pursuant to Section 316(a) of the Clean Water Act for the discharge from Outfall 001 be extended in the reissued permit instead of the thermal limitations applicable under Section 301 of the Clean Water Act and Indiana Water Quality Standards. In the previous NPDES permit IDEM authorized the permittee to alter the point of compliance for achieving the above-referenced table of effluent limits. As a result of this approval the thermal effluent limits would continue to be applicable at Outfall 002, in lieu of Outfall 001. Outfall 002 is the outlet from Turtle Creek Reservoir into Turtle Creek.

The temperature measurements shall be recorded continuously in one-hour intervals, and the total number of hours above the corresponding maximum limits in the table for the twelve (12) months shall be reported. The twelve months shall include the current month and the previous eleven (11) months.

PROCEDURES TO FILE A RESPONSE

You are hereby notified of the availability of a 30-day public comment period regarding the referenced draft permit renewal and ATEL renewal, in accordance with IC 13-15-5-1 and 327 IAC 5-3-9. The application and draft permit documents are available for inspection at IDEM, Central Office in Indianapolis, IN. 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.

The draft NPDES permit renewal, the fact sheet, and supporting documents are posted online with the public notice document. The proposed decision to issue a permit is tentative. Interested persons are invited to submit written comments regarding the draft permit. **All written comments must be postmarked or received no later than the Response Due Date of this Notice to be considered in the decision to issue a final permit.** Comments must be submitted to IDEM, to the attention of the Permit Manager/Contact Person whose contact information is listed below. You may submit comments to IDEM via email at HEtter@idem.IN.gov. Otherwise, please deliver or mail comments to the address below:

IDEM, Office of Water Quality
Industrial NPDES Permits Section
Attn: Heidi Etter, Permit Manager
100 N. Senate Ave, 12th Floor East
Indianapolis, IN 46204-2251

Contact Person: Ms. Heidi Etter, Permit Manager
Telephone number: (317) 233-4903
Email address: HETter@idem.in.gov.

Notices of subsequent permit action will ONLY be sent to persons who provide their contact mailing address or Email address and cannot be made to persons who fail to request such notifications.

For your rights & responsibilities see: Public Notices at <https://www.in.gov/idem/public-notices/>. For more information, please visit our Online Citizens' Guide: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. Please tell others whom you think would be interested in this matter.

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

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Mike Braun
Governor

Clint Woods
Commissioner

October 7, 2026

VIA ELECTRONIC MAIL

Heath Lovell, President
Hallador Power Company, LLC
1183 East Canvasback Drive
Terre Haute, IN 47802

Dear Heath Lovell:

Re: NPDES Permit No. IN0050296
Draft Permit
Hallador Power Company, LLC
Sullivan, IN – Sullivan County

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

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

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



Questions concerning this draft permit may be addressed to Heidi Etter of my staff, at 317/233-4903 or hetter@idem.in.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Hamblin". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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

Enclosures

cc: Sullivan County Health Department
Chief, Permits Section, U.S. EPA, Region 5
Scott McGuire, Hallador Power Company, LLC
Anthony Brklach, Hallador Power Company, LLC
Will Gardner, Taft Law
Kristen Belcredi, Keramida, Inc.
Holly Zurcher, IDEM
Andrew Dryden, IDEM
Troy Weaver, IDEM
Shyamala Raman, IDEM

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Clean Water Act" or "CWA"), and IDEM's authority under IC 13-15,

HALLADOR POWER COMPANY, LLC
MEROM GENERATING STATION

is authorized to discharge from a steam electric generating facility that is located at 5500 West Old Highway 54, Sullivan, Indiana to receiving waters identified as Turtle Creek Reservoir and Turtle Creek 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

- 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 39° 05' 09", Longitude -87° 30' 32". The discharge is limited to once-through cooling water, low volume wastewater, metal cleaning waste, treated sanitary wastewater, FGD process wastewater [11], bottom ash purge water [14], landfill area storm water and groundwater, landfill leachate, reverse osmosis reject water, run off from coal and limestone piles, and storm water from industrial areas around the powerhouses and near the railroad. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Turtle Creek Reservoir. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][10]

Outfall 001

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Daily	Continuous
River Intake Flow	Report	Report	MGD	----	----	----	1 X Daily	24-Hr. Total
TCR Intake Flow	Report	Report	MGD	----	----	----	1 X Daily	24-Hr. Total
BA Purge Volume [14][15]	0.18 [16]	Report	MGD	----	----	----	1 X Daily	24-Hr. Total
Temperature	----	----	----	----	Report	°F	1 X Daily	Continuous [12]
TSS	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
TRC [5][8]								
Continuous [7]	----	----	----	0.01 [6]	0.02 [6]	mg/l	1 X Weekly	Grab
Intermittent [9]	----	----	----	----	0.2	mg/l	1 X Weekly	Grab
Chlorination [9]								
Frequency	----	----	----	----	4	times/day	1 X Daily	Report
Duration	----	----	----	----	40	min/dose	1 X Daily	Report
Boron [4]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Copper [4]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Selenium [4][5]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Mercury [4][5]	----	----	----	----	Report	ng/l	6 X Yearly [13]	Grab
Arsenic [4][5]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Antimony [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Barium [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Beryllium [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Cadmium [4]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Total Chromium [4]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Cobalt [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Lead [4]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Lithium [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Molybdenum [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Thallium [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Radium 226 and 228 combined [4][5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Calcium	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chloride	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Fluoride [5]	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Sulfate	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
TDS	----	----	----	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [3][17]	6.0	----	9.0	s.u.	1 X Daily	Grab

- [1] See Part I.B. of the permit for the minimum narrative limitations.
- [2] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: <https://www.in.gov/idem/forms/idem-forms-list/>.
- [3] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.
- [4] The permittee shall measure and report the identified metal as total recoverable metal.
- [5] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.25 ng/l	0.5 ng/l
Arsenic	3113 B-2004	1 µg/l	3.2 µg/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 µg/l	1.6 µg/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 µg/l	1.3 µg/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 µg/l	1.9 µg/l
Radium 226 and 228 combined	903.0	0.253 pCi/L	0.805 pCi/L
Thallium	200.8 Rev. 5.4 (1994)	0.073 µg/l	1.0 µg/l
Thallium	200.7 Rev. 4.4 (1994)	5 µg/l	10 µg/l
Molybdenum	200.8 Rev. 5.4 (1994)	0.48 µg/l	5.0 µg/l
Molybdenum	200.7 Rev. 4.4 (1994)	25 µg/l	50 µg/l
Lithium	200.7 Rev. 4.4 (1994)	5.9 µg/l	20.0 µg/l
Cobalt	200.8 Rev. 5.4 (1994)	0.086 µg/l	1.0 µg/l
Cobalt	200.7 Rev. 4.4 (1994)	5 µg/l	10 µg/l
Beryllium	200.8 Rev. 5.4 (1994)	0.033 µg/l	0.20 µg/l
Barium	200.8 Rev. 5.4 (1994)	4.9 µg/l	15.6 µg/l
Barium	200.7 Rev. 4.4 (1994)	25 µg/l	50 µg/l
Antimony	200.8 Rev. 5.4 (1994)	0.13 µg/l	1.0 µg/l
Antimony	200.7 Rev. 4.4 (1994)	3 µg/l	6 µg/l
Fluoride	SM 4500F/C	0.021 mg/l	0.10 mg/l
Fluoride	300.0	0.05 mg/l	0.1 mg/l
Chlorine, Total residual	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l

Case-Specific LOD/LOQ

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

- [6] The water quality based effluent limit (WQBEL) for Total Residual Chlorine (TRC) is less than the limit of quantitation (LOQ) as specified in footnote [5]. 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 [5] 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 2 X Weekly and remain at this increased sampling frequency until:
 - (a) The increased sampling frequency for 2 X Weekly has been in place for at least five (5) 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 [5] in at least seven (7) out of the nine (9) most recent analyses.
- [7] Continuous chlorination is considered as all occurrences that do not meet the definition of intermittent chlorination, as described in 327 IAC 2-1-6 Table 1, Footnote [6]. These water quality-based effluent limits (WQBELs) are applicable any time that the discharge of chlorine does not meet this intermittent definition.
- [8] Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.
- [9] This daily maximum limit for total residual chlorine is only applicable if the discharge of chlorine is intermittent. As required by 327 IAC 2-1-6 Table 1, Footnote [6], to be considered an intermittent discharge, total residual chlorine shall not be detected in the discharge for a period of more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours. Simultaneous multi-unit chlorination is permitted.
- [10] 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.
- [11] Effective December 31, 2028, FGD wastewater must meet final effluent limitations at Internal Outfall 801.
- [12] Temperature measurements shall be recorded continuously in one-hour intervals, and the highest recorded temperature for each calendar day submitted on the MMR/DMR.

- [13] Effluent mercury monitoring shall be conducted 6 X annually, monitoring in the months of February, April, June, August, October and December of each year for the term of the permit.
- [14] There shall be no discharge of bottom ash transport wastewater generated after December 31, 2025, except for bottom ash purge water, which is limited to a maximum of 10% of the primary active wetted bottom ash system volume (0.09 MGD per unit) purged on a 30-day rolling average basis. Per 40 CFR 423.13(k)(4)(i), there shall be zero-liquid discharge of bottom ash transport wastewater, including purge water, as soon as possible but no later than December 31, 2034.
- [15] Bottom Ash Purge Water Requirements can be found in Part III.D of the permit. All bottom ash purge water flows shall be measured using a valid flow monitor.
- [16] The permittee shall report the maximum 30-day rolling average purge volume during the monitoring period. The 30-day rolling average volume shall be calculated as the average of the measured daily values from the most recent 30-day period.
- [17] In accordance with 327 IAC 2-1-6(b)(2), the pH of the effluent may not exceed nine (9.0) s.u. as a daily maximum, except in the case of daily fluctuations attributable to photosynthetic activity. Notice of such exceedances must accompany the monthly DMR form for each day the daily maximum limitation is exceeded.

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 39° 02' 37", Longitude -87° 31' 30". The discharge is limited to reservoir water and discharge from Outfall 001. Outfall 002 is the point of compliance for the 316(a) thermal variance subject to terms and conditions of this permit. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge from Turtle Creek Reservoir but prior to entry into Turtle Creek. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Outfall 002

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Temperature [1]	----	----	----	----	Report	°F	1 X Daily	Continuous [2]

- [1] The discharge from Outfall 002 shall not exceed the maximum limits in the following table more than one percent (1%) of the hours in the twelve (12) month period ending with any month.

At no time shall the water temperature of the discharge from Outfall 002 exceed the maximum limits in the following table by more than three degrees Fahrenheit (3°F) (one and seven-tenths degrees Celsius (1.7°C)).

Table 1

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
°F	50	50	60	70	80	90	90	90	90	78	70	57
°C	10	10	15.6	21.1	26.7	32.2	32.2	32.2	32.2	25.5	21.1	14

- [2] Temperature measurements shall be recorded continuously in one-hour intervals, and the total number of hours above the corresponding maximum limits in the table in Footnote [1] for the twelve (12) months shall be reported. The twelve months shall include the current month and the previous eleven (11) months.

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 Internal Outfall 101. The discharge is limited to low volume wastewater, metal cleaning waste, bottom ash purge water [6], FGD process wastewater [4], reverse osmosis reject water, and run off from coal and limestone piles. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Internal Outfall 101

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	mg/l	1 X Weekly	Estimate
TSS	----	----	----	29	89	mg/l	1 X Weekly	Grab
Oil & Grease	----	----	----	12	16	mg/l	1 X Weekly	Grab
Iron [2][3]	----	----	----	1.0	1.0	mg/l	1 X Daily	Grab
Copper [2][3]	----	----	----	0.86	0.86	mg/l	1 X Daily	Grab
Boron [2]	----	----	----	Report	Report	mg/l	1 X Weekly	Grab
Arsenic [1][2]	----	----	----	Report	Report	mg/l	1 X Weekly	Grab
Selenium [1][2]	----	----	----	Report	Report	mg/l	1 X Weekly	Grab
Mercury [1][2]	----	----	----	Report	Report	ng/l	1 X Weekly	Grab
Nitrate+Nitrite as N	----	----	----	Report	Report	mg/l	1 X Weekly	Grab
Sulfate	----	----	----	Report	Report	mg/l	1 X Weekly	Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [5]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.2 ng/l	0.5 ng/l
Arsenic	3113B-2004	1 ug/l	3.2 ug/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 ug/l	1.6 ug/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 ug/l	1.3 ug/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 ug/l	1.9 ug/l

- [2] The permittee shall measure and report the identified metal as total recoverable metal.
- [3] Monitoring requirements and effluent limits are only applicable during periods of discharge of metal cleaning wastes.
- [4] Effective December 31, 2028, FGD wastewater must meet final effluent limitations at Internal Outfall 801.
- [5] 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] Per 40 CFR 423.13(k)(4)(i), there shall be zero-liquid discharge of bottom ash transport wastewater, including purge water, as soon as possible but no later than December 31, 2034.

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. The discharge is limited to treated sanitary wastewater. 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 discharge canal. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Outfall 201

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Weekly	Estimate
TSS	----	----	----	12	18	mg/l	1 X Weekly	Grab
CBOD ₅	----	----	----	10	15	mg/l	1 X Weekly	Grab
Ammonia as N								
Summer [1]	----	----	----	1.1	1.6	mg/l	1 X Weekly	Grab
Winter [1]	----	----	----	1.6	2.4	mg/l	1 X Weekly	Grab
<i>E. coli</i> [2]	----	----	----	125 [3]	235 [4]	cfu/100mL	1 X Weekly	Grab
Phosphorus	----	----	----	----	1.0	mg/l	1 X Weekly	Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [5]	6.0	----	9.0	s.u.	2 X Weekly	Grab

- [1] Summer limitations apply from May 1 through November 30. Winter limitations apply from December 1 through April 30.
- [2] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations do not occur from April 1 through October 31 annually.
- [3] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.
- [4] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a

calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.

- [5] 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.

5. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 601. The discharge is limited to landfill area groundwater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Outfall 601

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Weekly	Estimate
Selenium [1][2]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Copper [2]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Lead [2]	----	----	----	----	Report	mg/l	1 X Monthly	Grab
Sulfate	----	----	----	----	Report	mg/l	1 X Monthly	Grab

Table 2

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

- [1] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Selenium	200.9, Rev. 2.2 (1994)	0.6 ug/l	1.9 ug/l

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

- [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 from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 801. The discharge is limited to FGD process wastewater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [7]

Outfall 801

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Weekly	Estimate
Arsenic [1][2] Interim [3] Final [4]	----	----	----	Report Report	Report 5	µg/l µg/l	1 X Monthly 1 X Weekly	Grab Grab
Mercury [1][2] Interim [3] Final [4]	----	----	----	Report 10	Report 23	ng/l ng/l	1 X Quarterly [5] 1 X Weekly	Grab Grab
Selenium [1][2] Interim [3] Final [4]	----	----	----	Report Report	Report 10	µg/l µg/l	1 X Monthly 1 X Weekly	Grab Grab
Nitrate/Nitrite Interim [3] Final [4]	----	----	----	Report 1.2	Report 2.0	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab
Bromide Interim [3] Final [4]	----	----	----	Report Report	Report 0.2	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab
Total Dissolved Solids (TDS) Interim [3] Final [4]	----	----	----	Report 149	Report 306	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab

Table 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [6]	6.0	----	9.0	s.u.	1 X Weekly	Grab

- [1] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.2 ng/l	0.5 ng/l
Arsenic	3113B-2004	1 ug/l	3.2 ug/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 ug/l	1.6 ug/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 ug/l	1.3 ug/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 ug/l	1.9 ug/l

- [2] The permittee shall measure and report the identified metal as total recoverable metal.
- [3] During the interim period, from the effective date of the permit until December 31, 2028, Hallador Merom shall monitor and report the above parameters.
- [4] Final effluent limitations become effective December 31, 2028.
- [5] 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.

- [6] 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.
- [7] Pursuant to 40 CFR 423.19(j)(3)-(4), the permittee must submit an annual progress report detailing the completion of interim milestones presented in the engineering dependency chart from their October 3, 2025 Notice of Planned Participation since the previous progress report, provide a narrative discussion of completed, missed, or delayed milestones, and provide updated milestones. This annual progress report shall be submitted to the Industrial NPDES Permit Section IDEM-OWQ at OWQWWPER@idem.in.gov by January 31 of each year.

7. 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 110. The discharge is limited to FGD process area stormwater and once-through vacuum seal water. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]

Outfall 110

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Weekly	Estimate
TSS	----	----	----	Report	Report	mg/l	1 X Weekly	Grab
Arsenic [2][3]	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Mercury [2][3]	----	----	----	Report	Report	ng/l	1 X Quarterly [5]	Grab
Selenium [2][3]	----	----	----	Report	Report	µg/l	1 X Monthly	Grab
Boron [3]	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Chloride	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Sulfate	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Hardness	----	----	----	Report	Report	mg/l	1 X Monthly	Grab

Table 2

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

- [1] There shall be no discharge of FGD wastewater, as defined by 40 CFR 423.11(n), from Outfall 110.
- [2] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631E	0.2 ng/l	0.5 ng/l
Arsenic	3113B-2004	1 ug/l	3.2 ug/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 ug/l	1.6 ug/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 ug/l	1.3 ug/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 ug/l	1.9 ug/l

- [3] The permittee shall measure and report the identified metal as total recoverable metal.
- [4] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.
- [5] 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.

8. 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 111. The discharge is limited to landfill leachate [1]. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to commingling with other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1]
Outfall 111

Table 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Weekly	Estimate
TSS	----	----	----	30	100	mg/l	1 X Weekly	Grab
Oil & Grease	----	----	----	15	20	mg/l	1 X Weekly	Grab
Selenium [2][3]	----	----	----	Report	Report	µg/l	1 X Monthly	Grab
Boron [3]	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Chloride	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Sulfate	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Hardness	----	----	----	Report	Report	mg/l	1 X Monthly	Grab

[1] There shall be no discharge of pollutants in combustion residual leachate pursuant to 40 CFR 423.13(l)(1)(i) by December 31, 2034.

- [2] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Selenium	200.9, Rev. 2.2 (1994)	0.6 ug/l	1.9 ug/l

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

9. The permittee is authorized to discharge stormwater from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfalls 001S, 002S, 003S, 005S, and 006S. The location of each of these outfalls is listed below:

001S: Latitude 39° 04' 17", Longitude -87° 30' 56"
 002S: Latitude 39° 03' 52", Longitude -87° 30' 58"
 003S: Latitude 39° 03' 39", Longitude -87° 31' 00"
 005S: Latitude 39° 04' 15", Longitude -87° 31' 03"
 006S: Latitude 39° 04' 52", Longitude -87° 30' 39"

Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Turtle Creek Reservoir. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][4]
 Outfall 001S, 002S, 003S, 005S, 006S

<u>Parameter</u>	<u>Daily Maximum</u>	<u>Units</u>	<u>Monitoring Requirements</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	MGD	1 X Yearly	Estimate Total
Total Suspended Solids	Report	mg/l	1 X Yearly	Grab
pH [5]	Report	s.u.	1 X Quarterly	Grab
Oil & Grease	Report	mg/l	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 plus Nitrite Nitrogen	Report	mg/l	1 X Yearly	Grab
Total Phosphorus	Report	mg/l	1 X Yearly	Grab
Boron [3][5]	Report	mg/l	1 X Quarterly	Grab
Selenium [3][5]	Report	mg/l	1 X Quarterly	Grab
Sulfate [5]	Report	mg/l	1 X Quarterly	Grab
Arsenic [3][5]	Report	mg/l	1 X Quarterly	Grab
Mercury [3]	Report	ng/l	1 X Yearly	Grab

- [1] The Stormwater Monitoring and Non-Numeric Effluent Limits and the Stormwater Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.
- [2] All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

For each sample taken, the permittee shall record the duration and total rainfall of the storm event, the number of hours between beginning of the storm measured

and the end of the previous measurable rain event, and the outside temperature at the time of sampling.

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

- [3] The permittee shall measure and report the identified metal as total recoverable metal.
- [4] See Part I.B. of the permit for the minimum narrative limitations.
- [5] Samples shall be taken once at any time during each of the four annual quarters:
 - (A) January-February-March;
 - (B) April-May-June;
 - (C) July-August-September; and
 - (D) October-November-December.

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

B. MINIMUM NARRATIVE LIMITATIONS

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

1. including waters within the mixing zone, to contain substances, materials, floating debris, oil, scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:
 - a. will settle to form putrescent or otherwise objectionable deposits;
 - b. are in amounts sufficient to be unsightly or deleterious;
 - c. produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
 - d. are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
 - e. are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
2. outside the mixing zone, to contain substances in concentrations that on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge flow and shall be taken at times which reflect the full range and concentration of effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameters.

2. Monthly Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management (IDEM) containing results obtained during the previous month and shall be submitted no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be

limited to, the Discharge Monitoring Report (DMR) and the Monthly Monitoring Report (MMR). All reports shall be submitted electronically by using the NetDMR application, upon registration, receipt of the NetDMR Subscriber Agreement, and IDEM approval of the proposed NetDMR Signatory. Access the NetDMR website (for initial registration and DMR/MMR submittal) via CDX at: <https://cdx.epa.gov/>. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit. See Part II.C.10 of this permit for Future Electronic Reporting Requirements.

- a. Calculations that require averaging of measurements of daily values (both concentrations and mass) shall use an arithmetic mean, except the monthly average for *E. coli* shall be calculated as a geometric mean.
- b. Daily effluent values (both mass and concentration) that are less than the LOQ that are used to determine the monthly average effluent level shall be accommodated in calculation of the average using statistical methods that have been approved by the Commissioner.
- c. Effluent concentrations less than the LOD shall be reported on the Discharge Monitoring Report (DMR) forms as < (less than) the value of the LOD. For example, if a substance is not detected at a concentration of 0.1 µg/l, report the value as <0.1 µg/l.
- d. Effluent concentrations greater than or equal to the LOD and less than the LOQ that are reported on a DMR shall be reported as the actual value and annotated on the DMR to indicate that the value is not quantifiable.
- e. Mass discharge values which are calculated from concentrations reported as less than the value of the limit of detection shall be reported as less than the corresponding mass discharge value.
- f. Mass discharge values that are calculated from effluent concentrations greater than the limit of detection shall be reported as the calculated value.

3. Definitions

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

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

- b. "Daily Discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four-hour period that reasonably represents the calendar day for the purposes of sampling.
- c. "Daily Maximum" means the maximum allowable daily discharge for any calendar day.
- d. A "24-hour composite sample" means a sample consisting of at least 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. 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 revise the IDEM approved Alternative Thermal Effluent Limitations (ATELs) in the permit pursuant to 327 IAC 5-7, 40 CFR 125, Subpart H, and section 316(a) of the Clean Water Act supported by an updated 316(a) Demonstration.
6. to be consistent with any revisions to the federal effluent guidelines applicable to this facility: including the Steam Electric Power Generating effluent guidelines (40 CFR 423), if the revised guidelines as issued or approved contains different conditions than those in the permit, including, but not limited to, different compliance deadlines or effluent limits.

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: Arsenic, Selenium, Copper, Mercury.

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. Thermal Effluent Requirements

The permittee has a 316(a) variance and alternative thermal effluent limitations at Outfalls 001 and 002. These alternative thermal effluent limitations are located in Part I.A.1 (Outfall 001) and Part I.A.2. (Outfall 002) of the permit. The facility is required to submit an addendum to the April 7, 2017 316(a) demonstration by October 31, 2029.

B. Polychlorinated Biphenyl

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

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

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

C. Fish Tissue and Water Column Sampling

The permittee shall submit a written selenium study plan to the Compliance Data Section and Permits Branch, Office of Water Quality (OWQ), within six (6) months of the effective date of the permit renewal. The study plan shall define the protocol that will be used by the permittee to assess the impact of selenium discharges from the Merom Generating Station on the concentrations of selenium in fish tissue and concentrations of selenium in the water column in Turtle Creek Reservoir. The study plan shall account for the following:

1. Per 327 IAC 2-1-6(a)(4), any proposal to sample fish tissue must be submitted to the department for review and approval prior to initiation of sampling, and the department will evaluate all representative fish tissue data that meets the requirements of the study approved by IDEM to determine compliance with a fish tissue criterion element.
2. The department's review of the study plan will consider, at a minimum, the historical fish tissue data collected in Turtle Creek Reservoir and the IDEM guidance document, "Guidance for the Collection of Fish Tissue and/or Water

Column Data for Implementation of Indiana's Selenium Chronic Aquatic Life Criteria", Version 1.0, November 2024.

3. Collection and analyses described in the study plan must meet data quality assessment Level 3 requirements as described in the "Technical Guidance for the Office of Water Quality External Data Framework", IDEM 2024.
4. The spatial extent of the study plan shall include the entire reservoir, divided into a minimum of two sampling reaches. The upper reach shall include littoral habitats within approximately 2000 meters of permitted Outfall 001 to Turtle Creek Reservoir, and the lower reach shall include littoral habitats within approximately 2000 meters of the dam prior to Turtle Creek.
5. Three composite samples, one each for the target species Bluegill, Largemouth Bass and Common Carp shall be collected for both the upper and lower reaches. Composite fillet samples shall be collected for Bluegill and Largemouth Bass and composite whole-body samples shall be collected for Common Carp.
6. Water column data shall be collected at the same time as fish tissue sampling and shall be collected at the fish tissue sampling locations, the intake canal, at Outfall 001, and at the dam prior to Turtle Creek. Water samples shall be analyzed for total recoverable selenium and total dissolved selenium using a 40 CFR 136 Table 1B approved method with a limit of detection less than or equal to 1.0 µg/L.
7. The permittee shall continue the sampling schedule for fish tissue and water column data from the prior permit renewal with sampling conducted in odd numbered years.
8. A work plan must be submitted to IDEM for review and approval prior to commencing any sampling. Collection and analyses described in the work plan shall meet the data quality assessment Level 3 requirements as described in the "Technical Guidance for the IDEM Office of Water Quality External Data Framework," IDEM 2024. Tissue chemistry results, percent solids, individual total length, mean total length, individual weight, mean weight, and water chemistry results, as well as accompanying QA/QC information for each sample shall be electronically delivered, as soon as possible after laboratory analysis, to the Watershed Assessment and Planning Branch and Permits Branch of the Office of Water Quality at IDEM. Additionally, all data collected as part of the project work plan are to be submitted to the External Data Framework.
9. The hierarchy of the fish tissue criterion elements (i.e., egg-ovary data supersedes muscle/whole-body) in 327 IAC 2-1-6(a)(4) apply within each fish species.

D. Bottom Ash Purge Water Requirements

In addition to the BA purge monitoring requirement and limit established in Part I.A.1 of the permit for Outfall 001, the permittee must record the volume of the bottom ash purge water discharge and which of the four qualifying events per 40 CFR 423.13(k)(2)(i)(A) the discharge falls under. This information must be reported on DMRs.

Part IV Cooling Water Intake Structures

A. Best Technology Available (BTA) Determination

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

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

Based on available information, IDEM has made Best Technology Available (BTA) impingement and entrainment determinations:

IDEM has determined that the existing Wabash River CWIS at the Merom Generating Station meets BTA for impingement and entrainment. The Wabash River Intake meets the requirements for impingement compliance at 40 CFR 125.92(c)(2). Under this alternative, the permittee must operate a cooling water intake structure that has a maximum design through-screen intake velocity of 0.5 feet per second. Regarding entrainment BTA, IDEM finds that the existing Wabash River CWIS meets BTA for entrainment based on the intermittent and seasonal use of the intake, use of wedgewire screens, and relatively minor volumes of intake flows relative to the flow in the Wabash River.

For the Turtle Creek Reservoir (TCR) CWIS, IDEM has determined that the TCR CWIS is BTA for impingement mortality and entrainment. The TCR CWIS meets the definition of a closed-cycle recirculating system at 40 CFR 125.92(c) as the make-up water withdrawals (flows from the Wabash River intake) attributed to the cooling portion of the system (Turtle Creek Reservoir) are minimized.

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

B. Permit Requirements

The permittee shall comply with requirements below:

1. In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.
2. The permittee must at all times properly operate and maintain the cooling water intake structure and associated intake equipment.
3. The permittee must inform IDEM of any proposed changes to the CWIS or proposed changes to operations at the facility that affect the information taken into account in the current BTA evaluation.
4. Any discharge of intake screen backwash must meet the Minimum Narrative Limitations contained in Part I.B of the permit. There must be no discharge of debris from intake screen washing which will settle to form objectionable deposits which are in amounts sufficient to be unsightly or deleterious, or which will produce colors or odors constituting a nuisance.
5. The permittee must monitor the actual intake flow at a minimum frequency of daily. The monitoring must be representative of normal operating conditions, and must include measuring cooling water withdrawals, make-up water, and blowdown volume. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the actual intake flows measured at a minimum frequency of daily by January 31 of each year.
6. The permittee must either conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather).
7. 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.
8. 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)(13) 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.
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
Hallador Power Company, LLC
Merom Generating Station
Draft: September 2026
Final: TBD**

Indiana Department of Environmental Management

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

Permittee:	Hallador Power Company, LLC 1183 East Canvasback Drive Terre Haute, IN 47802
Existing Permit Information:	Permit Number: IN0050296 Expiration Date: January 31, 2026
Facility Contact:	Anthony Brklach, Engineer/Permit Coordinator (812) 299-2800 Ext. 211, ABrklach@halladorenergy.com
Facility Location:	5500 West Old Highway 54 Sullivan, IN 47882 Sullivan County
Receiving Stream(s):	Turtle Creek Reservoir & Turtle Creek
GLI/Non-GLI:	Non-GLI
Proposed Permit Action:	Renew
Date Application Received:	August 1, 2025
Source Category:	NPDES Major – Industrial
Permit Writer:	Heidi Etter (317) 233-4903, hetter@idem.in.gov

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1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from Hallador Power Company, LLC on August 1, 2025.

In accordance with 327 IAC 5-2-6(a), the current five-year permit was issued with an effective date of February 1, 2021. The permit was subsequently modified on September 2, 2022, ownership of the permit was transferred from Hoosier Energy Rural Electric Cooperative Inc. to Hallador Power Company, LLC in a modification on November 18, 2022, and an additional modification was issued on December 24, 2025. 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

Hallador Power Company, LLC – Merom Generating Station is classified under Standard Industrial Classification (SIC) Code 4911 – Electric Services.

The facility is a coal-fired steam electric generating plant consisting of two (2) units with a total output capacity of 1,094 megawatts. The facility discharges to Turtle Creek Reservoir through Outfall 001 via a cooling/discharge canal. Turtle Creek Reservoir was constructed for the primary purpose of water supply and cooling for electric generating purposes for the operation of Merom Generating Station.

2.2 Outfall Locations

Outfall 001	Latitude: 39° 05' 09" Longitude: -87° 30' 32"
Outfall 002	Latitude: 39° 02' 37" Longitude: -87° 31' 30"
Outfall 001S	Latitude: 39° 04' 17" Longitude: -87° 30' 56"
Outfall 002S	Latitude: 39° 03' 52" Longitude: -87° 30' 58"
Outfall 003S	Latitude: 39° 03' 39" Longitude: -87° 31' 00"
Outfall 005S	Latitude: 39° 04' 15" Longitude: -87° 31' 03"
Outfall 006S	Latitude: 39° 04' 52" Longitude: -87° 30' 39"

2.3 Descriptions of Outfalls and Wastewater Treatment

All wastewaters generated at the facility ultimately discharge into the Turtle Creek Reservoir (TCR). Outfall 001 conveys once-through cooling water, wastewater from the facility's six internal outfalls (described below), landfill leachate and stormwater from Hoosier Energy's outfalls (INJ064951), as well as stormwater into the Turtle Creek Reservoir.

Outfall 002 consists of discharge from Turtle Creek Reservoir to Turtle Creek.

Internal Outfalls

101 – Discharge consists of low volume wastewater, metal cleaning wastewater, bottom ash purge water, FGD process wastewater, reverse osmosis reject water, and run off from coal and limestone piles. Treatment for 101 includes sedimentation, neutralization, chemical precipitation, flocculation, oil/water separation, and sand filtration.

201 – Discharge consists of sanitary wastewater. Wastewaters are treated via an activated sludge wastewater plant followed by UV disinfection and multimedia filtration.

601 – Discharge consists of landfill area groundwater. No treatment is utilized at 601.

801 – Discharge consists of FGD process wastewater. Treatment includes sedimentation, neutralization, chemical precipitation, flocculation, and filtration via the wastewater treatment plant (WWTP) at Internal Outfall 101.

110 – Discharge consists of IUCS Plant and stormwater including FGD process area stormwater runoff and once-through vacuum pump seal water. No treatment is utilized at 110.

111 – Discharge consists of landfill leachate. No treatment is utilized at 111.

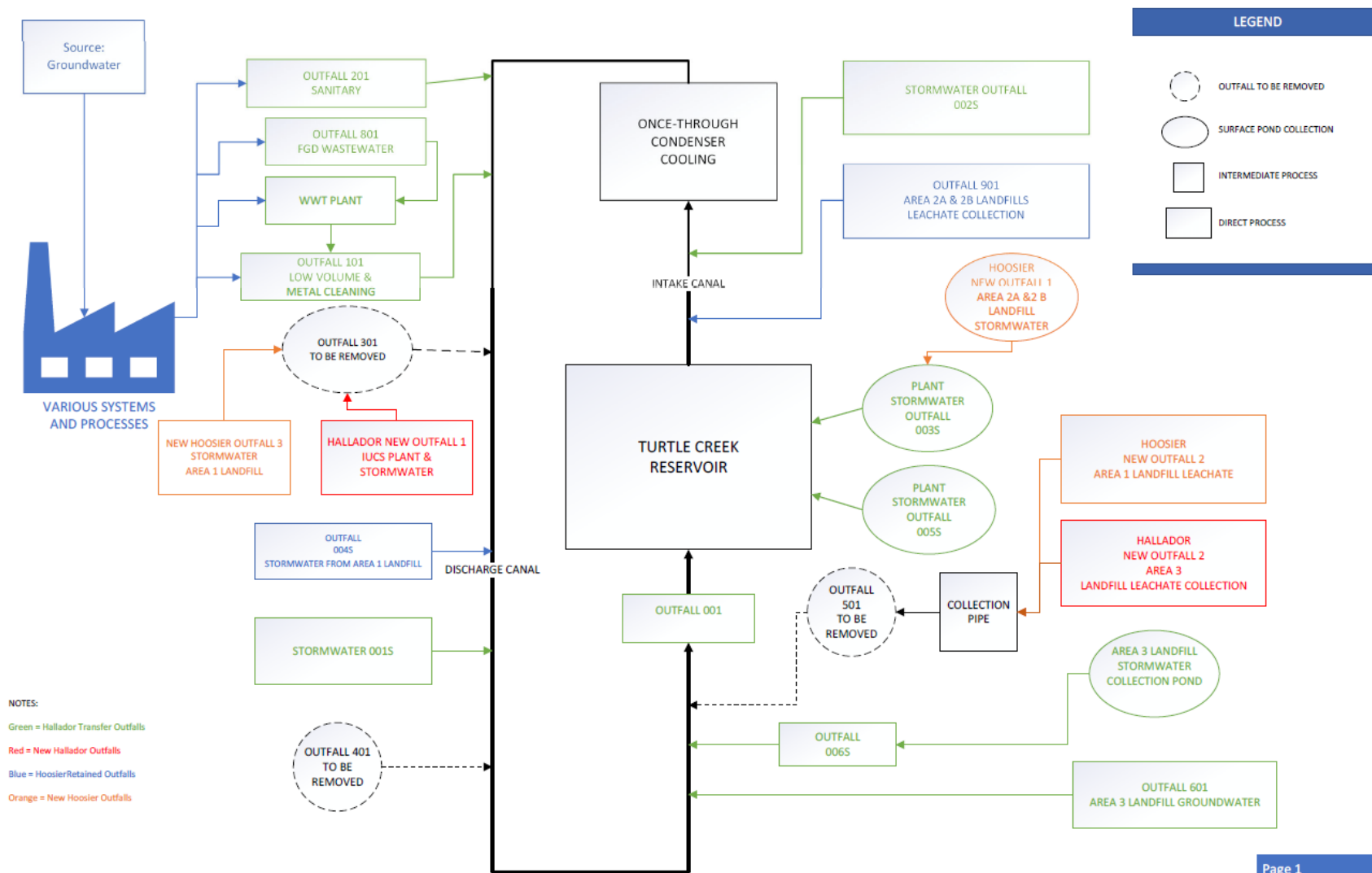
The facility has an average discharge of approximately 354.5 MGD to Turtle Creek Reservoir. A Water Balance Diagram has been included as Figure 2.

The WWTP at Internal Outfall 101, flow diagram included in Figure 3 below, has an average discharge of approximately 0.96 MGD.

Figure 2: Water Balance Diagram

July 30, 2025

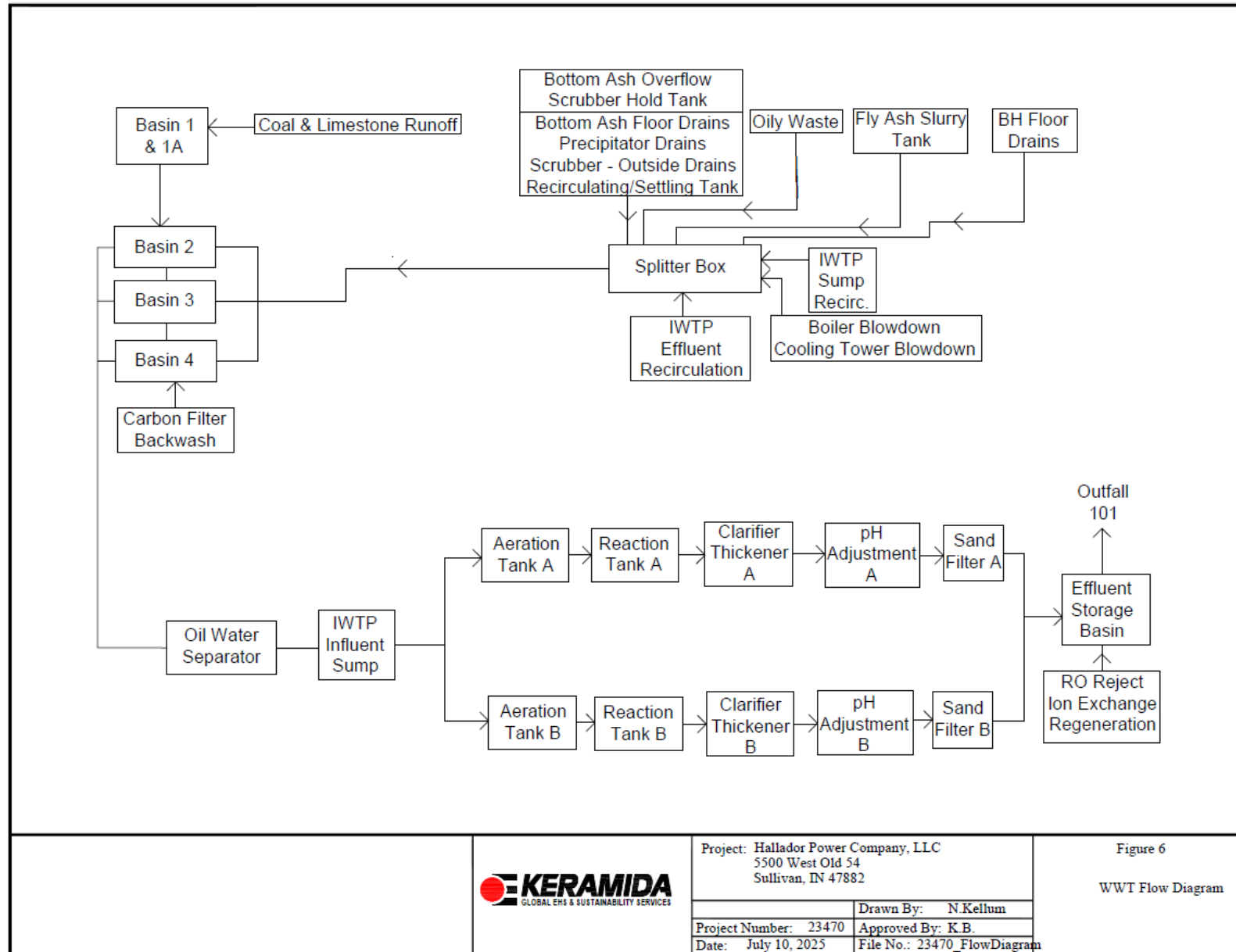
MEROM NPDES FLOW DIAGRAM



Page 1

Note: "Hallador New Outfall 1" and "Hallador New Outfall 2" listed in the flow diagram are Internal Outfall 110 and Internal Outfall 111, respectively.

Figure 3: WWTP Flow Diagram



Outfall 001: The average daily discharge from Outfall 001 to Turtle Creek Reservoir from January 2020 through August 2025 is 354.5 MGD. The design flow (highest monthly average) based on the most recent 2 years of data (September 2023 through August 2025) is 485.8 MGD.

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

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

2.4 Changes in Operation

NPDES Permit No. IN0050296 has been modified several times since the permit was renewed in 2021. The following is a brief description of each modification and the changes made, as well as a description of changes made in this renewal regarding responsible parties of certain outfalls.

September 2, 2022

The facility had announced intentions to retire the Merom Generating Station in 2023. However, Hoosier Energy Rural Electric Cooperative, Inc. submitted notice to IDEM on March 4, 2022 of its intent to transfer NPDES Permit No. IN0050296 to Hallador Power Company, LLC. Because the facility was no longer planning to retire in 2023, the permittee requested IDEM to make changes to the permit to address this. IDEM agreed to extend the compliance deadline for FGD wastewater and bottom ash transport water to December 31, 2025, extend the deadline for the thermal variance, confirmed the Wabash River Intake satisfied the BTA standards for impingement and entrainment, and concluded that the TCR intake meets BTA for impingement and entrainment mortality based on the use of a closed-cycle recirculating system.

November 18, 2022

NPDES Permit No. IN0050296 was transferred from Hoosier Energy Rural Electric Cooperative, Inc. to Hallador Power Company, LLC effective October 21, 2022.

December 24, 2025

Hallador Power Company, LLC submitted an initial certification statement to discharge bottom ash transport water pursuant to 40 CFR 423.13(k)(2)(i). They requested a purge allowance of up to ten (10) percent of the total system volume of Merom Generating Station's high recycle rate bottom ash transport system to manage chemistry, TSS, and significant storm events. Additionally, the permittee submitted a Notice of Planned Participation opting Merom Generating Station into the Voluntary Incentives Program (VIP). With this, the permittee requested the "final" FGD wastewater limits in the permit to be modified consistent with Table 7 of 40 CFR 423.13(g)(3)(i) and that the applicability date is established as December 31, 2028, as also required under 40 CFR 423.13(g)(3)(i). IDEM modified the permit to authorize the discharge of the bottom ash purge water, clarify bottom ash purge water discharge requirements, and implement VIP limits and requirements for FGD wastewater.

2026 Renewal

On February 6, 2023, Hallador and Hoosier Energy submitted a permit modification application to address the change in ownership and responsibility of certain outfalls in the current permit. The management of discharges from the Area 1, 2A, and 2B landfills would be the responsibility of Hoosier Energy moving forward, while the remaining outfalls would remain the responsibility of Hallador. After submitting the permit modification application, IDEM determined that the requested modifications would be addressed during this permit renewal. Therefore, in this renewal, the types of wastewater in each outfall and the location of certain outfalls are modified to segregate Hoosier Energy's Area 1, 2A, and 2B landfill leachate and stormwater from Hallador's outfalls.

External Outfalls 001 and 002, Internal Outfalls 101, 201, 601, and 801, and Stormwater Outfalls 001S, 002S, 003S, 005S, and 006S will remain on this permit and remain Hallador's responsibility. Two new outfalls have also been created due to the split of responsibilities: Internal Outfalls 110 and 111. Internal Outfalls 301, 401, 501, and 901 and Stormwater Outfall 004S have been removed from this permit.

2.5 Facility Stormwater

Stormwater from the facility is discharged through five outfalls: 001S, 002S, 003S, 005S, and 006S. Outfalls 001S and 006S discharge to Turtle Creek Reservoir via the discharge canal. Outfall 002S discharges to Turtle Creek Reservoir via the intake/discharge canal. Outfalls 003S and 005S discharge directly to Turtle Creek Reservoir. A description of the areas contributing to each stormwater outfall is included below.

001S – Includes areas around the FGD system including two scrubber buildings, thickener tanks, the maintenance building, the bottom ash tank system, and the fly ash storage silos.

002S – Includes areas around the Unit 1 Powerhouse, the electrostatic precipitators, the administration buildings, and its parking lot.

003S – Includes areas around the Unit 2 Powerhouse, warehouse areas, most of the roadways including the access road to landfill Area 2A/2B, and stormwater runoff from covered landfill Areas 2A/2B.

005S – Includes the area around the old Wastewater Treatment Facility.

006S – Stormwater runoff from landfill Area 3.

Coal and limestone storage piles are located north of the FGD system. All stormwater from these piles is routed to sedimentation basins, which overflow to Basin No. 2 of the wastewater treatment system and discharge via Internal Outfall 101. Scrubber solids and fly ash are mixed inside the Waste Stabilization Facility and disposed of, along with bottom ash, in an on-site landfill. Handling is completed inside buildings and minimizes the exposure to stormwater. Aboveground storage tanks and oil-filled equipment are equipped with secondary containment.

The facility is required to monitor stormwater at 001S, 002S, 003S, 005S, and 006S.

3.0 PERMIT HISTORY

3.1 Compliance History

A review of this facility's discharge monitoring data was conducted for compliance verification. This review indicates the following permit limitation violations between February 2021 and September 2025:

Outfall	Date	Violation
001	February 2021	TRC*
	January 2026	BA Purge Volume
	February 2026	BA Purge Volume
002	February 2021	Temperature
	January 2022	Temperature
	January 2023	Temperature
	February 2025	Temperature
	February 2026	Temperature
101	March 2021	Iron*
	October 2021	Iron*
	April 2022	Iron
	May 2022	TSS
	May 2022	Iron
	September 2022	Iron
	October 2022	Iron*
	November 2022	Iron*
	April 2023	Iron
	October 2023	Iron
	August 2024	TSS
201	January 2022	Ammonia
	January 2023	TSS*
	January 2023	Ammonia
	February 2023	Ammonia*
301**	February 2022	TSS
	March 2022	TSS
	July 2022	TSS
	June 2023	TSS*
401 ⁺	February 2022	TSS
	March 2022	TSS
	April 2022	TSS
	May 2022	TSS
	January 2023	pH
501 ⁺⁺	March 2021	O&G
	March 2022	TSS
	January 2024	TSS

*Violation of both the daily maximum and monthly average limits for this parameter occurred.

**Outfall 301 has been relocated and is now Outfall 110 and no longer contains landfill stormwater.

*Wastewater from Outfall 401 is no longer covered under this permit.

**Wastewater from Outfall 501 has been directed to two new outfalls. Area 1 landfill leachate is no longer covered under this permit. Area 3 landfill leachate is now covered under Outfall 111 in this permit.

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

4.0 LOCATION OF DISCHARGE/RECEIVING WATER USE DESIGNATION

The receiving waterbody for Outfall 001 is Turtle Creek Reservoir. Pursuant to 327 IAC 2-1-3, the applicable use designations of Turtle Creek Reservoir are: full-body contact recreation and capable of supporting a well-balanced, warm water aquatic community. In addition, the Turtle Creek Reservoir is used as an industrial water supply by the permittee. As provided by 327 IAC 2-1-4(e), no mixing zone is allowed for discharges to lakes, such as the Turtle Creek Reservoir, except for those consisting entirely of noncontact cooling water which meet the requirements set forth in Section 316(a) of the Clean Water Act.

Outfall 002 is the overflow of Turtle Creek Reservoir into Turtle Creek. The $Q_{7,10}$ low flow value of Turtle Creek is 0.0 cfs and also shall be capable of supporting a well-balanced, warm water aquatic community and full body contact recreation in accordance with 327 IAC 2-1-3.

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

A Site Map has been included as Figure 4.

Legend:

- Approximate Facility Boundary
- Hallador Power NPDES Points
- New Hallador Power Points

SCALE:

KERAMIDA
GLOBAL EHS & SUSTAINABILITY SERVICES

Project: Hallador Power Company, LLC 5500 West Old 54 Sullivan, IN 47882		Drawn By: N.Kellum
Project Number: 23606		Approved By: K.G.B.
Date: July 31, 2025		File No.: 23603 Figures

Outfall and Intake Locations
Hallador Power Company, LLC

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.

Turtle Creek Reservoir, Assessment-Unit INB11P1028_00, HUC 051201111601, is on the 2024 303(d) list for biological integrity impairments. Turtle Creek, Assessment-Unit INB11G2_T1007, HUC 051201111601, is not on the 2024 303(d) list for impairments. A TMDL for isn't currently planned for either waterbody.

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).

EPA Effluent Guidelines – Existing Source Standards (BAT/BPT)

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

Applicable ELG Subparts

Outfall	Subpart	Description
001	40 CFR 423.12(b)(6) 40 CFR 423.13(b)	Once Through Cooling Water
001, 101, 801	40 CFR 423.12(b)(1) 40 CFR 423.12(b)(2)	pH control and Polychlorinated biphenyl (PCB)
101	40 CFR 423.12(b)(3)	Low Volume Waste
	40 CFR 423.12(b)(11) 40 CFR 423.13(k)	Bottom Ash Purge Water
	40 CFR 423.12(b)(5) 40 CFR 423.13(e)	Metal Cleaning Waste
	40 CFR 423.12(b)(9)	Coal Pile Runoff
801	40 CFR 423.12(b)(11) 40 CFR 423.13(g)(3) 40 CFR 423.13(g)(4)	FGD Wastewater
111	40 CFR 423.12(b)(11) 40 CFR 423.13(l)	Combustion Residual Leachate

5.2 Water Quality-Based Effluent Limits (WQBELs)

WQBELs are designed to be protective of the beneficial uses of the receiving water and are independent of the available treatment technology. The WQBELs for this facility are based on water quality criteria in 327 IAC 2-1-6 or developed under the procedures described in 327 IAC 2-1-8.2 through 8.7 and 327 IAC 2-1-8.9, and implementation procedures in 327 IAC 5. Limitations are required for any parameter which has the reasonable potential to exceed a water quality criterion as determined using the procedures under 327 IAC 5-2-11.1(h).

5.3 Effluent Limitations and Monitoring Requirements by Outfall

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

5.3.1 All External Outfalls (001, 002, 001S, 002S, 003S, 005S, 006S)

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).

5.3.2 Outfall 001

Intake Flows

The intake flow at the Wabash River Intake (River Intake Flow) and Turtle Creek Reservoir Intake (TCR Intake Flow) is to be monitored to support the Best Technology Available (BTA) determinations for impingement and entrainment mortality.

Bottom Ash (BA) Purge Volume Per Unit

There shall be no discharge of bottom ash transport wastewater generated after December 31, 2025, except for bottom ash purge water, which is limited to a maximum of 10% of the primary active wetted bottom ash system volume purged on a 30-day rolling average basis. The BA purge volume limit included in the NPDES permit modification issued on December 24, 2025, was 0.09 MGD per unit. However, the facility has clarified that the high recycle rate bottom ash transport water system operates as a single system, with settling tanks and recirculation tanks being shared between the units. Therefore, the BA purge volume limit included in this NPDES permit renewal is 0.18 MGD (per system, not per unit). Per 40 CFR 423.13(k)(4)(i), there shall be zero-liquid discharge of bottom ash transport wastewater, including purge water, as soon as possible but no later than December 31, 2034.

The permittee must record the volume of the bottom ash purge water discharge and which of the four qualifying events per 40 CFR 423.13(k)(2)(i)(A) the discharge falls under. This information must be reported on Discharge Monitoring Reports (DMRs).

Temperature

Monitoring requirements for temperature at Outfall 001 are being retained from the September 2, 2022 permit modification. The permittee has a 316(a) variance and alternative thermal effluent limitations (reporting only) at Outfall 001 with WQBELs for temperature applied at Outfall 002 instead of Outfall 001. Application of the WQBELs at Outfall 002 instead of Outfall 001 allows the entire Turtle Creek Reservoir as a mixing zone. The permittee is required to submit an addendum to the April 7, 2017 316(a) demonstration by October 31, 2029. See Section 6.3 for more details on the 316(a) variance.

Total Suspended Solids (TSS)

TSS is a regulated conventional pollutant and is limited in the NPDES permit to ensure adequate wastewater treatment is provided and the narrative water quality criteria will be protected. TSS is a parameter used to protect the existing and designated uses by preventing the discharge from having putrescent, or otherwise objectionable deposits, unsightly or deleterious deposits, color or other conditions in such a degree as to create a nuisance. TSS technology-based effluent limits are always designed to protect and maintain the existing uses. The proposed monitoring requirements and effluent limitations are based upon best professional judgment (BPJ) of the technology and corresponding effluent limitations equivalent to the Best Conventional Pollutant Control Technology (BCT), and were developed in accordance with the technology-based treatment standards requirements of 327 IAC 5-5-2(b). Monitoring requirements for TSS have been added due to the source and nature of the discharge.

Free Available Chlorine

WQBELs for Total Residual Chlorine are more stringent than the federal effluent guidelines regulations for Free Available Chlorine found in 40 CFR 423.12(b)(6); therefore, IDEM is not proposing to include effluent limitations for Free Available Chlorine.

Total Residual Chlorine (TRC)

The permittee requested in their NPDES renewal application that TRC monitoring at Outfall 001 be removed as a monitoring requirement in the renewed permit. Due to the source and nature of the discharge, the TRC limits and monitoring at Outfall 001 have been retained.

Effluent limitations for continuous TRC of 0.02 mg/l daily maximum and 0.01 mg/l monthly average are being included in this proposed permit and are based on Indiana water quality standards. Intermittent TRC limitations of 0.2 mg/l daily maximum are also being included in the permit based on Indiana water quality standards. The federal effluent limitations guidelines also impose a daily maximum total residual chlorine limit of 0.2 mg/l.

The 0.2 mg/l daily maximum limit for intermittent TRC is only applicable if the discharge of chlorine is intermittent. As required by 327 IAC 2-1-6 Table 1, Footnote [a], to be considered an intermittent discharge, total residual chlorine shall not be detected in the discharge for a period of more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours. Simultaneous multi-unit chlorination is permitted. The effluent limitations for continuous TRC are applicable at all times the discharge of chlorine does not meet this interim definition.

Chlorination Frequency

The monitoring of chlorination frequency applies only when the facility is chlorinating

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

Chlorination Duration

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

Boron, Copper, Selenium, Mercury, and Arsenic

Based on effluent data provided with the NPDES renewal application and historical data, boron, copper, selenium, mercury, and arsenic have been identified as pollutants of concern in the discharge. Therefore, monitoring for these parameters has been retained from the previous permit renewal.

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

In conjunction with other facilities discharging coal combustion residuals, calcium, chloride, fluoride, sulfate, and total dissolved solids (TDS) were selected for monitoring based on the list of constituents for detection monitoring of CCR contaminants found in 40 CFR 257 Appendix III. Boron is also listed in 40 CFR 257 Appendix III, but monitoring has already been included for this parameter based on the site’s effluent data.

Antimony, barium, beryllium, cadmium, total chromium, cobalt, fluoride, lead, lithium, molybdenum, thallium, and radium 226 and 228 combined were selected for monitoring based on the list of constituents for assessment monitoring of CCR contaminants found in 40 CFR 257 Appendix IV. Selenium, mercury, and arsenic are also listed in 40 CFR 257 Appendix IV, but monitoring has already been included for this parameter based on the site’s effluent data.

40 CFR 257 Appendix III and IV were referenced only for selection of the parameters for monitoring based on exposure of the wastewater to coal combustion residuals. These pollutants will be evaluated based on surface water quality standards, not groundwater standards or for CCR Rule requirements.

The water quality criteria for chloride is hardness and sulfate dependent under 327 IAC 2-1-6(a)(6). Therefore, hardness should be monitored in conjunction with chloride and sulfate. It is recommended that the permittee monitor hardness during the last year of the permit cycle so that the data may be used in reasonable potential to exceed (RPE) analysis for chloride and sulfate in the next permit renewal. If hardness data is not provided for the next permit renewal, a default hardness value will be used instead for RPE analysis.

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).

5.3.3 Outfall 002

Temperature

The WQBELs and monitoring requirements for temperature at Outfall 002 are being retained from the September 2, 2022 permit modification. The permittee has a 316(a) variance and alternative thermal effluent limitations at Outfall 002 due to the application of WQBELs at Outfall 002 instead of Outfall 001, which allows the entire Turtle Creek Reservoir as a mixing zone. The permittee is required to submit an addendum to the April 7, 2017 316(a) demonstration by October 31, 2029. See Section 6.3 for more details on the 316(a) variance.

5.3.4 Internal Outfall 101

Total Suspended Solids (TSS)

The ELGs for low volume waste sources, bottom ash purge water, FGD wastewater, and metal cleaning include TSS limitations of 100 mg/l daily maximum and 30 mg/l monthly average, while the coal pile run off ELGs have a 50 mg/l instantaneous maximum limitation for TSS. Hallador provided flows for each of these wastestreams that are discharged through Internal Outfall 101 with the permit renewal application. The building block approach was used to account for the different wastestreams regulated for TSS as well as any dilution wastestreams (cooling tower blowdown) that discharge through Internal Outfall 101.

Although coal pile runoff is a regulated wastestream for TSS, it only has an instantaneous maximum limitation for TSS per the ELGs. Therefore, the instantaneous maximum of 50 mg/l was applied for the daily maximum TSS concentration allocation for coal pile runoff. Since coal pile runoff does not have a monthly average TSS limit in the ELGs, it was given the same monthly average concentration allocation as the regulated wastestreams with a 30 mg/l monthly average limit for TSS.

The limits calculated for TSS using the building block approach are a daily maximum of 89 mg/l and monthly average of 29 mg/l. See Appendix A for these limit calculations.

Oil & Grease (O&G)

The ELGs for O&G for each of the regulated contributing wastestreams (low volume waste sources, bottom ash purge water, and metal cleaning) are the same with a 20 mg/l daily maximum and a 15 mg/l monthly average. The dilution wastestreams for O&G that discharge through Internal Outfall 101 include cooling tower blowdown and coal pile runoff. Hallador provided flows for each of these individual wastestreams with the permit

renewal application. The building block approach was used to account for the different wastestreams regulated for O&G as well as any dilution wastestreams that discharge through Internal Outfall 101.

The limits calculated for O&G using the building block approach are a daily maximum of 16 mg/l and monthly average of 12 mg/l. See Appendix A for these limit calculations.

Iron

The ELGs for iron for metal cleaning wastes are provided at 40 CFR 423.12(b)(5) and 40 CFR 423.13(e) and are 1.0 mg/l daily maximum and 1.0 mg/l monthly average. Hallador provided sampling data showing the presence of iron in all the other wastestreams that discharge via Internal Outfall 101. These wastestreams are therefore considered to be “unregulated” wastestreams and received the same iron concentration allocations as the regulated wastestream. According to sampling data, no dilution wastestreams for iron are discharged via Internal Outfall 101. Hallador provided flows for each of these individual wastestreams with the permit renewal application.

Since all the contributing wastestreams at Internal Outfall 101 received an allocation for iron of 1.0 mg/l daily maximum and 1.0 mg/l monthly average, the overall limitations calculated for iron at Internal Outfall 101 are 1.0 mg/l daily maximum and 1.0 mg/l monthly average. This is demonstrated in Appendix A using the building block approach.

Copper

The ELGs for copper for metal cleaning wastes are provided at 40 CFR 423.12(b)(5) and 40 CFR 423.13(e) and are 1.0 mg/l daily maximum and 1.0 mg/l monthly average. Hallador provided sampling data showing the presence of copper in several other wastestreams that discharge via Internal Outfall 101. These wastestreams are therefore considered to be “unregulated” wastestreams and received the same copper concentration allocations as the regulated wastestream. Two wastestreams (RO reject and weak cation regeneration) are considered dilution wastestreams that do not contain copper in detectable amounts. Hallador provided flows for each of these individual wastestreams with the permit renewal application. The building block approach was used to account for the wastestreams regulated for copper, unregulated wastestreams for copper, as well as any dilution wastestreams that discharge through Internal Outfall 101.

The limits calculated for copper using the building block approach are a daily maximum of 0.86 mg/l and monthly average of 0.86 mg/l. See Appendix A for these limit calculations.

Arsenic, Mercury, Selenium, and Nitrate+Nitrite as N

Due to the discharge of FGD wastewater through Internal Outfall 101, monitoring requirements for arsenic, selenium, mercury, and nitrate+nitrite as N are being retained from the previous permit. As part of the December 24, 2025 permit modification, the final FGD wastewater limits at Internal Outfall 801 were changed to the Voluntary Incentives Program (VIP) FGD wastewater limits at 40 CFR 423.13(g)(3)(i).

FGD wastewaters are being monitored at Internal Outfall 801, and the final effluent limitations for that outfall become effective December 31, 2028.

Boron and Sulfate

Based on effluent data provided with the NPDES renewal application and historical data, boron and sulfate are pollutants of concern in the discharge. Therefore, monitoring for these parameters has been retained from the previous permit.

The water quality criteria for sulfate is hardness and chloride dependent under 327 IAC 2-1-6(a)(8). Therefore, hardness and chloride should be monitored in conjunction with sulfate. It is recommended that the permittee monitor hardness and chloride during the last year of the permit cycle so that the data may be used in reasonable potential to exceed (RPE) analysis for sulfate in the next permit renewal. If hardness and chloride data are not provided for the next permit renewal, default hardness and chloride values will be used instead for RPE analysis.

pH

Effluent limitations for pH are based on 40 CFR 423.12(b)(1) which states that the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 standard units.

5.3.5 Internal Outfall 201

Total Suspended Solids (TSS), CBOD5, Ammonia as N, and Phosphorus

Effluent limitations for TSS, CBOD5, Ammonia as N, and phosphorus are being retained from the previous permit. These limitations are based on requirements that apply to sanitary discharges to lakes or reservoirs located at 327 IAC 5-10-4(a).

E. coli

Effluent limitations for E. coli are based on 327 IAC 5-10-6 and are 235 cfu/100ml daily maximum and 125 cfu/100ml monthly average. These limitations are being retained from the previous permit.

pH

The effluent limitations for pH of 6.0-9.0 s.u. have been retained from the previous permit. These limitations are case-by-case, technology-based effluent limitations established using best professional judgment 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)). Under both EPA regulations and Indiana rules, all POTWs are required to meet secondary treatment requirements, which are the minimum level of effluent quality attainable by secondary treatment in terms of the parameters BOD5, TSS and pH. Although the permittee is not a POTW, IDEM has applied these secondary treatment requirements to other sanitary discharges.

5.3.6 Internal Outfall 601

Removal of Total Suspended Solids (TSS)

A daily maximum TSS limit of 50 mg/l was established in a May 1982 permit modification and has historically been carried over in renewals since then. However, the federal effluent guideline that was the basis for the 50 mg/l daily maximum limit has since been superseded by updated rules and significant changes have occurred at the facility since 1982. Based on these changes and the effluent data provided with the NPDES renewal application, the TSS daily maximum limit and monitoring requirements have been removed from Internal Outfall 601.

Selenium, Copper, Lead, and Sulfate

Monitoring requirements for the above parameters are being included in the proposed permit. These parameters were monitored in the previous permit renewal and will remain due to the source and nature of the discharge.

The water quality criteria for sulfate is hardness and chloride dependent under 327 IAC 2-1-6(a)(8). Therefore, hardness and chloride should be monitored in conjunction with sulfate. It is recommended that the permittee monitor hardness and chloride during the last year of the permit cycle so that the data may be used in reasonable potential to exceed (RPE) analysis for sulfate in the next permit renewal. If hardness and chloride data are not provided for the next permit renewal, default hardness and chloride values will be used instead for RPE analysis.

Removal of Arsenic, Mercury, Boron, Chloride, and Hardness

Monitoring requirements for these parameters have been removed from Internal Outfall 601 based on the effluent data provided with the NPDES renewal application and the inclusion of monitoring for these parameters at the final outfall (Outfall 001).

pH

Effluent limitations for pH are based on 40 CFR 423.12(b)(1) which states that the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 standard units.

5.3.7 Internal Outfall 801

Removal of Oil & Grease

The discharge from Internal Outfall 801 is treated in the WWTP that discharges to Internal Outfall 101. Since the technology utilized at the WWTP is what was used to determine the federal effluent guideline limitations for TSS and oil and grease, oil and grease limitations have been applied at Internal Outfall 101 with TSS instead. Allocations for TSS and oil and grease from the FGD wastewater at Internal Outfall 801 were

accounted for in the building block approach used to determine TSS and oil and grease limitations at Internal Outfall 101.

Arsenic, Mercury, Selenium, Nitrate+Nitrite as N, Bromide, Total Dissolved Solids (TDS)

The December 24, 2025 permit modification implemented interim monitoring and final effluent limitations for the above parameters. These effluent limitations are based on the Voluntary Incentives Plan FGD wastewater limits at 40 CFR 423.13(g)(3)(i) and have been retained in this permit renewal. The final effluent limitations for the above parameters are effective beginning December 31, 2028.

pH

Effluent limitations for pH are based on 40 CFR 423.12(b)(1) which states that the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 standard units.

5.3.8 Internal Outfall 110

Total Suspended Solids (TSS), Arsenic, Mercury, Selenium, Boron, Chloride, Sulfate, Hardness

Based on effluent data provided with the NPDES renewal application the above parameters are pollutants of concern in the discharge. Therefore, monitoring for these parameters has been included in the permit.

pH

Effluent limitations for pH are based on 40 CFR 423.12(b)(1) which states that the pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0 standard units.

5.3.9 Internal Outfall 111

Total Suspended Solids (TSS)

Due to the discharge of combustion residual leachate at Internal Outfall 111, the effluent limitations for TSS included in this permit are a daily maximum of 100 mg/l and monthly average of 30 mg/l per 40 CFR 423.12(b)(11). There shall be no discharge of pollutants in combustion residual leachate pursuant to 40 CFR 423.13(l)(1)(i) by December 31, 2034.

Oil & Grease

Due to the discharge of combustion residual leachate at Internal Outfall 111, the effluent limitations for oil & grease included in this permit are a daily maximum of 20 mg/l and monthly average of 15 mg/l per 40 CFR 423.12(b)(11). There shall be no discharge of

pollutants in combustion residual leachate pursuant to 40 CFR 423.13(l)(1)(i) by December 31, 2034.

Selenium, Boron, Chloride, Sulfate, and Hardness

Based on effluent data provided with the NPDES renewal application, the above parameters are pollutants of concern in the discharge. Therefore, monitoring for these parameters has been included in the permit.

5.3.10 All stormwater outfalls (001S, 002S, 003S, 005S, 006S)

Flow, Total Suspended Solids (TSS), pH, Oil and Grease, COD, CBOD₅, Total Kjeldahl Nitrogen, Nitrate+Nitrite as N, Total Phosphorus

Monitoring requirements for the above parameters are being retained from the previous permit. These are pollutants associated with discharges of storm water from industrial facilities.

Boron, Selenium, Sulfate, Arsenic, Mercury

Based on effluent data provided with the NPDES renewal application and historical data, the above parameters are pollutants of concern in the discharge. Therefore, monitoring for these parameters has been retained from the previous permit renewal.

5.4 Whole Effluent Toxicity (WET) Testing

The permit does not contain a requirement to conduct whole effluent toxicity (WET) tests.

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 calculated daily maximum limit for TSS, daily maximum and monthly average limits for Oil and Grease, and daily maximum and monthly average limits for iron at Internal Outfall 101 are less stringent than the respective limits in the previous permit. However, information was available during this permit renewal that was not available at the time of permit issuance last renewal that would have justified the application of a less stringent effluent limitation at the time of permit issuance. Therefore, under 327 IAC 5-2-10(a)(11)(B), these less stringent limitations do not violate the antibacksliding requirements.

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

5.6 Antidegradation

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

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

5.7 Stormwater

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

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

National Service Center for Environmental Publications at <https://www.epa.gov/nscep> or from IDEM.

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

According to 40 CFR 122.26(b)(14) and 327 IAC 15-6-2 facilities classified under Standard Industrial Classification (SIC) Code 4911, are considered to be engaging in "industrial activity" for purposes of 40 CFR 122.26(b). Therefore, the permittee is required to have all stormwater discharges associated with industrial activity permitted. Treatment for stormwater discharges associated with industrial activities is required to meet, at a minimum, best available technology economically achievable/best conventional pollutant control technology (BAT/BCT) requirements. EPA has determined that non-numeric technology-based effluent limits have been determined to be equal to the best practicable technology (BPT) or BAT/BCT for stormwater associated with industrial activity.

Stormwater associated with industrial activity must also be assessed to ensure compliance with all water quality standards. Effective implementation of the non-numeric technology-based requirements should, in most cases, control discharges as necessary to meet applicable water quality standards. Violation of any of these effluent limitations constitutes a violation of the permit.

Additionally, IDEM has determined that with the appropriate implementation of the required control measures and Best Management Practices (BMPs) found in Part I.D. of the permit, the discharge of stormwater associated with industrial activity from this facility will meet applicable water quality standards and will not cause a significant lowering of water quality. Therefore, the stormwater discharge is in compliance with the antidegradation standards found in 327 IAC 2-1.3-3, and pursuant to 327 IAC 2-1.3-4(a)(5), an antidegradation demonstration is not required.

The technology-based effluent limits (TBELs) require the permittee to minimize exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. In doing so, the permittee is required, to the extent technologically available and economically achievable, to either locate industrial materials and activities inside or to protect them with storm resistant coverings. In addition, the permittee is required to: (1) use good housekeeping practices to keep exposed areas clean, (2) regularly inspect, test, maintain and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges, (3) minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur, (4) stabilize exposed area and contain runoff using structural and/or non-structural control

measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants, (5) divert, infiltrate, reuse, contain or otherwise reduce stormwater runoff, to minimize pollutants in the permitted facility discharges, (6) enclose or cover storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, (7) train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team, (8) ensure that waste, garbage and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged, and (9) minimize generation of dust and off-site tracking of raw, final or waste materials.

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

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

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

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

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

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

Public availability of documents

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

5.8 Water Treatment Additives

In the event that changes are to be made in the use of water treatment additives that could significantly change the nature of, or increase the discharge concentration of any of the additives contributing to an outfall governed under the permit, the permittee must apply for and obtain approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) available at: <https://www.in.gov/idem/forms/idem-forms-list/> and submitting any needed supplemental information. In the review and approval process, IDEM determines, based on the information submitted with the application, whether the use of any new or changed water treatment additives/chemicals or dosage rates could potentially cause the discharge from any permitted outfall to cause chronic or acute toxicity in the receiving water.

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

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

<u>Supplier</u>	<u>WTA</u>	<u>Outfall</u>	<u>Purpose</u>	<u>Date of Approval</u>
Brenntag	12.5% NaClO	001	Chlorination	1997 permit
Suez	Flogard POT-6100	001	Scale inhibitor	2010 permit
Suez	Spectrus CT-1300	001	Cooling tower biocide	2010 permit

Suez	Spectrus OX909	001	Cooling tower biocide	5/31/2011
Suez	Dianodic DN2478	001	Cooling tower antiscalant	2010 permit
Suez	Polyfloc AE1703	001	IWTP polymer	2020 permit
Suez	AE-1115	001	WWTP polymer	2010 permit
Suez	PCD-9325	001	Scale inhibitor	6/14/2000
Suez	Klaraid IC1172	001	Phosphate control	2016 permit
Suez	Polyfloc AE-1123	001	Bottom ash polymer	2010 permit
Suez	Depositrol BL-5301	001	Bottom ash scale inhibitor	2010 permit
Suez	Gengard GN7110	001	Cooling tower antiscalant	3/02/2023
Suez	Polyfloc AS1002	001	IWTP polymer	4/16/2021
Suez	Optisea SW1401	001	Scale inhibitor	7/15/2022
Simple Green	All Purpose Cleaner	001	Cleaner	12/10/2024
Nalco	pHREEdom 5200M	001	FGD scrubber scale inhibitor	5/01/2024, 1/09/2026
Nu-Calgon	NU-Brite	001	Coil cleaner	7/06/2023
Suez	Klaraid IC1045	001	IWTP coagulant	1/13/2023
Suez	FuelSolv HG2620	001	FGD scrubber mercury control	5/06/2024
	Sulfuric Acid	001	Water treatment/IWTP pH	2025 permit
	Sodium Hydroxide	001	Water treatment/IWTP pH	2025 permit
Suez	Kleen MCT403	001	RO membrane cleaner	9/20/2022
Suez	Kleen MCT515	001	RO membrane cleaner	9/20/2022
Suez	Hypersperse MDC776	001	RO antiscalant	8/19/2021
GE Betz	Steamate PA6079	001	Boiler tube protectant	2/10/2017
Buckman Lab	BULAB 6004	001	Condenser cleaning	10/09/2013
Buckman Lab	Oximine 6150	001	Condenser cleaning	10/09/2013
Nalco	Optimer 9901	001	Anionic flocculant	5/05/2011
Nalco	Nalclear 7768	001	IWTP polymer	5/30/2025, 1/09/2026
Nalco	Nalclear 7766 Plus	001	IWTP polymer	6/03/2025
Nalco	Nalco 1503	001	IWTP coagulant	6/03/2025
Nalco	Ferralyte	001	IWTP coagulant	6/03/2025
Brenntag	Citric Acid Anhydrous	001	RO membrane cleaner	11/07/2025
Univar Solutions	Versene™ 100 Chelating Agent	001	RO membrane cleaner	11/07/2025
Nalco	3D TRASAR 3DT461	001	Cooling tower corrosion inhibitor	1/09/2026
Nalco	Nalco 7330	001	Cooling tower biocide	1/09/2026
Nalco	Nalco 7396	001	Potable water treatment	1/09/2026
Nalco	Nalco 7468	001	IWTP defoamer	1/09/2026
Nalco	Stabrex ST70	001	Cooling tower biocide	1/09/2026

Nalco	THRUGUARD THR404	001	Condenser scale inhibitor	1/09/2026
Nalco	Ultrion 8187	001	Sewage treatment plant coagulant	1/09/2026
Nalco	Nalco 8106	001	IWTP coagulant	1/09/2026
Nalco	Nalco 8134	001	Reactor Vessel coagulant	1/09/2026

6.0 PERMIT DRAFT DISCUSSION

6.1 Discharge Limitations, Monitoring Conditions and Rationale

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

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

The monitoring frequencies and sample types proposed for the CCR pollutants added at Outfalls 001 and the pollutants included at the new Internal Outfalls 110 and 111 are based on the source and nature of the discharges and comparable to the monitoring frequencies and sample types included in permits regulating similar types of discharges.

The monitoring frequency for boron at Outfall 001 has been changed from 1 X Monthly to 2 X Monthly and the sample frequency has been changed from “grab” to “24-hour composite”. Based on the effluent data provided with the NPDES renewal application, boron is a pollutant of concern in the discharge. These changes to monitoring frequency and sample type will help to better characterize the presence of this pollutant in the discharge at Outfall 001.

Outfall 001:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Daily	Continuous
River Intake Flow	Report	Report	MGD	1 X Daily	24-Hr. Total
TCR Intake Flow	Report	Report	MGD	1 X Daily	24-Hr. Total
BA Purge Volume	18	Report	MGD	1 X Daily	24-Hr. Total
Temperature	-----	Report	°F	1 X Daily	Continuous
TSS	Report	Report	mg/l	1 X Monthly	Grab
TRC					
Continuous	0.01	0.02	mg/l	1 X Weekly	Grab
Intermittent	-----	0.2	mg/l	1 X Weekly	Grab
Chlorination					
Frequency	-----	4	times/day	1 X Daily	Report
Duration	-----	40	min/dose	1 X Daily	Report
Boron	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Copper	-----	Report	mg/l	1 X Monthly	Grab
Selenium	-----	Report	mg/l	1 X Monthly	Grab
Mercury	-----	Report	ng/l	6 X Yearly	Grab
Arsenic	-----	Report	mg/l	1 X Monthly	Grab
Antimony	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

Barium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Beryllium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Cadmium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chromium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Cobalt	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Lead	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Lithium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Molybdenum	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Thallium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Radium 226 and 228 combined	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Calcium	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chloride	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Fluoride	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Sulfate	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
TDS	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 Daily	Grab

Outfall 002:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Temperature [1]	-----	Report	°F	1 X Daily	Continuous

- [1] The discharge from Outfall 002 shall not exceed the maximum limits in the following table more than one percent (1%) of the hours in the twelve (12) month period ending with any month.

At no time shall the water temperature of the discharge from Outfall 002 exceed the maximum limits in the following table by more than three degrees Fahrenheit (3°F) (one and seven-tenths degrees Celsius (1.7°C)).

Table 1

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
°F	50	50	60	70	80	90	90	90	90	78	70	57
°C	10	10	15.6	21.1	26.7	32.2	32.2	32.2	32.2	25.5	21.1	14

Internal Outfall 101:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
TSS	29	89	mg/l	1 X Weekly	Grab
Oil and Grease	12	16	mg/l	1 X Weekly	Grab
Iron	1.0	1.0	mg/l	1 X Daily	Grab
Copper	0.86	0.86	mg/l	1 X Daily	Grab
Boron	Report	Report	mg/l	1 X Weekly	Grab
Arsenic	Report	Report	mg/l	1 X Weekly	Grab
Selenium	Report	Report	mg/l	1 X Weekly	Grab
Mercury	Report	Report	ng/l	1 X Weekly	Grab
Nitrate/Nitrite	Report	Report	mg/l	1 X Weekly	Grab
Sulfate	Report	Report	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

Internal Outfall 201:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
TSS	12	18	mg/l	1 X Weekly	Grab
CBOD ₅	10	15	mg/l	1 X Weekly	Grab
Ammonia as N					
Summer	1.1	1.6	mg/l	1 X Weekly	Grab
Winter	1.6	2.4	mg/l	1 X Weekly	Grab
<i>E. coli</i>	125	235	cfu/100mL	1 X Weekly	Grab
Phosphorus	-----	1.0	mg/l	1 X Weekly	Grab

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

Internal Outfall 601:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
Selenium	-----	Report	mg/l	1 X Monthly	Grab
Copper	-----	Report	mg/l	1 X Monthly	Grab
Lead	-----	Report	mg/l	1 X Monthly	Grab
Sulfate	-----	Report	mg/l	1 X Monthly	Grab

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

Internal Outfall 801:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
Arsenic Interim Final	Report Report	Report 5	µg/l µg/l	1 X Monthly 1 X Weekly	Grab Grab
Mercury Interim Final	Report 10	Report 23	ng/l ng/l	1 X Quarterly 1 X Weekly	Grab Grab
Selenium Interim Final	Report Report	Report 10	µg/l µg/l	1 X Monthly 1 X Weekly	Grab Grab
Nitrate/Nitrite Interim Final	Report 1.2	Report 2.0	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab
Bromide Interim Final	Report Report	Report 0.2	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab
Total Dissolved Solids (TDS) Interim Final	Report 149	Report 306	mg/l mg/l	1 X Monthly 1 X Weekly	Grab Grab

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

Internal Outfall 110:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
TSS	Report	Report	mg/l	1 X Weekly	Grab
Arsenic	Report	Report	mg/l	1 X Monthly	Grab
Mercury	Report	Report	ng/l	1 X Quarterly	Grab
Selenium	Report	Report	µg/l	1 X Monthly	Grab
Boron	Report	Report	mg/l	1 X Monthly	Grab
Chloride	Report	Report	mg/l	1 X Monthly	Grab
Sulfate	Report	Report	mg/l	1 X Monthly	Grab
Hardness	Report	Report	mg/l	1 X Monthly	Grab

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

Internal Outfall 111:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	1 X Weekly	Estimate
TSS	30	100	mg/l	1 X Weekly	Grab
Oil and Grease	15	20	mg/l	1 X Weekly	Grab
Selenium	Report	Report	µg/l	1 X Monthly	Grab
Boron	Report	Report	mg/l	1 X Monthly	Grab
Chloride	Report	Report	mg/l	1 X Monthly	Grab
Sulfate	Report	Report	mg/l	1 X Monthly	Grab
Hardness	Report	Report	mg/l	1 X Monthly	Grab

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

Outfall 001S, 002S, 003S, 005S, 006S:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	-----	Report	MGD	1 X Yearly	Estimate Total
TSS	-----	Report	mg/l	1 X Yearly	Grab
pH	-----	Report	s.u.	1 X Quarterly	Grab
Oil and Grease	-----	Report	mg/l	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
Boron	-----	Report	mg/l	1 X Quarterly	Grab
Selenium	-----	Report	mg/l	1 X Quarterly	Grab
Sulfate	-----	Report	mg/l	1 X Quarterly	Grab
Arsenic	-----	Report	mg/l	1 X Quarterly	Grab
Mercury	-----	Report	mg/l	1 X Yearly	Grab

6.2 Schedule of Compliance

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

6.3 Clean Water Act (CWA) Section 316(a) Alternative Thermal Effluent Limitations

A. Applicability, Purpose and Scope

The information in this section is taken in large part from an October 28, 2008 memorandum from James A. Hanlon to Region 1-10 Water Division Directors regarding the implementation of Clean Water Act (CWA) Section 316(a) Thermal Variances in NPDES Permits. Section 316(a) of the CWA is applicable to point sources with thermal discharges. It authorizes the NPDES permitting authority to impose alternate effluent limitations for the control of the thermal component of a discharge in lieu of the effluent limitations that would otherwise be required.

Federal regulations implementing section 316(a) are codified at 40 CFR Part 125, subpart H; while Indiana has established rules implementing section 316(a) of the CWA at 327 IAC 5-7. These rules and regulations identify the criteria and processes for determining whether an alternate effluent limitation (i.e. a thermal variance from the otherwise applicable limits) may be included in a permit, and, if so, what that limit should be. This means that before a thermal variance can be granted, 327 IAC 5-7-3 and 4 (see also 40 CFR 125.72 and 125.73) require the permittee to demonstrate that the otherwise applicable thermal discharge effluent limit is more stringent than necessary to assure the protection and propagation of the waterbody's balanced indigenous community of shellfish, fish and wildlife.

The burden of proof is on the permittee to demonstrate that it is eligible to receive an alternative effluent limit under 316(a). In support of any proposed alternative thermal limit, the discharger must demonstrate that the alternative limit will assure protection of the waterbody's balanced indigenous population, considering the impacts of its thermal discharge together with all other significant impacts on the species affected. (see 327 IAC 5-7-4(a) and 40 CFR 125.73(a)) When applying for an alternative thermal limit, an applicant must submit the supporting information and demonstrations identified and described in 327 IAC 5-7-3 and 4 (see also 40 CFR 125.72 and 73). Among other things, the applicant must identify and describe (1) the requested alternative effluent limitation, (2) methodology used to support the limitation, (3) the organisms comprising the balanced indigenous community along with supporting data and information, and (4) the types of data, studies, experiments and other information the applicant intends to use to demonstrate that the alternative thermal limit assures the protection and propagation of the balanced indigenous community. 327 IAC 5-7-3(a) and (b) (see also 40 CFR 125.72(a) and (b)).

IDEM has developed a draft 316(a) guidance document, Guidance for Conducting a Demonstration as a Requirement of a 316(a) Alternative Thermal Effluent Limitation Request, March 2015; available at: <https://www.in.gov/idem/cleanwater/resources/thermal-effluent-limitations/>. For demonstrations conducted after the date of this guidance, dischargers shall take this guidance into consideration when preparing 316(a) study plans and conducting 316(a) demonstrations.

B. Criteria and standards for the determination of ATELS

Thermal discharge effluent limitations or standards established in permits may be less stringent than those required by applicable standards and limitations if the discharger demonstrates to the

satisfaction of the IDEM that such effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made. This demonstration must show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, will ensure the protection and propagation of a balanced indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made.

Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies in accordance with 327 IAC 5-7-5(c)(1). Any such demonstrations shall show: (i) That no appreciable harm has resulted from the normal component of the discharge (taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge has been made; or (ii) That despite the occurrence of such previous harm, the desired alternative effluent limitations (or appropriate modifications thereof) will nevertheless ensure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made. In determining whether or not prior appreciable harm has occurred, the IDEM shall consider the length of time in which the applicant has been discharging and the nature of the discharge.

C. The 316(a) Alternate Thermal Effluent Limitations Renewal Process

A 316(a) variance is a permit condition. It expires along with the permit. A permittee may request renewal of its 316(a) variance prior to the expiration of the permit. Therefore, when the permittee submits its next NPDES permit renewal application, if the permittee still wants the 316(a) variance, it must also request renewal of its 316(a) variance. In accordance with the IDEM draft 316(a) guidance document, Guidance for Conducting a Demonstration as a Requirement of a 316(a) Alternative Thermal Effluent Limitation Request, March 2015; existing dischargers are required to conduct a new Demonstration if they have not completed a Demonstration within the past 10 years. At the time this permit is due for renewal, 10 years will have passed since the previous demonstration was completed. Therefore, IDEM will require an addendum to the April 7, 2017 316(a) demonstration to be completed and submitted by October 31, 2029.

D. Historical summary of Alternative Thermal Effluent Limitations for Merom Generating Station

The permittee was granted a 316(a) variance in 1978. In 2010, IDEM reviewed temperature data and biological data submitted over a period of years by the owner at the time, Hoosier Energy. Based on that review, IDEM determined that the existing 316(a) did not comply with the requirements of 327 IAC 5-7 and did not include a 316(a) variance in the permit when it was issued December 22, 2010. That permit included a three-year schedule of compliance to meet temperature limitations at Outfall 001 based on 327 IAC 2-1-6. In addition to the three-year schedule of compliance, IDEM required interim temperature monitoring and limitations at Outfall 002, the discharge of Turtle Creek Reservoir to Turtle Creek, based on 327 IAC 2-1-6.

On July 2, 2012, the permittee submitted a progress report as required by Part I.F.(b) of the permit to IDEM. On December 31, 2012, with subsequent information on September 3, 2013, the permittee submitted a permit modification request to remove the numeric effluent limitations for temperature at Outfall 001. The modification request was not approved due to a lack of a valid 316(a) demonstration; instead, an Agreed Order was negotiated for submitting a new 316(a) demonstration.

An Agreed Order (Case No. 2013-22017-W) between IDEM and the permittee, dated December 30, 2013, required the permittee to submit a new 316(a) Demonstration Study Plan. On March 31, 2014, the permittee submitted the study plan and IDEM subsequently approved the plan on December 23, 2014. The permittee met with IDEM in January 2015 to renegotiate the submittal date of the 316(a) demonstration because of a delay in the approval of the study plan. The permit issued February 5, 2016 required the permittee to submit the 316(a) demonstration by September 1, 2016. The permit was subsequently modified in 2017, and an extension to the due date for the 316(a) demonstration was granted. The demonstration was required to be submitted 30 days from the effective date of the permit modification (April 1, 2017). A 316(a) demonstration dated April 7, 2017, with a cover letter dated April 28, 2017, was received by IDEM on May 1, 2017.

After review of the April 7, 2017 316(a) demonstration, IDEM concluded that Turtle Creek Reservoir did not support a balanced indigenous population due to the lack of a sustainable reproducing population of largemouth bass. Considering the planned closure of the plant though, IDEM allowed the permittee to operate with ATEs until the planned closure date.

However, Hoosier Energy Rural Electric Cooperative, Inc. submitted notice to IDEM on March 4, 2022, of its intent to transfer ownership of the NPDES permit to Hallador Power Company, LLC, as Hallador was in the process of acquiring the Merom Generating Station from Hoosier Energy and would become the owner and operator of the Station. Hallador wanted to continue running the plant and therefore the plant would not proceed with closure as originally planned.

In a modification request received April 14, 2022, on behalf of both Hoosier Energy and Hallador, the permittee proposed to implement an Update to 316(a) Demonstration and Near-Term Fishery Enhancement Plan to address IDEM's concerns regarding largemouth bass. The Update to 316(a) Demonstration and Fishery Enhancement Plan proposed to reduce predation of the largemouth bass population by channel catfish and to improve the habitat suitability such that largemouth bass can sustain a reproducing population.

IDEM responded in the permit modification issued September 2, 2022 agreeing to allow the permittee the opportunity to show that a balanced indigenous population can be established through implementation of the proposed enhancement plan. In this modification, IDEM extended the thermal variance until January 31, 2026 (permit expiration), modified requirements related to temperature limits and the thermal variance and removed the schedule of compliance related to temperature limits and retirement of the facility in August of 2023. IDEM required the permittee to submit to IDEM for review and approval a study plan for the updated 316(a) demonstration within 180 days of the effective date of the modification and required the submittal of the results and discussion of their Plan with an updated 316(a) demonstration as part of their next permit renewal application.

On November 18, 2022, the NPDES permit was transferred from Hoosier Energy to Hallador.

The study plan for an updated 316(a) demonstration was submitted to IDEM on February 28, 2023, titled “Merom Generating Station Revised 316(a) Study Plan”. IDEM approved this study plan in an email dated January 14, 2025.

The permittee submitted a Progress Update on Revised 316(a) Study Plan, dated July 2025, with their NPDES permit renewal application on August 1, 2025.

E. Summary and Evaluation of July 2025 Progress Update on Revised 316(a) Study Plan for Merom Generating Station

The Progress Update on Revised 316(a) Study Plan evaluates the objectives set forth in the Revised 316(a) Study Plan submitted to IDEM on February 28, 2023 and informs IDEM of the progress Hallador has achieved on those objectives.

The focus of the Revised 316(a) Study Plan (“The Plan”) is to specifically examine the largemouth bass population in TCR, focusing on those variables that may be limiting production of these species, i.e., habitat and disturbances to successful spawning. The Plan aims to improve the habitat suitability for largemouth bass, either directly or indirectly, by increasing cover and reducing the abundant channel catfish and, to a lesser extent, common carp and sunfish populations. These improvements will be within littoral areas at selected locations throughout TCR.

The following are the seven specific objectives identified in The Plan, with summaries and updates on the progress Hallador has achieved, along with points on how Hallador plans to further enhance these seven objectives:

1. *Determine which areas within TCR are best suited for habitat enhancement* – It was determined that the southeast coves of TCR are best suited for habitat enhancement based primarily on the presence of spawning bass, littoral slope, substrate quality, and water temperature. Six locations were enhanced in early spring 2024 and an additional five locations in spring 2025 by Hallador/Hoosier Energy personnel.
2. *Deploy a variety of artificial habitat structures at those areas* – Gravel was deposited, two or three Black Bass nesting structures were deployed, and several small “Christmas” trees and various artificial Pond King habitat structures were placed in combination at each location.
3. *Monitor habitat enhancement areas to determine which structures are being utilized and to what extent* – Post deployment monitoring was conducted May 9-10 and June 5 and 7, 2024, as well as May 13-14, 2025, in conjunction with the biomonitoring surveys. Monitoring consisted of shoreline observations, larval seining, delta net dipping, and viewing tubes to better observe nest construction and potential egg deposition and fry development within the fairly turbid waters of TCR. Largemouth bass nests were observed at several locations during the 2024 surveys. *Lepomis* (sunfish) nests were observed at most locations. Although no largemouth bass eggs or fry were observed within known nests using the viewing tube, active nest guarding was observed at multiple

locations in May 2024. Hundreds of fish larvae were observed/collected using delta dipnets during all surveys. Most of those larvae were Mississippi Silverside, while other common species/taxa included Mosquitofish, shad, Golden Shiner, and *Lepomis* spp. Two Young-Of-the-Year (YOY) largemouth bass were collected at Location 5.

4. *Continue annual standardized biomonitoring to gage overall success of the project based on variety of long-term catch parameters such as YOY production, electrofishing catch-per-effort (CPE), and overall species composition* – Annual standardized biomonitoring surveys have continued at TCR utilizing the same methodology since 2011. Targeted standardized sampling, e.g., electrofishing, within the southeast coves of the aforementioned study have not been incorporated due to the possibility of sampling induced mortality of YOY largemouth bass. It is expected that several years of habitat enhancement will be required before any improvement in annual catch parameters will be evident.
5. *Reduce the abundant channel catfish and common carp populations by hosting angling and bow fishing tournaments annually* – Hallador hosted annual channel catfish angling tournaments from 2023 through 2025. In summary, a total of over 2,100 fish were removed from TCR during the three-year period weighing 3,119 lbs. To date, no common carp tournaments have been scheduled. Plans are underway to introduce more angling tournaments to reduce the population size of these species which should improve spawning success and recruitment of largemouth bass as predation of YOY largemouth bass by channel catfish has been documented in TCR. These plans also include sunfish tournaments geared towards removal of the abundant sunfish populations as harassment by these populations has been documented on numerous occasions within TCR.
6. *Evaluate results of the current study to determine if habitat and species competition have been limiting to largemouth bass spawning and rearing success in TCR* – Based on field observations in spring 2024 and 2025 it appears that substrate quality may be limiting successful largemouth bass spawning as many nests were observed within introduced gravel areas among the southeast coves. Sunfish nests were observed in these areas as well. Based on field observations, the abundant channel catfish, common carp, and sunfish populations are negatively impacting successful largemouth bass spawning as continual harassment by these species, particularly sunfish, was observed on numerous occasions. Continued work will include annual biomonitoring studies, continued fish feeding via deployed fish feeders, additional habitat enhancement areas at select locations, post-habitat deployment monitoring, and establishing macrophytes.
7. *Update the previously submitted 316(a) demonstration accordingly* – It is anticipated that several years of habitat enhancement and monitoring will be necessary to gage success. Hallador proposes that a habitat enhancement summary update report be prepared late summer 2028 and incorporated as an addendum to the 2017 316(a) demonstration report.

Hallador noted that supplemental stocking of largemouth bass will likely continue until a critical mass is reached to enhance the probability of successful spawning and recruitment of this species to achieve the intended objective, a self-sustaining population within TCR.

IDEM appreciates Hallador's efforts to perform habitat enhancement and monitoring but still has concerns whether a sustainable reproducing population of largemouth bass can be established in TCR. IDEM looks forward to reviewing the addendum to the April 7, 2017 316(a) demonstration report and will require this addendum to be submitted by October 31, 2029.

F. Thermal Limitations which would be Applicable in the Absence of a 316(a) Variance

In absence of a 316(a) thermal variance, the following temperature limitations apply for direct discharge from Outfall 001 to Turtle Creek Reservoir based on 327 IAC 2-1-6(b)(4):

- (A) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- (B) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.
- (C) The maximum temperature rise at any time or place above natural temperatures shall not exceed three (3) degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius) in lakes and reservoirs.
- (D) Water temperature shall not exceed the maximum limits in the following table during more than one percent (1%) of the hours in the twelve (12) month period ending with any month. At no time shall the water temperature at such locations exceed the maximum limits in the following table by more than three (3) degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius):

Water Quality Based Effluent Limitations Table

Month	°F (°C)
January	50 (10.0)
February	50 (10.0)
March	60 (15.6)
April	70 (21.1)
May	80 (26.7)
June	90 (32.2)
July	90 (32.2)
August	90 (32.2)
September	90 (32.2)
October	78 (25.5)
November	70 (21.1)
December	57 (14.0)

G. Proposed Thermal Limitations

The permittee has a 316(a) variance and alternative thermal effluent limitations at Outfalls 001 (discharge to Turtle Creek Reservoir) and Outfall 002 (discharge to Turtle Creek).

Outfall 001

The permittee is required to monitor and report the daily maximum temperature of the discharge at Outfall 001 daily.

Outfall 002

Water temperatures in the discharge at Outfall 002 shall not exceed the maximum limits in the following table during more than one percent (1%) of the hours in the twelve (12) month period ending with any month. At no time shall the water temperature at such locations exceed the maximum limits in the following table by more than three (3) degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius):

Month	°F (°C)
January	50 (10.0)
February	50 (10.0)
March	60 (15.6)
April	70 (21.1)
May	80 (26.7)
June	90 (32.2)
July	90 (32.2)
August	90 (32.2)
September	90 (32.2)
October	78 (25.5)
November	70 (21.1)
December	57 (14.0)

H. Future Demonstration Requirements

The permittee's Revised 316(a) Study Plan provided a timeline for the habitat enhancement project at TCR. In accordance with this timeline, the habitat enhancement project began in spring 2023 and extended through fall 2025. Based on the size of TCR, Hallador expects that several years of habitat enhancement and monitoring will be required to assess the project outcomes. Hallador provided a project progress update with their NPDES renewal application, and they propose to prepare a habitat enhancement summary update report late summer 2028 and incorporate it as an addendum to the April 7, 2017 316(a) demonstration report.

Based on this ongoing project and effort to provide an addendum to the April 7, 2017 316(a) demonstration report, the permittee is not required to submit a new 316(a) demonstration with its next renewal. However, IDEM does require the permittee to submit the addendum to the April 7, 2017 316(a) demonstration report by October 31, 2029.

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

6.4.1 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)).

Merom Generating Station operates two intake water structures: one at the Wabash River to Turtle Creek Reservoir and one at Turtle Creek Reservoir to the plant.

The Wabash River cooling water intake structure provides make-up water to TCR from the Wabash River. This intake does not operate unless the reservoir level falls below normal pool level. Pumping from the Wabash River also stops when river flow falls below 1,250 cfs. The design intake flow (DIF) for the Wabash River CWIS is 27.36 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 Wabash River CWIS from 2020 through 2024 is 3.4 MGD.

Merom Generating Station withdraws cooling water from TCR via a cooling water intake structure located at the end of the 2,400 ft intake canal. The DIF of the TCR CWIS is 488.44 MGD and the AIF of the TCR CWIS from 2020 through 2024 is 347.6 MGD.

With these two intakes, the facility has a DIF of 515.8 MGD and an AIF of 351.0 MGD. All of the intake water used at Merom Generating Station is for cooling. Groundwater is used for process water.

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 greater than 125 MGD, the permittee was required to submit the application information required by 40 CFR 122.21(r)(2) through (r)(13). However, the permittee submitted a reduced 316(b) application request on July 24, 2023 and IDEM approved and rejected parts of the request in a letter issued August 19, 2024. The permittee submitted the required information in a reduced 316(b) application with their NPDES permit renewal application.

The regulation also established requirements that build on existing CWA requirements to coordinate with the U.S. Fish and Wildlife Service (USFWS) prior to issuing NPDES permits. Pursuant to 40 CFR 125.98(h), upon receipt of an NPDES permit 316(b) application for an existing facility subject to the rule, the Director (IDEM) must forward a copy of the permit application to the appropriate Field Office of the U.S. Fish and Wildlife Service for a 60-day review. A copy of this permit application was sent to the Bloomington Field Office of the U.S. Fish and Wildlife Service August 5, 2025. The USFWS's response is discussed in Section 6.4.5 below.

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

6.4.2 Facility and Cooling Water Intake Structure (CWIS) Description

A. Detailed Description

Wabash River CWIS

The Wabash Intake at Merom GS is located on the Wabash River at approximately River Mile 140, downstream of Merom, Indiana. The Wabash Intake consists of three pumps each rated for 9,500 GPM, but only two pumps can operate simultaneously (the third pump acts as a spare). These pumps withdraw water from the Wabash River through seven submerged cylindrical wedge wire tee-screens with $\frac{1}{4}$ inch slot openings. The screens have a diameter of two feet and a length of eight feet each. Each screen is mounted to a 24-inch diameter pipe that combines into a 36-inch diameter header pipe located below the screens, and into a single 72-inch diameter concrete intake pipe that leads onshore to a gate house. Figure 5 below details a plan view of the intake and Figure 6 below details the Wabash River CWIS. The water flows from this gate house to the pump house located approximately 4,400 ft from the riverbank.

Figure 5: Plan View of the Wabash River CWIS

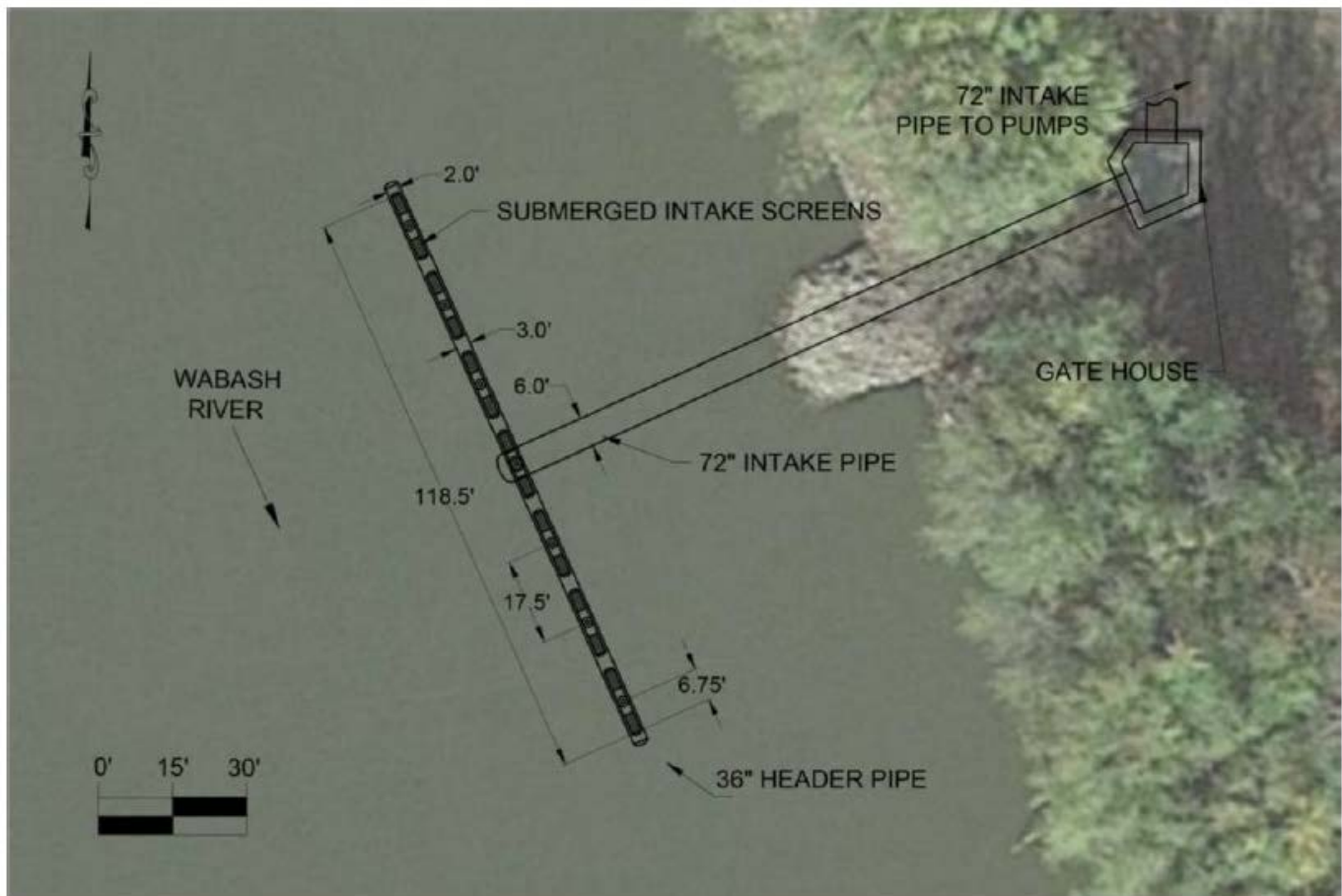
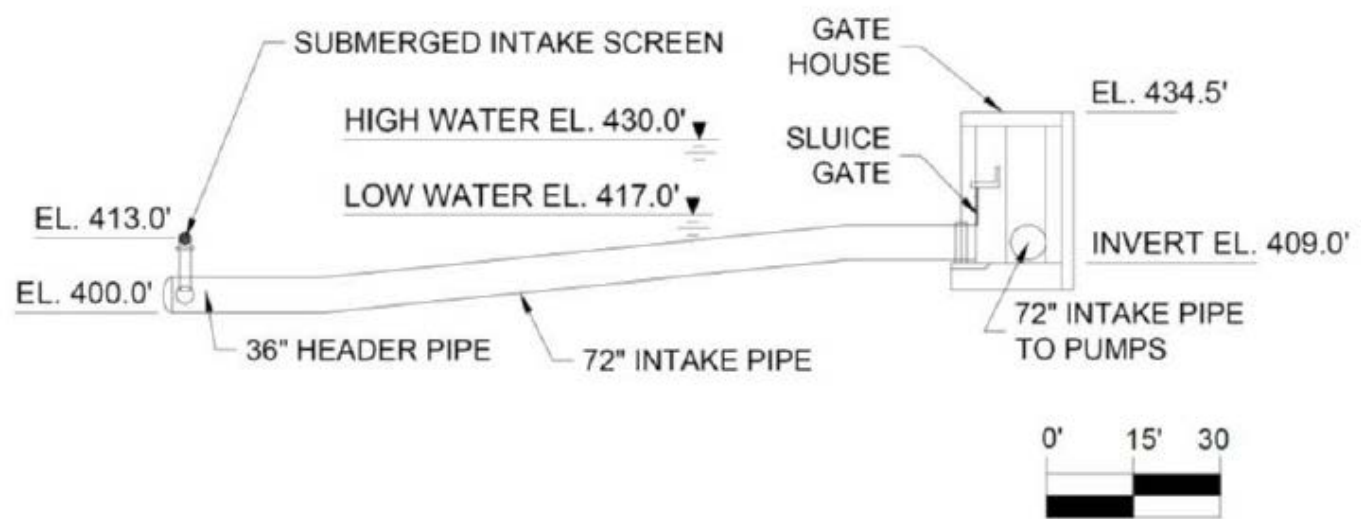


Figure 6: Section View of the Wabash River CWIS



Turtle Creek Reservoir CWIS

The TCR CWIS is located at the end of the intake canal. The canal draws water from a small cove arm approximately in the middle of TCR. Figure 7 below details the location of the CWIS in relation to TCR and the facility. There are four cooling water intake bays in the CWIS, two for Unit 1 and two for Unit 2. Each of these screen bays is 13.3 feet wide and equipped with a trash rack. Through-flow traveling screens designed for either intermittent or continuous operation are located approximately 16 feet downstream of the trash racks.

The four screens have 12 feet wide screen panels with $\frac{1}{4}$ inch square opening mesh. In spring and summer months, these screens are rotated and cleaned once per shift, while in the fall the screens are operated several times a shift if not constantly due to the accumulation of leaves. During winter months, the screens are operated continuously to assist in the reduction of ice. The screens can rotate at either 8.8 or 4.4 rpm and are cleaned by high pressure spray wash systems.

Debris and fish removed from the screens are collected in a trough located on the downstream side of the screens, flow down into a disposal basket, and are disposed of in a dumpster and ultimately to a local municipal landfill. The wash water used for the screens, once the debris and fish are removed by the basket, is returned to the inlet canal via a concrete trench. The fish/debris trough is cleaned, and contents removed from the trash basket periodically. A warm water recirculation pipe is located upstream of the CWIS and attached to a fixed skimmer to help prevent icing during winter months.

Four circulating water pumps, two per unit, are located downstream of the traveling water screens. Each pump provides a flow of 84,800 GPM and withdraws water from a single intake bay. The two circulating water pumps for each unit discharge to a common supply header that carries the circulating water to the turbine room. The supply header then divides to supply the two inlet water boxes of the condenser. Both pumps per unit are operated when a unit is online. Figure 8 below details the TCR CWIS.

Figure 7: Aerial View of Merom Generating Station and Intake Structure Locations

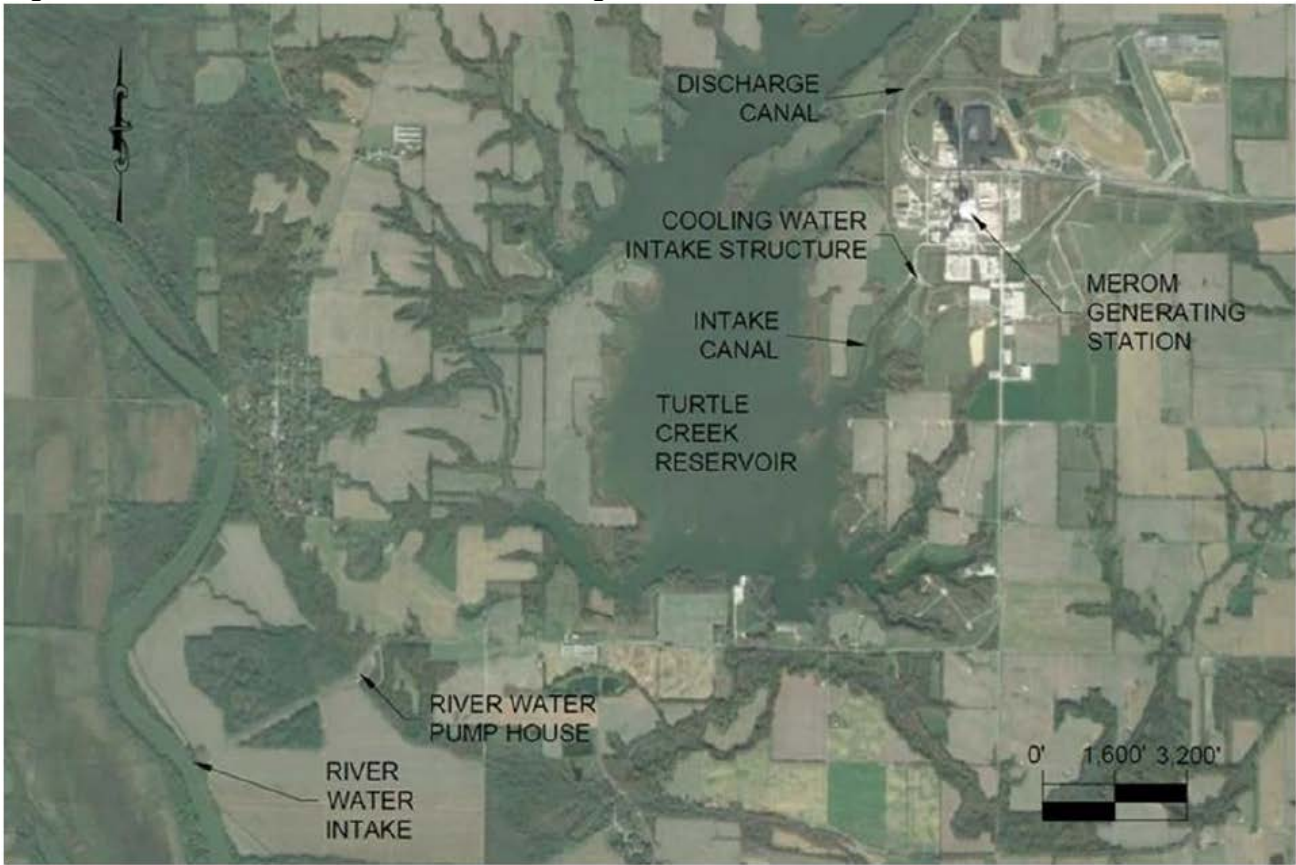
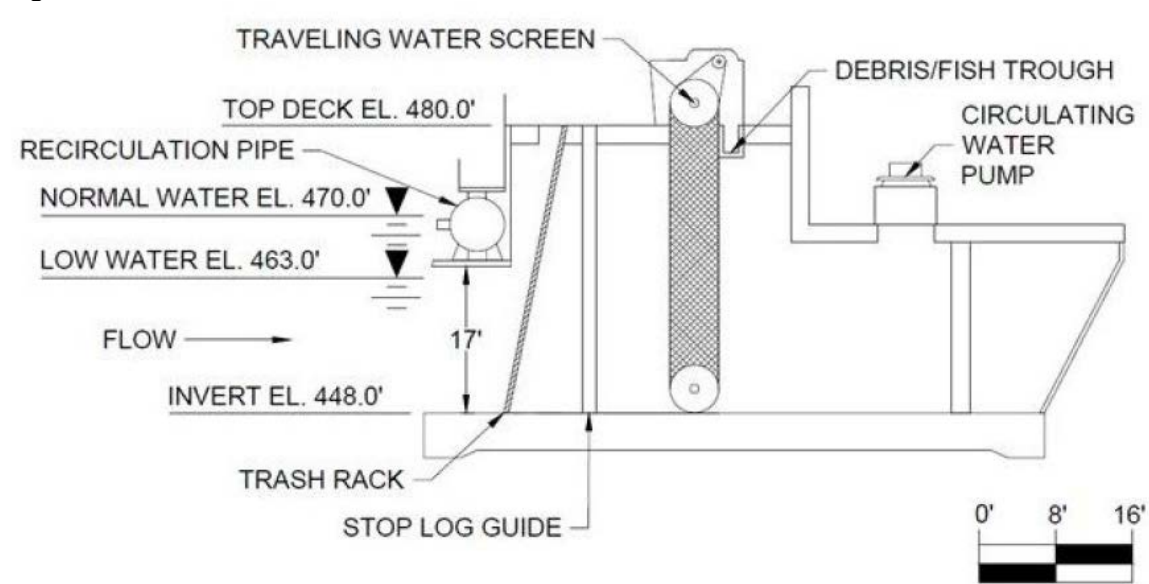


Figure 8: Section View of the TCR CWIS



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

Wabash River CWIS

Intake Flows

The Wabash River CWIS can only operate two pumps simultaneously, each rated for 9,500 GPM, which results in a maximum flow rate, or DIF, of 19,000 GPM (27.36 MGD).

Hallador provided the daily actual intake flows and monthly average intake flows calculated from pump hours and pump volumes from 2020 through 2024. The monthly average intake flows were averaged for each year, and those annual averages were used to determine the actual intake flow as defined under 40 CFR 125.92(a). The actual intake flow for the Wabash River CWIS was calculated to be 3.4 MGD (see table below).

Year	Annual Average Intake Flow
2020	2.9
2021	2.1
2022	3.3
2023	2.3
2024	6.4
AIF	3.4

Velocity of Intake Flows

Water is withdrawn from the Wabash River through seven submerged cylindrical wedge wire tee-screens with ¼ inch slot openings. The screens have a diameter of two feet and a length of eight feet each. The total effective open area of the screens is 266.4 ft², resulting in a through-screen velocity (TSV) of approximately 0.16 ft/sec (fps) at the DIF of 27.36 MGD. The TSV at the AIF would be approximately 0.02 fps.

Area of Influence

The area of influence (AOI) for the Wabash River CWIS is based on a number of assumptions including the following: the maximum AOI occurs at the low water elevation of 417.0 feet at the intake, at low water elevation through screen velocity is 0.16 fps, and that Wabash River velocities in the location of the intake are greater than 2.0 fps. At low water elevations, flow velocities equal to or less than 0.5 fps are not present in the vicinity of the Wabash Intake. A defined AOI could not be estimated for a 0.5 fps velocity contour. The AOI was estimated based on the percentage of the average river flow that is withdrawn from the source water. The proportion of source water removed from the Wabash River was multiplied by the river width near the intake (approximately 400 feet) to estimate AOI. The permittee calculated an AOI based on the above factors and the results are included as Table 1 below.

Table 1: AOI at the Wabash River CWIS

Month	Area of Influence (ft)	Wabash River Width (ft)	Portion of Source Water Withdrawn (%)
April	0.0	400	0.0
May	0.0	400	0.0
June	0.2	400	0.04
July	0.4	400	0.11
August	0.8	400	0.21

Turtle Creek Reservoir CWIS

Intake Flows

The circulating water pumps for Unit 1 and Unit 2 (two pumps per unit) are rated for 84,800 GPM. When all four pumps are operating, the maximum circulating flow, or DIF, is 339,200 GPM (488.44 MGD).

Hallador provided the daily actual intake flows and monthly average intake flows calculated from pump hours and pump volumes from 2020 through 2024. The monthly average intake flows were averaged for each year, and those annual averages were used to determine the actual intake flow as defined under 40 CFR 125.92(a). The actual intake flow for the TCR CWIS was calculated to be 347.6 MGD (see table below).

Year	Annual Average Intake Flow
2020	239.2
2021	380.5
2022	369.2
2023	368.5
2024	380.9
AIF	347.6

Velocity of Intake Flows

The through screen velocity (TSV) at the design intake flow at the TCR CWIS is calculated to be 1.4 feet per second (fps) to 2.1 fps, dependent on the water elevation (extreme low water level to full pond level). The TSV at AIF is calculated to be 1.0-1.4 fps, dependent on the water elevation.

Area of Influence

The AOI for the TCR CWIS (0.5 fps velocity contour) was estimated to begin just upstream of the inlet of the intake canal.

6.4.3 Source Water Biological Characterization

IDEM conducted fish community surveys near the Wabash River intake at Merom Generating Station. A sampling event in 2009 south of the Wabash River CWIS resulted in a calculated Index of Biotic Integrity (IBI) of 44 (passing; 36 required to pass). IDEM sampled north of the facility in 2016, resulting in a failing IBI score of 32. IDEM sampled north of the facility twice in 2025. The fish community received a failing score of 34 during an August sampling event. In September, the fish community score was passing with an IBI of 39. IDEM also conducted macroinvertebrate sampling in the same years. The 2009 sampling event resulted in a passing macroinvertebrate IBI (mIBI) score of 36. The samples from 2016 and 2025 were both failing, with scores of 30 and 32, respectively. Note, the 2025 score is not finalized, so it is subject to revision.

In 2018, IDEM conducted fish sampling and temperature monitoring in Turtle Creek Reservoir to support evaluation of the 316(a) variance in the 2021 permit renewal. At that time, IDEM determined that TCR does not support a balanced indigenous community based on the representative and important species largemouth bass. See additional discussion in Section 6.3 of this Fact Sheet (316(a) section).

6.4.4 Impingement and Entrainment– Aquatic Life Studies

The permittee did not have any source water biological data in the vicinity of the Wabash Intake, therefore, data from impingement and entrainment studies conducted at the Duke Wabash River Generating Station (“Wabash River Station”) approximately 74.5 river miles upstream from Merom Generating Station were used to address impingement and entrainment species at risk at the Wabash Intake.

A. Impingement

A one-year impingement study was conducted at the Wabash River Station in 2006 and 2007 and the results of this study were used to provide a list of fish species that might be at risk to impingement at Merom’s Wabash River CWIS. The study, prepared by EA Engineering for the Wabash River Station in 2007, reported 45 fish taxa and two shellfish taxa that were impinged. All except gizzard shad, channel catfish, freshwater drum, and bluegill were collected in low numbers, less than one specimen per sampling event. Gizzard shad, channel catfish, and freshwater drum collectively accounted for nearly 85% of the number impinged. Impingement rates at the Wabash River Station varied from three to 304 fish per twelve-hour period. The median/average rates were 58 and 32, respectively. The impinged fish at the Wabash River Station were mostly small, immature/juveniles as 31 species had average lengths <100 mm. Overall, 67% of the impinged fish at the Wabash River Station were <100 mm (EA 2007). Based on the low through-screen velocity at Merom’s Wabash River CWIS, and the lower pumping rate compared to the design capacity of the Wabash River Station (27 MGD vs 765 MGD), the number of impinged organisms can be assumed to be much lower.

B. Entrainment

Species at risk to entrainment at the Wabash River CWIS are based on results from a 2006 study conducted by EA Engineering at the Wabash River Station upstream of the Merom Generating Station. Ichthyoplankton representing five early life stages (eggs, yolk-sac larvae, post-yolk sac larvae, larvae, and juveniles) from eight families occurred in samples at the Wabash River Station. A total of 1,386 larval, juvenile, and fish eggs representing 22 taxa were collected during the study. The entrainment samples were dominated by yolk-sac larvae of unidentified cyprinids (33%) and freshwater drum eggs (17%). By family, the entrainment samples were dominated by cyprinids (53%), drum (20%), and catostomids (12%) (EA 2007).

The prior owner of the facility conducted an entrainment characterization study of the TCR CWIS during the 2016 entrainment season and the methods used and results of that study are summarized in their April 26, 2018 316(b) Report, available online on IDEM's Virtual File Cabinet.

Estimates of annual entrainment at TCR Merom Generating Station were calculated for each taxa and life stage by event and diel period. These data allow for examination of seasonal and diel variations in entrainment. Actual cooling water flows and entrainment sample volumes used for the 2016 entrainment extrapolations are summarized in Table 4 of Appendix A of the 2018 316(b) Report. An estimated 294.4 million ichthyoplankton were entrained in 2016 at Merom Generating Station (Table 9-1 of the 2018 316(b) Report). Total day-time estimates (100 million) were about one-half the night-time estimates (194 million). Entrainment estimates were strongly seasonal and generally followed the patterns observed for the entrainment sample densities. Ninety-five percent of the total estimated entrainment occurred between 25 April and 17 July (Table 14 of the 2018 316(b) Report). These trends largely reflect the abundance of yolk-sac and post yolk-sac *Dorosoma* sp. Based on the much reduced entrainment observed during the first (0.12 million) and final (0.93 million) extrapolation periods compared to the remaining periods (range = 1.7 to 99.7 million), the estimated annual entrainment approximates annual entrainment at Merom Generating Station for 2016. See Appendix B of the 2018 316(b) Report for a complete discussion of the study results.

Over 87% of the entrainment consisted of yolk sac and post yolk sac shad larvae that was most likely gizzard shad. The only other species/life stage that made up more than 1% of the entrainment was Inland Silverside (Mississippi Silverside) eggs and unidentified larvae with each making up approximately 1.5% of the entrainment.

6.4.5 Protected Species Susceptible to Impingement and Entrainment

Hallador reviewed the most recent available Federal and State resource documents and provided an updated assessment of protected species in their reduced 316(b) application. Information for both Sullivan County, Indiana, where Merom Generating Station is located, and Crawford County, Illinois, which borders the Wabash River adjacent to Merom, was reviewed for this assessment due to the proximity of these counties to the facility.

The USFWS ECOS Lists for both Sullivan County, Indiana and Crawford County, Illinois continue to include no fish species (see list in Table 2 below). Hallador noted that Rabbitsfoot (*Quadrula c. cylindrica*) is no longer found on the ECOS County list, but remains on the USFWS list of Threatened species, wherever found.

Table 2: Current List of Federally-Listed Threatened and Endangered Species Known to Occur in Sullivan County, Indiana and/or Crawford County, Illinois

Scientific Name	Common Name	Federal Status
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed Orchid	Threatened
<i>Potamilus capax</i>	Fat Pocketbook	Endangered
<i>Myotis grisescens</i>	Gray Bat	Endangered
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Endangered
<i>Myotis sodalis</i>	Indiana Bat	Endangered

Only one of these species, Indiana Bat, has final designated Critical Habitat, but it has been confirmed through a May 2025 IPaC (USFWS's Information for Planning and Consultation webtool) search that there is no overlap of displayed designated Critical Habitat at or near Merom Generating Station.

A total of thirty-five species are currently listed as being threatened or endangered by Indiana Department of Natural Resources (Indiana DNR) for Sullivan County. Since the last NPDES permit was issued for Merom Generating Station, there have been five species removed from Indiana DNR's Threatened and Endangered Species List for Sullivan County, where Merom Generating Station is located: Tubercled Blossom (*Epioblasma t. torulosa*)—delisted, Longsolid (*Fusconaia subrotunda*)—now considered state-extirpated, Pyramid Pigtoe (*Pleurobema rubrum*)—also now considered state extirpated, Thinleaf Sedge (*Carex sparganioides*)—removed, and Slick-seed Wild-bean (*Strophostyles leiosperma*)—removed. Three new species were added: Trumpeter Swan (*Cygnus buccinator*) and Eastern Bee Balm (*Monarda bradburiana*)—both listed as Endangered, and Green Flatsedge (*Cyperus pseudovegetus*), listed as Threatened.

A total of sixteen species are currently listed as being threatened or endangered in Crawford County by the Illinois Department of Natural Resources (Illinois DNR). Since the last NPDES permit was issued for Merom Generating Station, two species were removed from the Crawford County Threatened and Endangered Species list by the Illinois DNR: American Eel (*Anguilla rostrata*) and Iowa Darter (*Etheostoma exile*). There have been a total of four species added to the Crawford County list: Bigeye Chub (*Hybopsis amblops*), River Redhorse (*Masostoma carinatum*), Monkeyface (*Quadrula metanevra*), and Smooth Softshell (*Apalone mutica*); all categorized as Threatened.

The current comprehensive federal and state listings for applicable species are summarized and provided in Table 3 below.

Table 3: List of Federal and State-Listed Threatened and Endangered Species Known to Occur Near Merom Generating Station⁷

Scientific Name	Common Name	Federal Status ⁸ (County Level)	Indiana Status-- Sullivan County ⁹	Illinois Status-- Crawford County ¹⁰
Mollusk: Bivalvia (Mussels)				
<i>Cyprogenia stegaria</i>	Fanshell	Endangered	Endangered	--
<i>Epioblasma triquetra</i>	Snuffbox	Endangered	Endangered	--
<i>Fusconaia subrotunda</i>	Longsolid	Threatened	State Extirpated	--
<i>Obovaria retusa</i>	Ring Pink	Endangered	State Extirpated	--
<i>Pleurobema clava</i>	Clubshell	Endangered	Endangered	--
<i>Pleurobema plenum</i>	Rough Pigtoe	Endangered	Endangered	--
<i>Potamilus capax</i>	Fat Pocketbook	Endangered ¹¹	--	--
<i>Quadrula metanevra</i>	Monkeyface	--	--	Threatened
<i>Reginaia ebenus</i>	Ebonyshell	--	--	Endangered
<i>Theliderma cylindrica</i>	Rabbitsfoot	Threatened	Endangered	--
Fish				
<i>Ammocrypta pellucida</i>	Eastern Sand Darter	--	--	Threatened
<i>Hybopsis amblops</i>	Bigeye Chub	--	--	Threatened
<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	--	--	Endangered
<i>Maxostoma carinatum</i>	River Redhorse	--	--	Threatened
<i>Moxostoma valenciennesi</i>	Greater Redhorse	--	Endangered	--
Amphibian				
<i>Ambystoma platineum</i>	Silvery Salamander	--	--	Endangered
<i>Lithobates areolatus circulosus</i>	Northern Crawfish Frog	--	Endangered	--
<i>Lithobates blairi</i>	Plains Leopard Frog	--	Endangered	--
<i>Necturus maculosus</i>	Mudpuppy	--	--	Threatened
Reptile				
<i>Apalone mutica</i>	Smooth Softshell	--	--	Threatened
<i>Emydoidea blandingii</i>	Blanding's Turtle	Candidate	Endangered	--
<i>Sistrurus catenatus</i>	Eastern Massasauga	Threatened	Endangered	--
<i>Terrapene ornata ornata</i>	Plains Box Turtle ¹²	--	Endangered	--
<i>Thamnophis saurita</i>	Eastern Ribbon Snake	--	--	Threatened

⁷ This listing does not include insects, birds, vascular plants, or mammals as they have no nexus to Cooling Water Intake Structure (CWIS) operations at MGS.

⁸ Source: https://www.in.gov/dnr/nature-preserves/files/np_sullivan.pdf (02/26/2025 update list).

⁹ See *supra* note 8. Federal Listing Status for Sullivan County, IN also obtained from the Indiana DNR list, and supplemented with ECOS County Lists for IL and IN (<https://ecos.fws.gov/ecp/>).

¹⁰ <https://dnr.illinois.gov/content/dam/soi/en/web/dnr/espb/documents/etspeciescounty.pdf> (06/26/2024 update list).

¹¹ Listed as Endangered on USFWS ECOS list for Sullivan County, but not included on the most recent INDNR T&E List (2/26/2025) <https://ecos.fws.gov/ecp/>.

¹² See *supra* note 8.

Hallador also provided a risk assessment of the listed aquatic/semi-aquatic species in their reduced 316(b) application, which determined there is no significant risk to these federally or state protected species based on the following points:

- None of the previous or currently listed federally or state protected species were collected in any of the impingement and entrainment sampling studies conducted at Merom Generating Station, nor have they been collected as part of the TCR long-term monitoring studies, to-date. There are no listed species with designated Critical Habitat located at or near Merom Generating Station or TCR.
- Continued low approach velocities at the Wabash River CWIS and small volume of water withdrawn from the Wabash River for TCR make-up water ensures that the risk of impinging or entraining Threatened and Endangered species listed for Crawford County, Illinois remains low.
- The TCR CWIS continues to meet the definition of a closed-cycle recirculating system at 40 C.F.R. § 125.92(c) as the make-up water withdrawals attributed to the cooling portion of the system (Turtle Creek Reservoir) are minimized.
- Since both the Wabash River CWIS and TCR CWIS have been determined to be Best Technology Available (BTA) for both impingement and entrainment, any potential risk to listed aquatic species is minimized.
- There continues to be no nexus between Wabash River CWIS or TCR CWIS operation and any listed plant, animal, or insect species and therefore, they are unimpacted by cooling water intake withdrawals.

The U.S. Fish and Wildlife Service has reviewed the permittee's 316(b) submission and the response received from the Service stated, "There are no endangered freshwater mussels in Turtle Creek Reservoir (or probably not much else given the historic Se [selenium] concentrations)."

6.4.6 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.

Wabash River CWIS

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

Based on the information submitted by the permittee, IDEM has determined that the permittee's chosen alternative at the Wabash River CWIS meets BTA for impingement. The Wabash River CWIS has a design through-screen velocity of 0.16 fps, which is below the maximum through-screen velocity of 0.5 fps in alternative 2 above.

Turtle Creek Reservoir CWIS

The permittee has proposed to comply with alternative 1, above for the Turtle Creek Reservoir CWIS. Under this alternative, the permittee must operate a closed-cycle recirculating system as defined at 40 CFR 125.92. In addition, the permittee must monitor the actual intake flows at a minimum frequency of daily. The monitoring must be representative of normal operating conditions, and must include measuring cooling water withdrawals, make-up water, and blowdown volume.

Based on the information submitted by the permittee, IDEM has concluded that the TCR CWIS meets BTA for impingement mortality via compliance alternative 1 above. The TCR CWIS meets the definition of a closed-cycle recirculating system at 40 CFR 125.92(c) as the make-up water withdrawal (flows from the Wabash River intake) attributed to the cooling portion of the system (Turtle Creek Reservoir) are minimized.

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))

Wabash River CWIS

IDEM has determined that the Wabash River CWIS meets BTA for entrainment based on intermittent operation of the intake, the use of wedgewire screens on the Wabash River CWIS, the fact that the Wabash River intake operates only to maintain pool level in Turtle Creek Reservoir (thus minimizing intake flows), and the minor volume of intake flows relative to the flow of the Wabash River.

Turtle Creek Reservoir CWIS

IDEM has determined that the TCR CWIS is BTA for entrainment based on the use of a closed-cycle recirculating system with a man-made cooling reservoir (TCR).

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);

A one-year site-specific entrainment study was conducted in TCR as required for Merom Generating Station in 2016. Over 87% of the entrainment consisted of yolk sac and post yolk sac shad larvae that was most likely gizzard shad. The only other species/life stage that made up more than 1% of the entrainment was Inland Silverside (Mississippi Silverside) eggs and unidentified larvae with each making up approximately 1.5% of the entrainment.

No federally protected species were collected and TCR is not a designated critical habitat.

The facility has not conducted any entrainment studies on the Wabash River in the vicinity of the Wabash Intake. Entrainment numbers are expected to be minimal due to the relatively low intake volumes relative to the Wabash River flows and intermittent operation of the intake pumps which typically operate most often in the months of June through November as well as use of wedgewire screens.

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

There are no particulate emissions or other pollutants associated with fine-mesh screens.

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

There is adequate space to accommodate a CCRS around the southwest corner of the plant area near the current cooling system intake canal.

iv. Remaining useful plant life; and

There are currently no plans to retire the Merom Generating Station.

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.

An analysis of retrofitting Merom Generating Station with a CCRS or fine-mesh screens was previously conducted and in terms of net present value (NPV) the cost of a CCRS retrofit exceeded the annualized benefit by a ratio of 40,491 to 1 and 35,782 to 1 at discount rates of 7% and 3%, respectively. The entrainment technology with the lowest cost to benefit ratio was 0.5 mm fine-mesh modified traveling screens, however, this technology had a NPV cost-benefit ratio of 4,054 to 1 and 3,565 to 1 at discount rates of 7% and 3%, respectively.

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

i. Entrainment impacts on the waterbody;

The permittee did not provide any information on entrainment impacts on the Wabash River CWIS. Regarding the Turtle Creek Reservoir CWIS, the permittee reported that the results of the 2016 entrainment characterization study determined that entrainment is dominated by *Dorosoma* sp. (>87%) and there was no entrainment of federal or state protected species.

ii. Thermal discharge impacts;

The permit for Merom Generating Station includes alternative thermal effluent limitations for temperature for both Outfall 001 (discharge from the discharge canal to TCR) and Outfall 002 (discharge from TCR to Turtle Creek). The permittee is required to monitor and report the daily maximum temperature of the discharge at Outfall 001 daily. The temperature limits at Outfall 002 are based on Indiana water quality standards.

The facility submitted a Progress Update on Revised 316(a) Study Plan with their NPDES renewal application and plans to provide another update report in 2028. This update will be part of an addendum to the April 7, 2017 316(a) demonstration.

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

A closed-circuit cooling tower would add a parasitic auxiliary load of 15 MW which is a 1.5% reduction of available power to sell to the market. This reduction in available MWs would greatly impact the Net Heat Rate of the unit which factors into the economics of the plant dispatch and profitability of the plant.

v. Impacts on water consumption; and

If Merom Generating Station were required to install a cooling tower for entrainment BTA on the TCR, the permittee believes it would result in increased evaporative loss from TCR. As a result of the additional mechanical draft cooling tower evaporative loss, the Wabash River CWIS pumps would need to withdraw additional water from the Wabash River. This will result in increased purchased power from Western Indiana Energy, and it would increase the potential of entrainment from the Wabash River, depending on the season when such additional withdrawals occur.

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

There is no available alternative source capable of supplying the volume of cooling water necessary to operate the facility.

6.4.7 BTA Impingement and Entrainment Determination Summary

Wabash River CWIS

IDEM has determined that the existing Wabash River CWIS at the Merom Generating Station meets BTA for impingement and entrainment. The Wabash River Intake meets the requirements for impingement compliance alternative 2 (40 CFR 125.92(c)(2)) because the design through-screen velocity is 0.16 fps, which is below the required threshold of 0.5 fps. Under this alternative, the permittee must operate a cooling water intake structure that has a maximum design through-screen intake velocity of 0.5 feet per second.

Regarding entrainment BTA, IDEM finds that the existing Wabash River CWIS meets BTA for entrainment based on the intermittent and seasonal use of the intake, use of wedgewire screens, and relatively minor volumes of intake flows relative to the flow in the Wabash River.

Turtle Creek Reservoir CWIS

Regarding BTA determinations for the TCR CWIS, IDEM has determined that the TCR CWIS is BTA for impingement mortality and entrainment. The TCR CWIS meets the definition of a closed-cycle recirculating system at 40 CFR 125.92(c) as the make-up water withdrawals (flows from the Wabash River intake) attributed to the cooling portion of the system (Turtle Creek Reservoir) are minimized.

6.4.8 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 monitor the actual intake flow at a minimum frequency of daily. The monitoring must be representative of normal operating conditions, and must include measuring cooling water withdrawals, make-up water, and blowdown volume. These data must be reported on the DMRs and MMRs. Further, the permittee shall submit an annual summary of the actual intake flows measured at a minimum frequency of daily by January 31 of each year.
6. The permittee must either conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation as required by 40 CFR 125.96(e). The permittee must conduct such inspections at least weekly to ensure that any technologies operated to comply with 40 CFR 125.94 are maintained and operated to function as designed including those installed to protect Federally-listed threatened or endangered species or designated critical habitat. Alternative procedures can be approved if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather).
7. 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.
8. 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)(13) 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.
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.

6.5 Polychlorinated Biphenyl (PCB)

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

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

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

6.6 Fish Tissue and Water Column Sampling

The permittee shall submit a written selenium study plan to the Compliance Data Section and Permits Branch, Office of Water Quality (OWQ), within six (6) months of the effective date of the permit renewal. The study plan shall define the protocol that will be used by the permittee to assess the impact of selenium discharges from the Merom Generating Station on the concentrations of selenium in fish tissue and concentrations of selenium in the water column in Turtle Creek Reservoir. The study plan shall account for the following:

1. Per 327 IAC 2-1-6(a)(4), any proposal to sample fish tissue must be submitted to the department for review and approval prior to initiation of sampling, and the department will evaluate all representative fish tissue data that meets the requirements of the study approved by IDEM to determine compliance with a fish tissue criterion element.
2. The department's review of the study plan will consider, at a minimum, the historical fish tissue data collected in Turtle Creek Reservoir and the IDEM guidance document, "Guidance for the Collection of Fish Tissue and/or Water Column Data for Implementation of Indiana's Selenium Chronic Aquatic Life Criteria", Version 1.0, November 2024.
3. Collection and analyses described in the study plan must meet data quality assessment Level 3 requirements as described in the "Technical Guidance for the Office of Water Quality External Data Framework", IDEM 2024.
4. The spatial extent of the study plan shall include the entire reservoir, divided into a minimum of two sampling reaches. The upper reach shall include littoral habitats within approximately 2000 meters of permitted Outfall 001 to Turtle Creek Reservoir, and the lower reach shall include littoral habitats within approximately 2000 meters of the dam prior to Turtle Creek.

5. Three composite samples, one each for the target species Bluegill, Largemouth Bass and Common Carp shall be collected for both the upper and lower reaches. Composite fillet samples shall be collected for Bluegill and Largemouth Bass and composite whole-body samples shall be collected for Common Carp.
6. Water column data shall be collected at the same time as fish tissue sampling and shall be collected at the fish tissue sampling locations, the intake canal, at Outfall 001, and at the dam prior to Turtle Creek. Water samples shall be analyzed for total recoverable selenium and total dissolved selenium using a 40 CFR 136 Table 1B approved method with a limit of detection less than or equal to 1.0 µg/L.
7. The permittee shall continue the sampling schedule for fish tissue and water column data from the prior permit renewal with sampling conducted in odd numbered years.\
8. A work plan must be submitted to IDEM for review and approval prior to commencing any sampling. Collection and analyses described in the work plan shall meet the data quality assessment Level 3 requirements as described in the "Technical Guidance for the IDEM Office of Water Quality External Data Framework," IDEM 2024. Tissue chemistry results, percent solids, individual total length, mean total length, individual weight, mean weight, and water chemistry results, as well as accompanying QA/QC information for each sample shall be electronically delivered, as soon as possible after laboratory analysis, to the Watershed Assessment and Planning Branch and Permits Branch of the Office of Water Quality at IDEM. Additionally, all data collected as part of the project work plan are to be submitted to the External Data Framework.
9. The hierarchy of the fish tissue criterion elements (i.e., egg-ovary data supersedes muscle/whole-body) in 327 IAC 2-1-6(a)(4) apply within each fish species.

6.7 Spill Response and Reporting Requirement

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

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

6.8 Permit Processing/Public Comment

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at <https://www.in.gov/idem/public-notice/>. 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. A general notice will also be published in the newspaper with the largest general circulation within Sullivan County.

Appendix A

Technology-Based Effluent Limitation Calculations

Building Block Approach for TSS at Internal Outfall 101

Source	2025 Flow (gpd)	Designation	Concentration (mg/l)		CiFi	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
FGD Hold Tank	184,320	Regulated	100	30	18432000	5529600
Bottom Ash	216,000	Regulated	100	30	21600000	6480000
BH Floor Drains - Outage Related	288,000	Regulated	100	30	28800000	8640000
BH Floor Drains - Non-Outage	89,280	Regulated	100	30	8928000	2678400
Boiler Blowdown	15,695	Regulated	100	30	1569500	470850
Cooling Tower Blowdown	39,236	Dilution	0	0	0	0
Coal Pile Runoff	183,300	Regulated	50	30	9165000	5499000
RO Reject Water	162,000	Regulated	100	30	16200000	4860000
Carbon Filter Backwash	2,571	Regulated	100	30	257100	77130
Weak Cation Regeneration	4,300	Regulated	100	30	430000	129000

Total Flow: 1,184,702

ΣCiFi: 105381600 34363980

Daily Max Limit (mg/l):	89
Monthly Avg Limit (mg/l):	29

Building Block Approach for O&G at Internal Outfall 101

Source	2025 Flow (gpd)	Designation	Concentration (mg/l)		CiFi	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
FGD Hold Tank	184,320	Regulated	20	15	3686400	2764800
Bottom Ash	216,000	Regulated	20	15	4320000	3240000
BH Floor Drains - Outage Related	288,000	Regulated	20	15	5760000	4320000
BH Floor Drains - Non-Outage	89,280	Regulated	20	15	1785600	1339200
Boiler Blowdown	15,695	Regulated	20	15	313900	235425
Cooling Tower Blowdown	39,236	Dilution	0	0	0	0
Coal Pile Runoff	183,300	Dilution	0	0	0	0
RO Reject Water	162,000	Regulated	20	15	3240000	2430000
Carbon Filter Backwash	2,571	Regulated	20	15	51420	38565
Weak Cation Regeneration	4,300	Regulated	20	15	86000	64500

Total Flow: 1,184,702

ΣCiFi: 19243320 14432490

Daily Max Limit (mg/l):	16
Monthly Avg Limit (mg/l):	12

Building Block Approach for Iron at Internal Outfall 101

Source	2025 Flow (gpd)	Designation	Concentration (mg/l)		CiFi	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
FGD Hold Tank	184,320	Unregulated	1	1	184320	184320
Bottom Ash	216,000	Unregulated	1	1	216000	216000
BH Floor Drains - Outage Related	288,000	Regulated	1	1	288000	288000
BH Floor Drains - Non-Outage	89,280	Unregulated	1	1	89280	89280
Boiler Blowdown	15,695	Unregulated	1	1	15695	15695
Cooling Tower Blowdown	39,236	Unregulated	1	1	39236	39236
Coal Pile Runoff	183,300	Unregulated	1	1	183300	183300
RO Reject Water	162,000	Unregulated	1	1	162000	162000
Carbon Filter Backwash	2,571	Unregulated	1	1	2571	2571
Weak Cation Regeneration	4,300	Unregulated	1	1	4300	4300

Total Flow: 1,184,702

ΣCiFi: 1184702 1184702

Daily Max Limit (mg/l):	1.0
Monthly Avg Limit (mg/l):	1.0

Building Block Approach for Copper at Internal Outfall 101

Source	2025 Flow (gpd)	Designation	Concentration (mg/l)		CiFi	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
FGD Hold Tank	184,320	Unregulated	1	1	184320	184320
Bottom Ash	216,000	Unregulated	1	1	216000	216000
BH Floor Drains - Outage Related	288,000	Regulated	1	1	288000	288000
BH Floor Drains - Non-Outage	89,280	Unregulated	1	1	89280	89280
Boiler Blowdown	15,695	Unregulated	1	1	15695	15695
Cooling Tower Blowdown	39,236	Unregulated	1	1	39236	39236
Coal Pile Runoff	183,300	Unregulated	1	1	183300	183300
RO Reject Water	162,000	Dilution	0	0	0	0
Carbon Filter Backwash	2,571	Unregulated	1	1	2571	2571
Weak Cation Regeneration	4,300	Dilution	0	0	0	0

Total Flow: 1,184,702

ΣCiFi: 1018402 1018402

Daily Max Limit (mg/l):	0.86
Monthly Avg Limit (mg/l):	0.86