

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Eric J. Holcomb

Governor

Brian C. Rockensuess

Commissioner

May 20, 2024

VIA ELECTRONIC MAIL

Mr. Jeffrey Hansen, Director of Wastewater Plant Operations CWA Authority, Inc. 2020 N Meridian Street Indianapolis, Indiana 46201

Dear Mr. Hansen:

Re: Final NPDES Permit No. IN0023183

Belmont and Southport Advanced Wastewater

Treatment Plants

Marion County

Your application for a National Pollutant Discharge Elimination System (NPDES) permit has been processed in accordance with Sections 402 and 405 of the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251, et seq.), and IDEM's permitting authority under IC 13-15. The enclosed NPDES permit covers your discharges to the West Fork of the White River. All discharges from this facility shall be consistent with the terms and conditions of this permit.

One condition of your permit requires monthly reporting of several effluent parameters. You are required to submit both federal discharge monitoring reports (DMRs) and state Monthly Reports of Operation (MROs) on a routine basis. The MRO form is available on the internet at the following web site: https://www.in.gov/idem/cleanwater/wastewater-compliance/wastewater-reporting-forms-notices-and-instructions/.

Once you are on this page, select the "IDEM Forms" page and locate the version of the MRO applicable to your plant under the "Wastewater Facilities" heading. We recommend selecting the "XLS" version as it will complete all of the calculations on the data entered.

All NPDES permit holders are required to submit their monitoring data to IDEM using NetDMR. Please contact Rose McDaniel at (317) 233-2653 or Helen Demmings at (317) 232-8815 if you would like more information on NetDMR. Information is also available on our website at https://www.in.gov/idem/cleanwater/resources/netdmr/.



Mr. Jeffrey Hansen, Director of Wastewater Plant Operations Page 2

Another condition which needs to be clearly understood concerns violation of the effluent limitations in the permit. Exceeding the limitations constitutes a violation of the permit and may bring criminal or civil penalties upon the permittee. (See Part II.A.1 and II.A.11 of this permit). It is very important that your office and treatment operator understand this part of the permit.

Please note that this permit issuance can be appealed. An appeal must be filed under procedures outlined in IC 13-15-6, IC 4-21.5, and the enclosed public notice. The appeal must be initiated by filing a petition for administrative review with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the emailing of an electronic copy of this letter or within eighteen (18) days of the mailing of this letter by filing at the following addresses:

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

Indianapolis, Indiana 46204

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

Please reference the "Post Public Notice Addendum," on the final pages of the Fact Sheet, for this Office's response to comments submitted during the public notice period.

The permit should be read and studied. It requires certain action at specific times by you, the discharger, or your authorized representative. One copy of this permit is also being sent to your operator to be kept at the treatment facility. You may wish to call this permit to the attention of your consulting engineer and/or attorney.

If you have any questions concerning your NPDES permit, please contact Alyce Klein at (317) 233-6728 or aklein@idem.IN.gov. More information on the appeal review process is available at the website for the Office of Environmental Adjudication at http://www.in.gov/oea.

Sincerely,

Jerry Dittmer, Chief Permits Branch Office of Water Quality

Enclosures

cc: Jeffrey Willman, Vice President of Water Operations
Ann McIver, Director of Environmental Stewardship
Jeff Guinn, Pretreatment Program Supervisor
Roger Hanas, Director of Wastewater Collections
Cheryl Carlson, Manager, Environmental Compliance

Mr. Jeffrey Hansen, Director of Wastewater Plant Operations Page 3

Pete Corsaro, Certified Operator & Manager, Wastewater Plant Operations Chadd Stott, Environmental Manager, Sumco Group Mark Hoffman, Environmental Director, Ecobat Resources Christopher Ray, Corporate Compliance Program Specialist, Heritage Environmental

EPA Region 5

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 IDEMs authority under IC 13-5, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

CWA AUTHORITY, INC.

hereinafter referred to as "the permittee." The permittee owns and/or operates the following major municipal Advanced Wastewater Treatment (AWT) plants and associated collection system:

Facility Name:	Belmont AW I Plant	Southport AW I Plant
Address:	2700 South Belmont Ave. Indianapolis, Indiana	3800 West Southport Rd. Indianapolis, Indiana
Receiving Water:	West Fork of the White River	West Fork of the White River
receiving waters named the monitoring requirements, a authorized to discharge fro including a Wet Weather T accordance with the efflue	e West Fork of the White River ind other conditions set forth in the combined sewer overflow out reatment Facility (WWTF), to rent limitations, monitoring require	outfalls identified in Part I of this permit to in accordance with the effluent limitations, he permit. The permittee is also falls listed in Attachment A of this permit, ceiving waters identified in the permit in ments, and other conditions set forth in this applicable fees in accordance with
Effective Date:	June 1, 2024	
Expiration Date:	May 31, 2029	·
submit such information ar Environmental Manageme	nd application forms as are requent. The application shall be subpermit, unless a later date is allo	red by the Indiana Department of mitted to IDEM at least 180 days prior to wed by the Commissioner in accordance
Issued on <u>May 20,</u> Management.	2024, for the Inc	diana Department of Environmental
	Jan Di	More

Jerry Dittmer, Chief Permits Branch Office of Water Quality

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TREATMENT FACILITY DESCRIPTION

Wastewater from the Indianapolis collection system is treated by one of two Advanced Wastewater Treatment (AWT) plants. The Belmont AWT plant receives flow predominantly from the central portions of Marion County, as well as wet weather flow. The Southport AWT plant receives flow predominantly from the collar areas of Marion County including satellite communities and flow from the permittee's DigIndy tunnel system. As further described below, flow from the Belmont AWT can be diverted to the Southport AWT during both wet and dry weather. The sludge generated at the Southport AWT plant is pumped to the Belmont AWT plant for treatment and ultimate disposal. Thus, the two AWT plants function and are operated as a single system.

The wastewater collection system is comprised of combined sanitary and storm sewers with 130 Combined Sewer Overflow (CSO) points and a Wet Weather Treatment Facility (WWTF). Sanitary Sewer Overflows (SSOs) are strictly prohibited.

Belmont Advanced Wastewater Treatment (AWT) Plant

The Belmont AWT Plant is a Class IV nitrification facility with influent flow monitoring, screening, grit removal tanks, primary clarifiers, oxygen/air nitrification system (ONS/ANS), final clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination, ultraviolet (UV) radiation, and effluent flow monitoring.

The Belmont AWT Plant has an average design flow of 120 MGD and a peak design flow of 300 MGD. The Belmont AWT Plant has two wet weather storage basins: a 30-million gallon basin (EQ basin 1) to store primary influent and/or primary effluent during wet weather and a 4-million gallon basin (EQ basin 2) to store primary effluent during wet weather. Sludge treatment includes gravity belt thickening, gravity thickening, equalization, centrifuges, dewatering, and incineration or landfilling.

The Belmont AWT Plant has the following flow diversions located within the facility:

- Primary Effluent Diversion Structures: A primary effluent diversion structure exists at the 96 Structure/Junction Structure No. 1. This diversion allows primary effluent to be diverted to the EQ basin 2 or the ONS Wet Weather Pump Station. A second primary effluent diversion structure exists at Junction Structure No. 2 which allows primary effluent to be diverted around ANS and directly to the ONS Wet Weather Pump Station.
- 2. <u>Effluent Filters Diversion</u>: An ONS effluent diversion exists prior to the facility's effluent filters. All or a portion of the ONS effluent can be diverted around the effluent filters to the chlorine contact tanks.

The Belmont AWT Plant has the following flow diversions located in the collection system or at the AWT facility, all of which are capable of diverting flow from the Belmont AWT Plant to the Southport AWT Plant.

- Southwest (Southern Avenue) Diversion: A raw wastewater flow diversion exists
 external to the Belmont AWT Plant at the Southwest Diversion Structure located
 near Southern Avenue. Raw wastewater may be diverted via a 60-inch diameter
 gravity sewer to the Southport AWT Plant depending on the system hydraulics and
 plant capacities.
- 2. Belmont Wet Weather Pump Station (Raw Wastewater): A raw wastewater diversion exists prior to the facility's headworks. Raw wastewater from the Belmont Interceptor may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant via a 42-inch force main to the Tibbs Interceptor. The Wet Weather Pump Station can also pump raw wastewater to Wet Weather Storage Basin No. 1. Depending on the system hydraulics, the pumping capacity is 28-30 MGD.
- 3. Belmont Wet Weather Pump Station (Primary Effluent): A primary effluent flow diversion exists after the Belmont Primary Clarifiers. Primary effluent stored in Wet Weather Storage Basin No. 1 may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant via a 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is approximately 28-30 MGD.
- 4. <u>Gravity Diversion (Primary Influent)</u>: A preliminary treatment flow diversion exists prior to the facility's primary clarifiers. Preliminary treatment flow from the diversion may be conveyed by gravity via the 42-inch force main to the Southport AWT Plant via the Tibbs Interceptor. Depending on the system hydraulics, the diversion capacity is 16-18 MGD.
- 5. Belmont Primary Effluent Pump Station (Primary Effluent): A primary effluent diversion exists after the facility's primary clarifiers. Primary effluent from the primary effluent channel may be pumped by the Belmont Primary Effluent Pump Station (PEPS) to the Southport AWT Plant via the 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is 30 to 35 MGD. This pump station can also pump primary effluent flow to EQ basin 1.

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Southport Advanced Wastewater Treatment (AWT) Plant

The Southport AWT Plant is a Class IV nitrification facility with influent flow monitoring, screening, grit removal tanks, primary clarifiers, oxygen and air nitrification system (ONS/ANS) reactors, secondary clarifiers, mixed media tertiary filters, effluent disinfection by chlorination/dechlorination and ultraviolet (UV) radiation, effluent flow monitoring, and effluent pumping.

The Southport AWT Plant has a design average flow of 125 MGD with a peak design flow of 250 MGD. Sludges are conveyed to and centrally processed by dewatering and incineration operations at the Belmont AWT Plant's Solids Handling Operations. The Southport AWT Plant has two equalization basins with a total storage capacity of 25 million gallons. These basins are used to store screened raw wastewater. The basins are designed to be used during wet weather when the plant's treatment capacity has been reached.

The Southport AWT Plant has the following flow diversions:

- Raw Wastewater Diversion: Raw wastewater can be diverted to either of the two
 equalization basins after the screening process. Excess flow is pumped from the
 Surface Flow Wet Weather Pump Station (SFWWPS) to the equalization basins.
 The stored wastewater is returned to Southport's Headworks for full treatment after
 the influent flow rate decreases.
- 2. <u>Grit Tank Diversion</u>: A screened raw wastewater diversion exists prior to the grit facility. Flows can be diverted directly to the Mixed Liquor Channel from the SFWWPS bypassing the grit facility, primary clarifiers, and the ANS system.
- 3. <u>Grit Tank Effluent Diversion</u>: A preliminary treatment effluent diversion exists that allows flows to be diverted around the primary clarifiers and the ANS system to the ONS system. This diversion is located at Junction Structure (JS) 101B and sends screened and degritted flows to the ONS WWPS or northwest primary clarifiers.
- Primary Influent Diversion: A primary influent diversion exists at Junction Structure (JS) 102A. Flows can be diverted past the southeast primary clarifiers to the southwest primary clarifiers using the sluice gates at JS 102A.
- 5. <u>Primary Effluent Diversion</u>: A primary effluent diversion exists when using the northwest primary clarifiers. Flow from the two southern northwest primary clarifiers can be diverted to the mixed liquor channel at Junction Structure (JS) 105. Flow from the northern two primary clarifiers is conveyed to the ONS WWPS.

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6. ONS Effluent Diversion to Disinfection System: An oxygen nitrification effluent diversion exists prior to the facility's tertiary filters. All or a portion of the ONS effluent after the secondary final clarifiers can be diverted through Junction Structure (JS) 111 around the tertiary filters. The flow is then conveyed by gravity to the Chlorine Contact Tank for disinfection.

- 7. <u>Effluent Filters Diversion</u>: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the ANS/ONS effluent (up to 150 MGD) can be diverted through a 42" butterfly valve at Junction Structure (JS) 112 in the Effluent Filter Building to the effluent disinfection system.
- 8. <u>UV System Flow Diversion</u>: A diversion exists prior to the UV system. All or a portion of the filter flow effluent can be diverted around the UV system at Junction Structure (JS) 113A. This diversion will require chlorination to occur at Junction Structure (JS) 110 which is located at the southwestern end of the secondary final clarifiers.

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 shall take samples and measurements at a location representative of each discharge to determine whether the effluent limitations have been met. Refer to Part I.B of this permit for additional monitoring and reporting requirements.

1. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001, **Southport AWT Plant Outfall**, which is located at Latitude: 39° 39' 51" N, Longitude: 86° 14' 8" W. The discharge is subject to the following requirements:

TABLE 1

	Quantity or Loading		Quality or Concentration			Monitoring Requirements		
Parameter	Monthly Average	Weekly Average	Units	Monthly Average	Weekly Average	Units	Measurement Frequency	Sample Type
Flow [1]	Report		MGD				Daily	24-Hr. Total
CBOD₅							-	
Summer [2]	20,863	31,294	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	52,156	83,450	lbs/day	25	40	mg/l	Daily	24-Hr. Comp.
TSS								
Summer [2]	20,863	31,294	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	62,588	83,450	lbs/day	30	40	mg/l	Daily	24-Hr. Comp.
Ammonia-nitrogen							-	
Summer [2]	2,921	4,381	lbs/day	1.4	2.1	mg/l	Daily	24-Hr. Comp.
Winter [3]	5,216	7,928	lbs/day	2.5	3.8	mg/l	Daily	24-Hr. Comp.
Total Phosphorus	Report		lbs/day	1.0		mg/l	Daily	24-Hr. Comp.
Nitrogen, Total (as N) [4]	Report		lbs/day	Report		mg/l	Monthly	24-Hr. Comp.

TABLE 2

	Quality or Concentration			Monitoring Requirements		
Parameter	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [5]	6.0		9.0	s.u.	Daily	Grab
Dissolved Oxygen [6]						
Summer [2]	7.0			mg/l	Daily	12 Grabs/24-Hrs.
Winter [3]	6.0			mg/l	Daily	12 Grabs/24-Hrs.
Total Residual Chlorine [7]						
Final effluent [8]		0.01	0.02	mg/l	Daily	Grab
E.coli [9]		125 [10]	235 [11]	cfu/100 ml	Daily	Grab
Selenium [12][13]						
Interim		Report	Report	mg/l	Weekly	24-Hr. Comp.
Final		0.0031	0.0075	mg/l	Weekly	24-Hr. Comp.
Copper [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Zinc [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Fluoride [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Cyanide, Free [12]		Report	Report	mg/l	2 X Monthly	Grab
Sulfate [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Arsenic [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Cadmium [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chromium [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Lead [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Nickel [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Chloride [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Hardness		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.

2. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 006, **Belmont AWT Plant Outfall**, which is located at Latitude: 39° 43' 5" N, Longitude: 86° 11' 35" W. The discharge is subject to the following requirements:

TABLE 3

	Quantity or Loading		Quality or Concentration			Monitoring Requirements		
Parameter	Monthly Average	Weekly Average	Units	Monthly Average	Weekly Average	Units	Measurement Frequency	Sample Type
Flow [1]	Report		MGD				Daily	24-Hr. Total
CBOD ₅								
Summer [2]	25,035	37,553	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	50,070	75,105	lbs/day	20	30	mg/l	Daily	24-Hr. Comp.
TSS								
Summer [2]	25,035	37,553	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	50,070	75,105	lbs/day	20	30	mg/l	Daily	24-Hr. Comp.
Ammonia-nitrogen								
Summer [2]	3,505	5,257	lbs/day	1.4	2.1	mg/l	Daily	24-Hr. Comp.
Winter [3]	6,259	9,513	lbs/day	2.5	3.8	mg/l	Daily	24-Hr. Comp.
Total Phosphorus	Report		lbs/day	1.0		mg/l	Daily	24-Hr. Comp.
Nitrogen, Total (as N) [4]	Report		lbs/day	Report		mg/l	Monthly	24-Hr. Comp.

TABLE 4

	Quality or	Quality or Concentration			Monitoring Requirements		
Parameter	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type	
pH [5]	6.0		9.0	s.u.	Daily	Grab	
Dissolved Oxygen [6]							
Summer [2]	7.0			mg/l	Daily	12 Grabs/24-Hrs.	
Winter [3]	6.0			mg/l	Daily	12 Grabs/24-Hrs.	
Total Residual Chlorine [7]					-		
Final effluent [8]		0.01	0.02	mg/l	Daily	Grab	
E.coli [9]		125 [10]	235 [11]	cfu/100 ml	Daily	Grab	
Selenium [12]		Report	Report	mg/l	Weekly	24-Hr. Comp.	
Copper [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Zinc [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Fluoride [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Cyanide, Free [12]		Report	Report	mg/l	2 X Monthly	Grab	
Sulfate [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Arsenic [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Cadmium [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Chromium [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Lead [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Nickel [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Chloride [12]		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	
Hardness		Report	Report	mg/l	2 X Monthly	24-Hr. Comp.	

- [1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once every twelve months.
- [2] Summer limitations apply from May 1 through November 30 of each year.
- [3] Winter limitations apply from December 1 through April 30 of each year.
- [4] Total Nitrogen shall be determined by testing Total Kjeldahl Nitrogen (TKN) and Nitrate + Nitrite and reporting the sum of the TKN and Nitrate + Nitrite results (reported as N). Nitrate + Nitrite can be analyzed together or separately. Monitoring for Total Nitrogen is required in the effluent only.

The following EPA methods are recommended for use in the analysis of TKN and Nitrate + Nitrite. Alternative approved 40 CFR 136 methods may be utilized.

<u>Parameter</u>	<u>Method</u>
TKN	350.1, 351.1, 351.2
Nitrate	300.0, 300.1, 352.1
Nitrite	300.1, 353.2
Nitrate + Nitrite	300.0, 300.1, 353.2

- [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 Report of Operation forms.
- [6] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of the twelve (12) daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.
- [7] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations (*E. coli*) do not occur from April 1 through October 31, annually. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Table 2 for Total Residual Chlorine (TRC) shall be in effect whenever chlorine is used.
- [8] In accordance with 327 IAC 5-2-11.1(f), compliance with this permit will be demonstrated if the measured effluent concentrations are less than the limit of quantitation (0.06 mg/l). If the measured effluent concentrations are above the water quality-based permit limitations and above the Limit of Detection (LOD) specified by the permit in any of three (3) consecutive analyses or any five (5) out of nine (9) analyses, the permittee is required to reevaluate its chlorination/dechlorination practices to make

any necessary changes to assure compliance with the permit limitation for TRC. These records must be retained in accordance with the record retention requirements of Part I.B.8 of this permit.

Effluent concentrations greater than or equal to the LOD but less than the Limit of Quantitation (LOQ), shall be reported on the discharge monitoring report forms as the measured value. A note must be included with the DMR indicating that the value is not quantifiable. Effluent concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected at a concentration of 0.01 mg/l, report the value as < 0.01 mg/l. At present, two methods are considered to be acceptable to IDEM, amperometric and DPD colorimetric methods, for chlorine concentrations at the level of 0.06 mg/l.

Parameter	LOD	LOQ
Chlorine	0.02 mg/l	0.06 mg/l

Case-Specific MDL

The permittee may determine a case-specific Method Detection Level (MDL) using one of the analytical methods specified above, or any other test method which is approved by IDEM prior to use. The MDL shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the MDL. Other methods may be used if first approved by the U.S. EPA and IDEM.

- [9] The Escherichia coli (E. coli) limitations apply from April 1 through October 31 annually.
- [10] 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.
- [11] 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.
- [12] The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide. Concentrations less than the Limit of

Quantitation (LOQ) and greater than or equal to the Limit of Detection (LOD) shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.

The following EPA test methods and/or Standard Methods and associated LODs and LOQs are recommended for use in the analysis of the effluent samples. Alternative 40 CFR 136 approved methods may be used provided the LOQ is less than the monthly average and/or daily maximum effluent limitations.

The permittee may determine a case-specific Method Detection Level (MDL) using one of the analytical methods specified below, or any other test method which is approved by IDEM prior to use. The MDL shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the MDL. NOTE: The MDL for purposes of this document, is synonymous with the "limit of detection" or "LOD" as defined in 327 IAC 5-1.5-26: "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".

Parameter	EPA Method	LOD	LOQ
Arsenic	3113 B	1.0 µg/l	3.2 µg/l
Cadmium	3113 B	0.1 µg/l	0.32 µg/l
Chloride	4500 C1-E	1000 µg/l	3200 µg/l
Chromium	3111 C or 3113 B	2.0 µg/l	6.4 µg/l
Copper	3113 B	1.0 µg/l	3.2 µg/l
Cyanide, Available*	OIA-1677-09 (available)	0.5 μg/l	1.6 µg/l
Cyanide, Available*	Kelada-01 (available)	0.5 μg/l	1.6 µg/l
Fluoride	4500 F-E	16.0 µg/l	50.0 μg/l
Lead	3113 B	1.0 µg/l	3.2 µg/l
Nickel	3113 B	1.0 µg/l	3.2 µg/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 µg/l	1.9 µg/l
Sulfate	375.2, Revision 2.0	3000 µg/l	9500 μg/l
Zinc	200.7, Revision 4.4	2.0 µg/l	6.4 µg/l
	or 3120 B		

^{*}Free cyanide shall be reported as free cyanide but measured using one of the approved EPA test methods above for available cyanide.

[13] Refer to the Schedule of Compliance in Part I.E of this permit.

3. Minimum Narrative Limitations

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

- a. 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:
 - (1) will settle to form putrescent or otherwise objectionable deposits;
 - (2) are in amounts sufficient to be unsightly or deleterious;
 - (3) produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
 - (4) are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
 - (5) 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.
- b. 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.

4. Additional Monitoring Requirements

Beginning on the effective date of this permit, the permittee shall conduct the following monitoring activities:

a. Influent Monitoring – Southport AWT Plant

In addition to the requirements contained in Part I.B.2 of the NPDES permit, the permittee shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent in accordance with 327 IAC 5-2-13(b).

TABLE 5

	Quality or Concentration			Monitoring Requirements		
Parameter	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type	
Cadmium [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Chromium [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Copper [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Cyanide (free) [1]	Report	Report	mg/l	2 X Monthly	Grab	
Lead [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Fluoride	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Nickel [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Zinc [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Sulfate [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Chloride [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Arsenic [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Selenium [1]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.	

[1] The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide. Concentrations less than the Limit of Quantitation (LOQ) and greater than or equal to the Limit of Detection (LOD) shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.

b. Influent Monitoring – **Belmont AWT Plant**

In addition to the requirements contained in Part I.B.2 of the NPDES permit, the permittee shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent in accordance with 327 IAC 5-2-13(b).

TABLE 6

	Quality or Concentration			Monitoring Requirements		
Parameter	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type	
Cadmium [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Chromium [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Copper [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Cyanide (free) [1]	Report	Report	mg/l	2 X Monthly	Grab	
Lead [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Fluoride	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Nickel [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Zinc [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Sulfate [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Chloride [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Arsenic [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.	
Selenium [1]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.	

[1] The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide. Concentrations less than the Limit of Quantitation (LOQ) and greater than or equal to the Limit of Detection (LOD) shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.

c. Priority Pollutants Monitoring

The permittee shall conduct an annual inventory of priority pollutants (see 40 CFR 423, Appendix A) and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge from both the Belmont and Southport AWT Plants. The analytical report shall be sent to the Pretreatment Group. This report is due in December of each year. The inventory shall consist of:

(1) Sampling and Analysis of Influent and Effluent

Sampling shall be conducted on a day when industrial discharges are occurring at normal or maximum levels. The samples shall be 24-hour flow proportional composites, except for cyanide and volatile organics, which shall be taken by appropriate grab sampling techniques. Analysis for the U.S. EPA organic priority pollutants shall be performed using U.S. EPA methods 624, 625 and 608 in 40 CFR 136, or other equivalent methods approved by U.S. EPA. Equivalent methods must be at least as sensitive and specific as methods 624, 625 and 608.

All samples must be collected, preserved and stored in accordance with 40 CFR 136, Appendix A. Samples for volatile organics must be analyzed within 14 days of collection. Samples for semivolatile organics, PCBs and pesticides must be extracted within 7 days of collection and analyzed within 40 days of extraction. For composite samples, the collection date shall be the date at the end of the daily collection period.

(2) Sampling and Analysis of Sludge

Sampling collection, storage, and analysis shall conform to the U.S. EPA recommended procedures equivalent to methods in accordance with 40 CFR 503. Special sampling and/or preservation techniques will be required for those pollutants which deteriorate rapidly.

Sludge samples for volatile organics must be analyzed within 14 days of collection. Sludge samples for semivolatile organics, PCBs and pesticides must be extracted within 14 days of collection and analyzed within 40 days of extraction.

(3) Additional Pollutant Identification

In addition to the priority organic pollutants, a reasonable attempt shall be made to identify and quantify the ten most abundant constituents of each fraction (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) more than ten times higher than the adjacent background noise. Identification shall be attempted through the use of U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate based upon comparison with an internal standard.

The annual pretreatment program report required by Part III.A.7. of this permit, should identify the additional steps necessary to determine whether the pollutants that are present interfere, pass through, or otherwise violate 40 CFR 403.2. Upon such determination, the report must also identify the steps taken to develop and enforce local limitations on industrial discharges for those pollutants. This is a requirement of 40 CFR 403.5.

B. 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. Data on Plant Operation

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. are the minimum frequencies required by this permit.

3. Reporting per Monitoring Period

The permittee shall submit accurate monitoring reports to the Indiana Department of Environmental Management containing results obtained during each monitoring period and shall be submitted no later than the 28th day of the month following each completed monitoring period. Each monitoring period report shall be submitted no less than annually and no more than monthly, as per parameter measurement frequency listed. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (DMR) and the Monthly Report of Operation (MRO). Permittees with metals monitoring requirements shall complete and submit the Indiana MRO Form (State Form 10829 MRO for the Activated Sludge Type WWTP – expanded version) to report their influent and/or effluent data for metals and other toxics. Permittees with combined sewer overflow discharges must also submit the CSO Monthly Report of Operation to IDEM by the 28th day of the month following each completed monitoring period. 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.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the MRO for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

4. Definitions

a. Calculation of Averages

Pursuant to 327 IAC 5-2-11(a)(5), the calculation of the average of discharge data shall be determined as follows: For all parameters except fecal coliform and *E. coli*, calculations

that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified in this permit. For fecal coliform, the monthly average discharge and weekly average discharge, as concentrations, shall be calculated as a geometric mean. For *E. coli*, the monthly average discharge, as a concentration, shall be calculated as a geometric mean.

b. Terms

- (1) "Monthly Average" -The monthly average discharge 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.
- (2) "Weekly Average" The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.
- (3) "Daily Maximum" The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "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 represents the calendar day for purposes of sampling.
- (4) "24-hour Composite" A 24-hour composite sample consists of at least twelve (12) individual flow-proportioned samples of wastewater, taken by the grab sample method over equal time intervals during the period of operator attendance or by an automatic sampler, and which are combined prior to analysis. A flow proportioned composite sample shall be obtained by:
 - (a) recording the discharge flow rate at the time each individual sample is taken,
 - (b) adding together the discharge flow rates recorded from each individual sampling time to formulate the "total flow value,"
 - (c) dividing the discharge flow rate of each individual sampling time by the total flow value to determine its percentage of the total flow value, and
 - (d) multiplying 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.

Alternatively, a 24-hour composite sample may be obtained by an automatic sampler on an equal time interval basis over a twenty-four hour period provided that a minimum of 24 samples are taken and combined prior to analysis. The samples do not need to be flow-proportioned if the permittee collects samples in this manner.

- (5) CBOD₅: Five-day Carbonaceous Biochemical Oxygen Demand
- (6) TSS: Total Suspended Solids
- (7) E. coli: Escherichia coli bacteria
- (8) The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
- (9) The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.
- (10) Limit of Detection or LOD is defined as a measurement of the concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the Method Detection Level or MDL.
- (11) Limit of Quantitation or LOQ is defined as 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 called the limit of quantification or quantification level.
- (12) Method Detection Level or MDL is defined as 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 the procedure set forth in 40 CFR Part 136, Appendix B. The method detection level or MDL is equivalent to the LOD.

5. 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).

6. Recording Results

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

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

7. 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 such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report and on the Monthly Report of Operation form. Such increased frequency shall also be indicated on these forms. Any such additional monitoring data which indicates a violation of a permit limitation shall be followed up by the permittee, whenever feasible, with a monitoring sample obtained and analyzed pursuant to approved analytical methods. The results of the follow-up sample shall be reported to the Commissioner in the Monthly Discharge Monitoring Report.

8. 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-year period 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 U.S. Environmental Protection Agency, Region V Regional Administrator or the Indiana Department of Environmental Management.

C. REOPENING CLAUSES

In addition to the reopening clause provisions cited at 327 IAC 5-2-16, the following reopening clauses are incorporated into this permit:

- This permit may be modified or, alternately, revoked and reissued after public notice and opportunity for hearing to incorporate effluent limitations reflecting the results of a wasteload allocation if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.
- 2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
- 3. This permit may be modified, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under section 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.
- 4. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate monitoring requirements and effluent limitations for arsenic, cadmium, chromium, copper, chloride, cyanide (free), lead, fluoride, nickel, sulfate, zinc, and/or selenium, if the Department of Environmental Management determines that such monitoring requirements and effluent limitations are needed to assure that State Water Quality standards are met in the receiving streams.
- 5. This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include Whole Effluent Toxicity (WET) limitations or to include limitations for specific toxicants if the results of the WET testing and/or the Toxicity Reduction Evaluation (TRE) study indicate that such limitations are necessary.
- 6. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
- 7. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific

toxicants if the required additional analyses in Part I.A. indicate that such additional requirements and/or limitations are necessary to assure that State Water Quality Standards are met in the receiving stream.

D. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

To adequately assess the effects of the effluent on aquatic life, the permittee is required by this section of the permit to conduct chronic Whole Effluent Toxicity (WET) testing. Part I.D.1. of this permit describes the testing procedures and Part I.D.2. describes the Toxicity Reduction Evaluation (TRE) which is only required if the effluent demonstrates toxicity in two (2) consecutive toxicity tests as described in Part I.D.1.f.

1. Whole Effluent Toxicity (WET) Tests

The permittee must conduct the series of aquatic toxicity tests described below to monitor the acute and chronic toxicity of the effluent discharged from Outfalls 001 and 006.

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

a. Toxicity Test Procedures and Data Analysis

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

Figures 4 and 6) of the <u>Chronic Toxicity Test Method</u>. The IC₂₅ value together with 95% confidence intervals calculated by the Linear Interpolation and Bootstrap Methods in Appendix M of the <u>Chronic Toxicity Test Method</u> must be determined in addition to the NOEC value.

b. Types of Whole Effluent Toxicity Tests

- (1) The permittee must conduct a 3-brood (7-day) definitive static-renewal daphnid (*Ceriodaphnia dubia*) survival and reproduction toxicity test and a 7-day definitive static-renewal fathead minnow (*Pimephales promelas*) larval survival and growth toxicity test.
- (2) All tests must be conducted using 24-hour composite samples of final effluent. Three effluent samples are to be collected on alternate days (e.g. collected on days one, three, and five). The first effluent sample will be used for test initiation and for test solution renewal on day 2. The second effluent sample will be used for test solution renewal on days 3 and 4. The third effluent sample will be used for test solution renewal on days 5, 6, and 7. If shipping problems are encountered with renewal samples after a test has been initiated, the most recently used sample may continue to be used for test renewal, if first approved by the IDEM Permits Branch, but for no longer than 72 hours after first use.
- (3) The whole effluent dilution series for the definitive test must include a control and at least five effluent concentrations with a minimum dilution factor of 0.5. The effluent concentrations selected must include and, if practicable, bracket the effluent concentrations associated with the determinations of acute and chronic toxicity provided in Part I.D.1.f. Guidance on selecting effluent test concentrations is included in Section 8.10 of the Chronic Toxicity Test Method. The use of an alternate procedure for selecting test concentrations must first be approved by the IDEM Permits Branch.
- (4) If, in any control, more than 10% of the test organisms die in the first 48 hours with a daphnid species or the first 96 hours with a fathead minnow, or more than 20% of the test organisms in 7 days, that test is considered invalid and the toxicity tests must be repeated. In addition, if in the *Ceriodaphnia dubia* survival and reproduction test, the average number of young produced per surviving female in the control group is less than 15, or if 60% of surviving control females have less than three broods; and in the fathead minnow (*Pimephales promelas*) survival and growth test, if the mean dry weight of surviving fish in the control group is less than 0.25 mg, that test is considered invalid and must also be repeated. All other test conditions and test acceptability criteria for the fathead minnow (*Pimephales promelas*) and *Ceriodaphnia dubia* chronic toxicity tests must be in accordance with the test requirements in Section 11 (Test Method 1000.0), Table 1 and Section 13 (Test Method 1002.0), Table 3, respectively, of the Chronic Toxicity Test Method.

c. Effluent Sample Collection and Chemical Analysis

- (1) Whole effluent samples taken for the purposes of toxicity testing must be 24-hour composite samples collected at a point that is representative of the final effluent, but prior to discharge. Effluent sampling for the toxicity testing may be coordinated with other permit sampling requirements as appropriate to avoid duplication. First use of the whole effluent toxicity testing samples must not exceed 36 hours after termination of the 24-hour composite sample collection and must not be used for longer than 72 hours after first use.
- (2) Chemical analysis must accompany each effluent sample taken for toxicity testing, including each sample taken for the repeat testing as outlined in Part I.D.1.f.3. The chemical analysis detailed in Part I.A.1. and Part I.A.2. must be conducted for the effluent sample in accordance with Part I.B.5. of this permit.

d. Toxicity Testing Frequency and Duration

(1) Southport AWT Plant Outfall 001

Under the previous permit, this facility initiated a TRE and the Compliance Data Section suspended toxicity testing requirements for the term of the TRE compliance schedule. The facility is required under this permit to complete the TRE following the current compliance schedule which ends April 11, 2026. Successful completion of the TRE will be demonstrated by the toxicity tests required under Part I.D.2.c. After successful completion of the TRE, the toxicity tests established under Part I.D.1.b. must be conducted once **every six (6) months**, as calculated from the first day of the first month following successful completion of the post-TRE toxicity tests (see Part I.D.2.c.(4)), for the remainder of the permit term.

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

(2) Belmont AWT Plant Outfall 006

The toxicity tests specified in Part I.D.1.b. must be conducted once **every six (6) months**, as calculated from the effective date of the permit at Belmont AWT Plant Outfall 006, for the duration of the permit.

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

e. Reporting

- (1) Notifications of the failure of two (2) consecutive toxicity tests and the intent to begin the implementation of a TRE under Part I.D.1.f.(4) must be submitted in writing to the Compliance Data Section of IDEM's Office of Water Quality.
- (2) Results of all toxicity tests, including invalid tests, must be reported to IDEM according to the general format and content recommended in the <u>Chronic Toxicity Test Method</u>, Section 10, "Report Preparation and Test Review". However, only the results of valid toxicity tests are to be reported on the discharge monitoring report (DMR). The results of the toxicity tests and laboratory report are due by the <u>earlier</u> of 60 days after completion of the test or the 28th day of the month following the end of the period established in Part I.D.1.d.
- (3) The full WET test laboratory report must be submitted to IDEM electronically as an attachment to an e-mail to the Compliance Data Section at www.eports@idem.IN.gov. The results must also be submitted via NetDMR.
- (4) For quality control and ongoing laboratory performance, the laboratory report must include results from appropriate standard reference toxicant tests. This will consist of acute (LC₅₀ values), if applicable and chronic (NOEC, LOEC, and IC₂₅ values) endpoints of toxicity obtained from reference toxicant tests conducted within 30 days of the most current effluent toxicity tests and from similarly obtained historical reference toxicant data with mean values and appropriate ranges for each species tested for at least three months to one year. Toxicity test reports must also include copies of chainof-custody records and laboratory raw data sheets.
- (5) Statistical procedures used to analyze and interpret toxicity data (e.g. Fisher's Exact Test and Steel's Many-one Rank Test for 7-day survival of test organisms; tests of normality (e.g., Shapiro Wilk's Test) and homogeneity of variance (e.g., Bartlett's Test); appropriate parametric (e.g. Dunnett's Test) and non-parametric (e.g. Steel's Many-one Rank Test) significance tests and point estimates (IC₂₅) of effluent toxicity, etc.; together with graphical presentation of survival, growth, and reproduction of test organisms), including critical values, levels of significance, and

- 95% confidence intervals, must be described and included as part of the toxicity test laboratory report.
- (6) For valid toxicity tests, the WET test laboratory report must include a summary table of the results for each species tested, as shown in the table presented below. This table will provide toxicity test results, reported in acute toxic units (TU₂) and chronic toxic units (TU₂) for evaluation under Part I.D.1.f. and reporting on the DMR.

Test Organism [1]	Test Type	Endpoint [2]	Units	Result	Compliance Limit [6]	Pass/ Fail [7]	Reporting
Ceriodaphnia	3-brood	48-hr. LC ₅₀	%	Report			
dubia	(7-day)	40-III. LO ₅₀	TUa	Report			
	Definitive	NOEC	%	Report			
	Static-	Survival	TU₀	Report			Laboratory
	Renewal	NOEC	%	Report			Report
	Survival and	Reproduction	TUc	Report			
	Reproduction	IC ₂₅	%	Report			
		Reproduction	TUc	Report			
		Toxicity (acute) [3]	TUa	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61425)
		Toxicity (chronic) [4]	TUc	Report [5]	1.1	Report	Laboratory Report and NetDMR (Parameter Code 61426)
Pimephales	7-day	06 br 1 C	%	Report			
promelas	Definitive	96-hr. LC ₅₀	TU_a	Report			
	Static-	NOEC	%	Report			
	Renewal	Survival	$TU_{\mathtt{c}}$	Report			Laboratory
	Larval	NOEC	%	Report			Report
	Survival and	Growth	TUc	Report			
	Growth	IC ₂₅	%	Report			
		Growth	TUc	Report			
		Toxicity (acute) [3]	TU_{a}	Report [5]	1.0	Report	Laboratory Report and NetDMR (Parameter Code 61427)
		Toxicity (chronic) [4]	TUc	Report [5]	1.1	Report	Laboratory Report and NetDMR (Parameter Code 61428)

^[1] For the WET test laboratory report, eliminate from the table any species that was not tested.

- [2] A separate acute test is not required. The endpoint of acute toxicity must be extrapolated from the chronic toxicity test.
- [3] The toxicity (acute) endpoint for *Ceriodaphnia dubia* is the 48-hr. LC₅₀ results reported in acute toxic units (TU_a). The toxicity (acute) endpoint for *Pimephales promelas* is the 96-hr. LC₅₀ result reported in acute toxic units (TU_a).
- [4] The toxicity (chronic) endpoint for *Ceriodaphnia dubia* is the higher of the NOEC Survival, NOEC Reproduction, and IC₂₅ Reproduction values reported in chronic toxic units (TU_c).
- [5] Report the values for acute and chronic endpoints of toxicity determined in [3] and [4] for the corresponding species. These values must be reported on the DMR.
- [6] These values do not represent effluent limitations, but rather exceedance of these values results in a demonstration of toxicity that triggers additional action and reporting by the permittee.
- [7] If the toxicity result (in TU_s) is less than or equal to the compliance limit, report "Pass". If the toxicity result (in TU_s) exceeds the compliance limit, report "Fail".

f. Demonstration of Toxicity

- (1) Toxicity (acute) will be demonstrated if the effluent is observed to have exceeded **1.0** TU_a (acute toxic units) for *Ceriodaphnia dubia* in 48 hours or in 96 hours for *Pimephales promelas*. For this purpose, a separate acute toxicity test is not required. The results for the acute toxicity demonstration must be extrapolated from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.D.1.b.2., the effluent concentration associated with acute toxicity is 100%.
- (2) Toxicity (chronic) will be demonstrated if the effluent is observed to have exceeded **1.1** TU_c (chronic toxic units) for *Ceriodaphnia* or *Pimephales promelas* from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.D.1.b.2., the effluent concentration associated with chronic toxicity is 91%.
- (3) If toxicity (acute) or toxicity (chronic) is demonstrated in any of the chronic toxicity tests specified above, a repeat chronic toxicity test using the procedures in Part I.D.1. of this permit and the same test species must be initiated within two (2) weeks of test failure. During the sampling for any repeat tests, the permittee must also collect and preserve sufficient effluent samples for use in any Toxicity Identification Evaluation (TIE) and/or TRE, if necessary.
- (4) If any two (2) consecutive chronic toxicity tests, including any and all repeat tests, demonstrate acute or chronic of toxicity, the permittee must notify the Compliance Data

Section under Part I.D.1.e. within 30 days of the termination of the second test, and begin the implementation of TRE as described in Part I.D.2. After receiving notification from the permittee, The Compliance Data Section will suspend the whole effluent toxicity testing requirements in Part I.D.1. for the term of the TRE compliance schedule.

g. Definitions

- (1) "Acute toxic unit" or "TUa" is defined as 100/LC50 where the LC50 is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organism.
- (2) "Chronic toxic unit" or "TU_c" is defined as 100/NOEC or 100/IC₂₅, where the NOEC or IC₂₅ are expressed as a percent effluent in the test medium.
- (3) "Inhibition concentration 25" or "IC₂₅" means the toxicant (effluent) concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the test population. For example, the IC₂₅ is the concentration of toxicant (effluent) that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.
- (4) "No observed effect concentration" or "NOEC" is the highest concentration of toxicant (effluent) to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant (effluent) in which the values for the observed responses are not statistically significantly different from the controls.

2. Toxicity Reduction Evaluation (TRE) Schedule

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

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

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

a. Development and Submittal of a TRE Plan

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

(1) Method for Aquatic Toxicity Identification Evaluations:

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

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

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

- (2) Toxicity Identification Evaluation: Characterization of chronically Toxic Effluents, Phase I (EPA/600/6-91/005F), May 1992.
- (3) Toxicity Reduction evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833B-99-002), August 1999.
- (4) Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program, U.S. EPA, March 27, 2001.

b. Conduct the TRE

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

- c. Post-TRE Toxicity Testing Requirements
 - (1) After completing the TRE, the permittee must conduct monthly post-TRE toxicity tests with the two (2) test species *Ceriodaphnia dubia* and fathead minnow (*Pimephales promelas*) for a period of three (3) consecutive months.
 - (2) If the three (3) monthly tests demonstrate no toxicity with any test species as described in Part I.D.1.f., the TRE will be considered successful. Otherwise, the TRE study must be continued.
 - (3) The post-TRE toxicity tests must be conducted in accordance with the procedures in Part I.D.1. The results of these tests must be submitted as part of the final TRE Report required under Part I.D.2.d.
 - (4) After successful completion of the TRE, the permittee must resume the chronic toxicity tests required in Part I.D.1. The established starting date for the frequency in Part I.D.1.d. is the first day of the first month following successful completion of the post-TRE toxicity tests.

d. Reporting

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

(2) Within 90 days of successfully completing the TRE, including the three (3) consecutive monthly tests required as part of the post-TRE toxicity testing requirements under Part I.D.2.c., the permittee must submit to the Compliance Data Section a final TRE Report that includes a discussion of the TRE results, along with the starting date established under Part I.D.2.c.(4). for the continuation of the toxicity testing required in Part I.D.1.

e. Compliance Date

The permittee must complete items a., b., c., and d. from Part I.D.2. and reduce toxicity in the effluent discharge to acceptable levels as soon as possible, but <u>no later than three (3)</u> years from the date that toxicity is initially demonstrated in two (2) consecutive toxicity tests (i.e. the date of the termination of the second test) as described in Part I.D.1.f.4.

E. SCHEDULE OF COMPLIANCE FOR SELENIUM FOR SOUTHPORT AWT PLANT

- 1. The final effluent limitations for selenium are deferred for the term of this compliance schedule, however the permittee must take steps to attempt to meet the final limitations as soon as reasonably possible. If the permittee determines prior to the conclusion of this compliance schedule that it can meet any of the final limitations, the permittee shall provide written notification to the Compliance Data Section of the Office of Water Quality. Monitoring and reporting of effluent selenium is required during the interim period in accordance with Part I.A.1 of the permit.
- 2. The permittee shall submit a written progress report to the Compliance Data Section and Permits Branch, Office of Water Quality (OWQ) twelve (12) months from the effective date of the permit. The progress report shall summarize progress made towards determining the method(s) for meeting the final requirements for selenium for the Southport AWT Plant. The following information, at a minimum, is required to be included in the report: progress on the industrial source and collection system assessment and summary of findings thus far; progress on and current status of local limits development; progress on the assessment of the Authority's wastewater treatment plants and implementation of any necessary and appropriate controls; and a summary of activities planned for the next year.
- 2. The permittee shall submit a written progress report to the Compliance Data Section and Permits Branch, Office of Water Quality not later than twenty-four (24) months from the effective date of the permit. The progress report shall summarize progress made towards determining the method(s) for meeting the final requirements for selenium for the Southport AWT Plant. The following information, at a minimum, is required to be included in the report: a summary of the completed industrial source and collection system assessment; progress on and current status of local limits development (expected to be completed); status of submitting the proposed amendments to local limits for selenium to US EPA and IDEM for review; status of incorporation of revised selenium limits into Resolution No. CWA 2-2011; progress and status of the assessment of the Authority's wastewater treatment plants and implementation of any necessary and appropriate controls; and a summary of activities planned for the next year.

- 3. The permittee shall submit a written progress report to the Compliance Data Section and Permits Branch, Office of Water Quality not later than thirty-six (36) months from the effective date of the permit. The progress report shall summarize progress made towards determining the method(s) for meeting the final requirements for selenium for the Southport AWT Plant. The following information, at a minimum, is required to be included in the report: progress on and current status of submitting the proposed amendments to local limits for selenium to US EPA and IDEM for review (expected to be completed); status of incorporation of revised selenium limits into Resolution No. CWA 2-2011 (expected to be completed); progress on issuance of new and/or amendments to existing industrial discharge permits; progress on revisions to satellite community sewer use ordinances; progress and status of the assessment of the Authority's wastewater treatment plants and implementation of any necessary and appropriate controls; and a summary of activities planned for the next year.
- 4. The permittee shall submit a written progress report to the Compliance Data Section and Permits Branch, Office of Water Quality not later than forty-eight (48) months from the effective date of the permit. The progress report shall summarize progress made towards determining the method(s) for meeting the final requirements for selenium for the Southport AWT Plant. The following information, at a minimum, is required to be included in the report: status of issuance of new and/or amendments to existing industrial discharge permits (expected to be completed); progress and status of the assessment of the Authority's wastewater treatment plants and implementation of any necessary and appropriate controls; and a summary of activities planned for the next year.
- 5. The permittee shall comply with all final requirements no later than fifty-nine (59) months from the effective date of the permit. The permittee shall submit a written progress report to the Compliance Data Section and Permits Branch, Office of Water Quality at this time.
- 6. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the Compliance Data Section and Permits Branch of the Office of Water Quality stating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final effluent limitations.

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 Provide Information

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 facility that:

- a. could significantly change the nature of, or increase the quantity of, pollutants discharged; or
- b. the Commissioner may request to evaluate whether such cause exists.

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

4. 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 a renewal of this permit in accordance with

327 IAC 5-3-2(a)(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. The application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

- a. permission is requested in writing before such deadline;
- b. IDEM grants permission to submit the application after the deadline; and
- c. the application is received no later than the permit expiration date.

As required under 327 IAC 5-2-3(g)(1) and (2), POTWs with design influent flows equal to or greater than one million (1,000,000) gallons per day and POTWs with an approved pretreatment program or that are required to develop a pretreatment program, will be required to provide the results of whole effluent toxicity testing as part of their NPDES renewal application.

5. 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.

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.

6. Permit Actions

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

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

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

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

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

7. 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 an invasion of 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.

8. 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.

9. 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.

10. 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.

11. 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 or knows that the commission of the offense places another person in imminent danger of death or serious bodily injury. An offense under IC 13-30-10-1.5(e) is 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.

12. 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.

13. 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.

14. Operator Certification

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7. The permittee shall designate one (1) person as the certified operator with complete responsibility for the proper operations of the wastewater facility.

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

the actual operations conditions. In accordance with 327 IAC 5-22-3(11), "responsible charge" means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

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

15. Construction Permit

Except in accordance with 327 IAC 3, the permittee shall not construct, install, or modify any water pollution treatment/control facility as defined in 327 IAC 3-1-2(24). Upon completion of any construction, the permittee must notify the Compliance Data Section of the Office of Water Quality in writing.

16. 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:

- Enter upon the permittee's premises where a point source, regulated facility, or activity is located or conducted, or where records must be kept pursuant to the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;
- 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.

17. 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. Facility Operations, Maintenance, and Quality Control

- a. In accordance with 327 IAC 5-2-8(9), the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances, i.e., equipment used for measuring and determining compliance) for collection and treatment that are:
 - (1) installed or used by the permittee; and
 - (2) necessary for achieving compliance with the terms and conditions of the permit.

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. This provision also does not prohibit taking redundant treatment units off line, provided that the permittee is at all times: maintaining in good working order and efficiently operating all facilities and systems; providing best quality effluent; and achieving compliance with the terms and conditions of the permit.

- b. The permittee shall operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants. The permittee shall properly remove and dispose of excessive solids and sludges.
- c. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- d. Maintenance of all waste collection, control, treatment, and disposal facilities shall be conducted in a manner that complies with the bypass provisions set forth below.
- e. Pursuant to 327 IAC 5-22-10(1), the permittee is responsible for providing adequate funding for and oversight of the wastewater treatment plant and collection system to ensure proper operation, maintenance, management, and supervision.

f. Any extensions to the sewer system must continue to be constructed on a separated basis. Plans and specifications, when required, for extension of the sanitary system must be submitted to the Facility Construction and Engineering Support Section, Office of Water Quality in accordance with 327 IAC 3-2-2. There shall also be an ongoing preventative maintenance program for the sanitary sewer system.

2. Bypass of Treatment Facilities

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

- a. Terms as defined in 327 IAC 5-2-8(12)(A):
 - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses, as defined above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II.B.2.d; or
 - (4) The condition under Part II.B.2.f below is met.
- c. 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.

- d. The permittee must provide the Commissioner with the following notice:
 - (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
 - (2) The permittee shall orally report an unanticipated bypass within 24 hours of becoming aware of the bypass event. The permittee must also provide a written report within five (5) days of the time the permittee becomes aware of the bypass event. **Note that electronic submission will be the only acceptable method after December 21, 2025, provided such systems are available and use is required by the Commissioner**. The report must contain a description of the noncompliance (i.e. the bypass) and its cause; the period of noncompliance, including exact dates and times; if the cause of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the bypass event. If a complete email submittal is sent within 24 hours of the time that the permittee became aware of the unanticipated bypass event, then that report will satisfy both the oral and written reporting requirement.
- e. 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.b. The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.
- f. The permittee may allow any bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.b., d and e of this permit.
- g. The Belmont and Southport AWT facilities have the following bypass points (outfalls), the use of which is prohibited except in compliance with the above provisions:

Outfall No.	Location	Receiving Stream
002	Southport Primary Influent Bypass 39° 40' 11" N; 86° 13' 33" W	Little Buck Creek
007	Belmont Primary Effluent Bypass 39° 43' 38" N; 86° 11' 24" W	West Fork White River

Belmont Primary Effluent Bypass: A primary effluent bypass exists after the primary clarifiers and prior to the Belmont AWT Plant Wet Weather Secondary Treatment System (WWTS). Primary effluent from this bypass discharges over adjustable weirs located in the Primary Effluent Diversion Structure and enters the White River via Outfall 007.

<u>Southport Primary Influent Bypass</u>: A preliminary treatment effluent diversion exists that allows flow to be diverted around the primary clarifiers. This diversion is located at the effluent channel of the grit chambers and diverts screened and degritted wastewater to Structure 5-K or flow is mixed with primary effluent and bypassed to Little Buck Creek through Outfall 002.

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 subsection, 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 operated in compliance with proper operation and maintenance procedures;
 - (3) The permittee complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and
 - (4) The permittee submitted notice of the upset as required in the "Incident 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.

- a. Collected screenings, slurries, sludges, and other such pollutants shall be disposed of in accordance with provisions set forth in 329 IAC 10, 327 IAC 6.1, or another method approved by the Commissioner.
- b. The permittee shall comply with existing federal regulations governing solids disposal, and with applicable provisions of 40 CFR Part 503, the federal sludge disposal regulation standards.
- c. The permittee shall notify the Commissioner prior to any changes in sludge use or disposal practices.
- d. The permittee shall maintain records to demonstrate its compliance with the above disposal requirements.

5. Power Failures

In accordance with 327 IAC 5-2-10 and 327 IAC 5-2-8(14) in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, or
- b. shall halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of this permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit.

6. <u>Unauthorized Discharge</u>

Any overflow or release of sanitary wastewater from the wastewater treatment facilities or collection system that results in a discharge to waters of the state and is not specifically authorized by this permit is expressly prohibited. These discharges are subject to the reporting requirements in Part II.C.3 of this permit.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(11)(F) and 5-2-16(d), the permittee shall give notice to the Commissioner as soon as possible of any planned alterations or additions to the facility (which includes any point source) that could significantly change the nature of, or increase the quantity of, pollutants discharged. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited. Material and substantial alterations or additions to the permittee's operation that were not covered in the permit (e.g., production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) are also cause for modification of the permit. However those alterations which constitute total replacement of the process or the production equipment causing the discharge converts it into a new source, which requires the submittal of a new NPDES application.

2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(10), 327 IAC 5-2-13, and 327 IAC 5-2-15, monitoring results shall be reported at the intervals and in the form specified in "Data On Plant Operation", Part I.B.2.

3. Incident Reporting Requirements

Pursuant to 327 IAC 5-2-8(11) and 327 IAC 5-1-3, the permittee shall orally report to the Commissioner information on the following incidents within 24 hours from the time permittee becomes aware of such occurrence. If the incident meets the emergency criteria of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made 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 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.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any emergency incident 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 incident by calling 317/233-7745 (888/233-7745 toll free in Indiana). This number should only be called when reporting these emergency events;
- c. Any upset (as defined in Part II.B.3 above) that exceeds any technology-based effluent limitations in the permit;

- d. Any release, including basement backups, from the sanitary sewer system (including satellite sewer systems operated or maintained by the permittee) not specifically authorized by this permit. Reporting of known releases from private laterals not caused by a problem in the sewer system owned or operated by the permittee is not required under Part II.C.3, however, documentation of such events must be maintained by the permittee and available for review by IDEM staff;
- e. Any discharge from any outfall from which discharge is explicitly prohibited by this permit as well as any discharge from any other outfall or point not listed in this permit; or
- f. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: selenium

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 five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the event and its cause; the period of occurrence, including exact dates and times, and, if the event has not concluded, the anticipated time it is expected to continue; and steps taken or planned to reduce, mitigate and eliminate the event and steps taken or planned to 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/Incident Report" (State Form 48373) or a "Noncompliance Notification Report" (State Form 54215), whichever is appropriate, to IDEM at www.wwepports@idem.IN.gov. If a complete submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then that report will satisfy both the oral and written reporting requirements.

4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(11)(D), the permittee shall report any instance of noncompliance not reported under the "Incident Reporting Requirements" in Part II.C.3 at the time the pertinent Discharge Monitoring Report is submitted. 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, eliminate and prevent the noncompliance.

5. Other Information

Pursuant to 327 IAC 5-2-8(11)(E), where the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or in any report to the Commissioner, 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 principal executive defined as a president, secretary, treasurer, any vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making functions for the corporation or the manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars), if 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. <u>Electronic Signatures.</u> 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. <u>Certification.</u> Any person signing a document identified under paragraphs a and b of this section, 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 or noncompliance, 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. Progress Reports

In accordance with 327 IAC 5-2-8(11)(A), 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 fourteen (14) days following each schedule date.

10. Advance Notice for Planned Changes

In accordance with 327 IAC 5-2-8(11)(B), the permittee shall give advance notice to IDEM 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.

11. Additional Requirements for POTWs and/or Treatment Works Treating Domestic Sewage

a. All POTWs shall identify, in terms of character and volume of pollutants, any significant indirect discharges into the POTW which are subject to pretreatment standards under section 307(b) and 307 (c) of the CWA.

- b. All POTWs must provide adequate notice to the Commissioner of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to section 301 or 306 of the CWA if it were directly discharging those pollutants.
 - (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by any source where such change would render the source subject to pretreatment standards under section 307(b) or 307(c) of the CWA or would result in a modified application of such standards.

As used in this clause, "adequate notice" includes information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of the effluent to be discharged from the POTW.

- c. This permit incorporates any conditions imposed in grants made by the U.S. EPA and/or IDEM to a POTW pursuant to Sections 201 and 204 of the Clean Water Act, that are reasonably necessary for the achievement of effluent limitations required by Section 301 of the Clean Water Act.
- d. This permit incorporates any requirements of Section 405 of the Clean Water Act governing the disposal of sewage sludge from POTWs or any other treatment works treating domestic sewage for any use for which rules have been established in accordance with any applicable rules.
- e. POTWs must develop and submit to the Commissioner a POTW pretreatment program when required by 40 CFR 403 and 327 IAC 5-19-1, in order to assure compliance by industrial users of the POTW with applicable pretreatment standards established under Sections 307(b) and 307(c) of the Clean Water Act. The pretreatment program shall meet the criteria of 327 IAC 5-19-3 and, once approved, shall be incorporated into the POTW's NPDES permit.

12. Electronic Reporting

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.B.3., Monthly Reporting, for the electronic reporting requirements for the monthly

monitoring reports such as the Discharge Monitoring Report (DMR), Monthly Report of Operation (MRO) and Monthly Monitoring Report (MMR).

13. <u>Trucked or Hauled Pollutants and Hauled Waste Requirements</u>

The permittee shall manage trucked or hauled pollutants as required and implemented in permittee's Sewer Use Ordinance.

D. ADDRESSES

1. Municipal NPDES Permits Section

Indiana Department of Environmental Management Office of Water Quality – Rm 1255 Municipal NPDES Permits Section 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Municipal NPDES Permits Section:

- a. NPDES permit applications (new, renewal or modifications) with fee
- b. Preliminary Effluent Limits request letters
- c. Comment letters pertaining to draft NPDES permits
- d. NPDES permit transfer of ownership requests
- e. NPDES permit termination requests
- f. Notifications of substantial changes to a treatment facility, including new industrial sources
- g. Combined Sewer Overflow (CSO) Operational Plans
- h. CSO Long Term Control Plans (LTCP)
- i. Stream Reach Characterization and Evaluation Reports (SRCER)
- j. Streamlined Mercury Variance Annual Reports

2. Facility Construction and Engineering Support Section

Indiana Department of Environmental Management Office of Water Quality – Rm 1255 Facility Construction and Engineering Support Section 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Facility Construction and Engineering Support Section:

a. Construction permit applications with fee

3. Compliance Data Section

Indiana Department of Environmental Management
Office of Water Quality – Rm 1255
Compliance Data Section
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Compliance Data Section:

- a. Discharge Monitoring Reports (DMRs)
- b. Monthly Reports of Operation (MROs)
- c. Monthly Monitoring Reports (MMRs)
- d. CSO MROs
- e. Gauging station and flow meter calibration documentation
- f. Compliance schedule progress reports
- g. Completion of Construction notifications
- h. Whole Effluent Toxicity (WET) Testing reports
- Notification of two (2) consecutive failed WETTs and the intent to begin implementation of a TRE
- j. Notification of initiation of a TRE
- k. TRE plans and progress reports

- I. TRE final report
- m. Bypass/Overflow Reports
- n. Anticipated Bypass/Overflow Reports

4. Pretreatment Group

Indiana Department of Environmental Management Office of Water Quality – Rm 1255 Compliance Data Section – Pretreatment Group 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Pretreatment Group:

- a. Organic Pollutant Monitoring Reports
- b. Significant Industrial User (SIU) Quarterly Noncompliance Reports
- c. Pretreatment Program Annual Reports
- d. Sewer Use Ordinances
- e. Enforcement Response Plans (ERP)
- f. Sludge analytical results

PART III

REQUIREMENT TO OPERATE A PRETREATMENT PROGRAM

A. CONDITIONS

The permittee, hereinafter referred to as the "Control Authority," is required to operate its approved industrial pretreatment program approved on March 29, 2016, and any subsequent modifications approved up to the issuance of this permit. To ensure the program is operated as approved and consistent with 40 CFR 403 and 327 IAC 5-16 through 5-21, the following conditions and reporting requirements are hereby established. The Control Authority (CA) shall:

1. Legal Authority

The CA shall develop, enforce and maintain adequate legal authority in its Sewer Use Ordinance (SUO) to fully implement the pretreatment program in compliance with State and local law. As part of this requirement, the CA shall develop and maintain local limits as necessary to implement the prohibitions and standards in 40 CFR 403 and 327 IAC 5-18.

2. Permit Issuance

In accordance with 40 CFR 403 and 327 IAC 5-19-3(1) the CA is required to issue/reissue permits to Significant Industrial User(s) (SIU) as stated in the SUO. The CA must issue permits to new SIUs prior to the commencement of discharge. A SIU is defined in the SUO.

3. Industrial Compliance Monitoring

The CA is required to conduct inspection, surveillance, and monitoring activities to determine SIU compliance status with the approved program and the SUO independent of data supplied by the SIU. SIU compliance monitoring performed by the CA will be conducted in accordance with the program plan or yearly program plan. SIUs will be inspected once per year, at a minimum.

4. Enforcement

The CA is required to initiate the appropriate enforcement action against a SIU violating any provision of the SUO and/or discharge permit in accordance with the Enforcement Response Plan (ERP) adopted by the CA. The CA must investigate violations by collecting and analyzing samples and collecting other information with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions in accordance with 40 CFR 403.8(f)(1)(iii) and 327 IAC 5-19-3(1)(F).

5. SIU Quarterly Noncompliance Report

The CA is required to report the compliance status of each SIU quarterly. The report is due by the 28th of the following months: May, August, November and February of each year. The report shall include a description of corrective actions that have or will be taken by the CA and SIU to resolve the noncompliance situations. This report is to be sent to the Compliance Branch of the Office of Water Quality.

6. Public Participation and Annual Publishing of SIUs in Significant Noncompliance

The CA is required to comply with the public participation requirements under 40 CFR 25 and 327 IAC 5-19-3(2)(L). The CA must publish annually, by April 30, in the largest daily newspaper in the area, a list of SIUs that have been in Significant Noncompliance (SNC) with the SUO during the calendar year. The CA shall include in the Annual Report required by Part III.A.8 of this permit a list of the SIUs published along with the Publisher's Affidavit.

7. Industrial User Survey

The CA shall prepare and maintain a list of its Industrial Users meeting the criteria in 40 CFR 403.3(v)(1). The list shall identify the criteria in 40 CFR 403.3(v)(1) applicable to each Industrial User and where applicable, shall also indicate whether the CA has made a determination pursuant to 40 CFR 403.3(v)(2) that such Industrial User should not be considered a Significant Industrial User. Modifications to the list shall be submitted to the Approval Authority pursuant to 40 CFR 403.12(i)(1).

8. Annual Report

The CA is required to submit an annual report to the Pretreatment Group and EPA Region 5 by April 1, of each year. The CA shall also include a copy of the updated industrial user survey list. The annual report will be submitted in accordance with 40 CFR 403.12(i) to the following addresses:

Pretreatment Program Manager
U.S. EPA Region 5, ECW-15J
Water Enforcement and Compliance Assurance Branch
77 W. Jackson Blvd.
Chicago, IL 60604
r5pretreatment@epa.gov

Indiana Department of Environmental Management Office of Water Quality – Rm 1255 Compliance Data Section – Pretreatment Group 100 North Senate Avenue Indianapolis, IN 46204-2251

9. Records Retention

Pursuant to 327 IAC 5-16-5.3(b), the CA shall retain any pretreatment reports from an industrial user a minimum of three (3) years and shall make such reports available for inspection and copying by IDEM or the U.S. EPA. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user, the operation of the POTW pretreatment program or when requested by IDEM or the U.S. EPA.

10. Confidentiality

The CA is required to comply with all confidentiality requirements set forth in 40 CFR 403.14, as well as the procedures established in the SUO.

11. Program Resources

Pursuant to 327 IAC 5-19-3(3), The CA shall maintain sufficient resources and qualified personnel to carry out the pretreatment program requirements.

12. Interjurisdictional Agreements

The CA must maintain sufficient legal authority to ensure compliance with all applicable pretreatment limits and requirements by all SIUs discharging to the POTW, including SIUs within governmental jurisdictions outside the immediate jurisdiction of the POTW. The CA must maintain the interjurisdictional agreements necessary to ensure full compliance by SIUs located within other jurisdictions as discussed in 40 CFR 403.8(f)(1).

13. POTW Pretreatment Program Revision Requirements

The permittee shall re-evaluate its SUO to determine whether it provides adequate legal authority to fully implement the pretreatment program. Any modifications to the permittee's SUO shall be consistent with U.S. EPA's EPA Model Pretreatment Ordinance, available at: https://www3.epa.gov/npdes/pubs/pretreatment_model_suo.pdf

In addition, the re-evaluation must include a technical re-evaluation of the local limits in accordance with 40 CFR 122.44(j)(2)(ii). The CA is to conduct the local limitations technical evaluation consistent with U.S. EPA's Local Limits Development Guidance (July 2004) document and U.S. EPA Region 5 Local Limits Spreadsheet (February 2011). The Development Guidance and the Local Limits Spreadsheet are available upon request through IDEM's Pretreatment Coordinator. The permittee shall submit the local limit re-evaluation to U.S. EPA Region 5 and IDEM Pretreatment Group for review. If any changes are deemed necessary to the SUO, the permittee shall notify the U.S. EPA Region 5 and IDEM Pretreatment Group.

The permittee shall update the local limits for selenium (as may be necessary) in its SUO in accordance with the compliance scheduled outlined in Part I.E.

14. Program Modification

Pursuant to 327 IAC 5-19-6 and 40 CFR 403.18, any significant proposed program modification shall be submitted to the Pretreatment Group and the U.S. EPA for approval. A significant modification shall include, but not be limited to, any change in the SUO, major modification in the approval program's administrative procedures, a significant reduction in monitoring procedures, a significant change in the financial/revenue system, a significant change in the local limitations contained in the SUO, and a change in the industrial user survey.

ATTACHMENT A

Precipitation Related Combined Sewer Overflow Discharge Authorization Requirements

I. <u>Discharge Authorization</u>

Combined Sewer Overflows are point sources subject to both technology-based and water quality-based requirements of the Clean Water Act and state law. The permittee is authorized to have wet weather discharges from outfalls listed below subject to the requirements and provisions of this permit, including Attachment A.

Outfall	Location	Receiving Water
003	Raw Wastewater Overflow prior to Southport AWT Plant's Headworks 39° 40' 11" N 86° 13' 29" W	Little Buck Creek
008	Raw Wastewater Overflow prior to Belmont AWT Plant's Headworks 39° 43' 42" N 86° 11' 17" W	White River
011	Minnesota Street & Pershing Avenue 39° 44' 36" N 86° 12' 04" W	Big Eagle Creek
012	Raymond Street & West Street 39° 44' 12" N 86° 10' 09" W	White River
013	Meridian Street & Adler Street 39° 44' 32" N 86° 10' 05" W	White River
015	Southern Avenue & Manker Avenue 39° 43' 48" N 86° 08' 31" W	Bean Creek
016	Shelby Street & Willow Drive 39° 43' 44" N 86° 08' 23" W	Bean Creek
017	Boyd Avenue & Nelson Avenue 39° 43' 44" N 86° 08' 04" W	Bean Creek
019	Pleasant Run Parkway North Drive & Meridian Street 39° 43' 55" N 86° 09' 29" W	Pleasant Run

020	Pleasant Run Parkway North Drive & Pennsylvania Street 39° 43' 58" N 86° 09' 23" W	Pleasant Run
021	Pleasant Run Parkway North Drive & Ransdell Street 39° 44' 06" N 86° 09' 06" W	Pleasant Run
022	Pleasant Run Parkway North Drive & Raymond Street 39° 44' 14" N 86° 08' 47" W	Pleasant Run
023	Pleasant Run Parkway North Drive & Iowa Street 39° 44' 37" N 86° 08' 35" W	Pleasant Run
025	Pleasant Run Parkway North Drive & Shelby Street 39° 44' 41" N 86° 08' 24" W	Pleasant Run
027	Pleasant Run Parkway South Drive & Cottage Avenue 39° 44' 51" N 86° 08' 06" W	Pleasant Run
028	Pleasant Run Parkway South Drive & State Street 39° 44' 58" N 86° 07' 50" W	Pleasant Run
029	Orange Street & Randolph Street 39° 44' 56" N 86° 07' 39" W	Pleasant Run
030	Pleasant Run Parkway South Drive & Randolph Street 39° 44' 57" N 86° 07' 38" W	Pleasant Run
031	Pleasant Run Parkway South Drive & Churchman Avenue 39° 44' 58" N 86° 07' 28" W	Pleasant Run
032	Morris Street & Warman Avenue 39° 45' 03" N 86° 12' 27" W	Big Eagle Creek

033	Vermont Street & Somerset Avenue	Little Eagle Creek
	39° 46' 18" N 86° 13' 19" W	
034	Michigan Street & Dorman Street 39° 46' 25" N 86° 08' 20" W	Pogues Run
035	Arsenal Avenue & 10th Street 39° 46' 53" N 86° 07' 59" W	Pogues Run
036	Nowland Avenue & Tecumseh Street 39° 47' 08" N 86° 07' 35" W	Pogues Run
037	Washington Street & Geisendorff Street 39° 46' 03" N 86° 10' 23" W	White River
038	New York Street & Agnes Street 39° 46' 09" N 86° 10' 33" W	White River
A38	Davidson Street & Washington Street 39° 46' 01" N 86° 08' 44" W	Pogues Run
039	New York Street & Beauty Avenue 39° 46' 12" N 86° 10' 47" W	White River
040	New York Street & Koehne Street 39° 46' 18" N 86° 11' 12" W	White River
041	White River Parkway West Drive & Michigan Street 39° 46' 29" N 86° 11' 21" W	White River
042	Saint Clair Street & Lynn Avenue 39° 46' 44" N 86° 11' 29" W	White River
043	Harding Street & Waterway Boulevard 39° 47' 08" N 86° 11' 15" W	White River
044	Waterway Boulevard & Riverside Drive 39° 47' 11" N 86° 11' 28" W	White River

045	White River Parkway West Drive & Belmont Avenue 39° 47' 09" N 86° 11' 41"W	White River
046	Lafayette Road & 19th Street 39° 47' 30" N 86° 12' 04" W	White River
049	Stadium Drive & Fall Creek 39° 46' 55" N 86° 10' 39" W	Fall Creek
050	Fall Creek Boulevard & Burdsal Parkway 39° 48' 02" N 86° 10' 28" W	Fall Creek
50A	Northwestern Avenue & 24th Street 39° 48' 02" N 86° 10' 28" W	Fall Creek
051	Capitol Avenue & 22nd Street 39° 47' 50" N 86° 09' 44" W	Fall Creek
052	Fall Creek Boulevard & Boulevard Place 39° 48' 06" N 86° 09' 46" W	Fall Creek
053	Fall Creek Parkway North Drive & Illinois Street 39° 48' 10" N 86° 09' 32" W	Fall Creek
054	Fall Creek Parkway North Drive & Meridian Street 39° 48' 14" N 86° 09' 24" W	Fall Creek
055	28th Street & Talbot Street 39° 48' 19" N 86° 09' 15" W	Fall Creek
057	28th Street & Washington Boulevard 39° 48' 21" N 86° 09' 07" W	Fall Creek
058	28th Street & New Jersey Street 39° 48' 21" N 86° 09' 03" W	Fall Creek
059	Fall Creek Parkway North Drive & Central Avenue 39° 48' 21" N 86° 08' 58" W	Fall Creek

060	Sutherland Avenue & Central Avenue 39° 48' 20" N 86° 08' 56" W	Fall Creek
061	Fall Creek Parkway North Drive & Ruckle Street 39° 48' 23" N 86° 08' 54" W	Fall Creek
062	Guilford Avenue & 30th Street 39° 48' 37" N 86° 08' 31" W	Fall Creek
063	Fall Creek Parkway North Drive & 32nd Street 39° 48' 50" N 86° 08' 37" W	Fall Creek
63A	Fall Creek Parkway North Drive & 32nd Street 39° 48' 50" N 86° 08' 37" W	Fall Creek
064	Winthrop Avenue & 34th Street 39° 49' 00" N 86° 08' 22" W	Fall Creek
065	Sutherland Avenue & 34th Street 39° 49' 04" N 86° 08' 15" W	Fall Creek
066	Fall Creek Boulevard & Balsam Avenue 39° 49' 16" N 86° 08' 10" W	Fall Creek
072	Pleasant Run Parkway North Drive & Saint Peter Street 39° 45' 00" N 86° 07' 20" W	Pleasant Run
073	Pleasant Run Parkway North Drive & Keystone Avenue 39° 45' 02" N 86° 07' 15" W	Pleasant Run
074	Pleasant Run Parkway North Drive & Prospect Street 39° 45' 09" N 86° 07' 04" W	Pleasant Run
075	Pleasant Run Parkway North Drive & Southeastern Avenue 39° 45' 29" N 86° 06' 31" W	Pleasant Run

076	Pleasant Run Parkway North Drive & English Avenue 39° 45' 35" N 86° 06' 18" W	Pleasant Run
077	Pleasant Run Parkway North Drive & Sherman Drive 39° 45' 47" N 86° 06' 07" W	Pleasant Run
078	Pleasant Run Parkway North Drive & Brookville Road 39° 45' 50" N 86° 05' 43" W	Pleasant Run
080	Pleasant Run Parkway North Drive & Wallace Avenue 39° 46' 02" N 86° 05' 19" W	Pleasant Run
081	Pleasant Run Parkway North Drive & Riley Avenue 39° 46' 11" N 86° 05' 09" W	Pleasant Run
083	Hawthorne Lane & Lowell Avenue 39° 46' 23" N 86° 04' 48" W	Pleasant Run
084	Pleasant Run Parkway North Drive & Michigan Street 39° 46' 32" N 86° 04' 40" W	Pleasant Run
085	Pleasant Run Parkway North Drive & Ritter Avenue 39° 46' 33" N 86° 04' 26" W	Pleasant Run
086	Pleasant Run Parkway North Drive & Ritter Avenue 39° 46' 33" N 86° 04' 26" W	Pleasant Run
087	Pleasant Run Parkway North Drive & Audubon Road 39° 46' 35" N 86° 04' 11" W	Pleasant Run
088	Pleasant Run Parkway North Drive & Graham Avenue 39° 46' 33" N 86° 04' 06" W	Pleasant Run

089	Pleasant Run Parkway North Drive & Arlington Avenue 39° 46' 33" N 86° 03' 51" W	Pleasant Run
89A	North Arlington Avenue 39° 46' 33" N 86° 03' 50" W	Pleasant Run
090	Lowell Avenue & Sheridan Avenue 39° 46' 30" N 86° 03' 36" W	Pleasant Run
091	Pleasant Run Parkway South Drive & Kenmore Road 39° 46' 31" N 86° 03' 30" W	Pleasant Run
092	Pleasant Run Parkway South Drive & Ridgeview Drive 39° 46' 32" N 86° 03' 27" W	Pleasant Run
095	Brookside Parkway North Drive & Coyner Avenue 39° 47' 12" N 86° 07' 27" W	Pogues Run
096	Brookside Parkway South Drive & Nowland Avenue 39° 47' 12" N 86° 07' 27" W	Pogues Run
097	Brookside Parkway South Drive & Keystone Avenue 39° 47' 11" N 86° 07' 15" W	Pogues Run
098	Tacoma Avenue & Nowland Avenue 39° 47' 10" N 86° 07' 11" W	Pogues Run
099	Brookside Parkway South Drive & Temple Avenue 39° 47' 08" N 86° 07' 05" W	Pogues Run
100	Brookside Parkway South Drive & Rural Street 39° 47' 09" N 86° 07' 02" W	Pogues Run

101	Sherman Drive & Brookside Parkway North Drive 39° 47' 30" N 86° 06' 14" W	Pogues Run
102	Forest Manor Avenue & 19th Street 39° 47' 32" N 86° 06' 03" W	Pogues Run
103	Sherman Drive & Denwood Drive Lift Station 39° 49' 44" N 86° 06' 10" W	Meadow Brook
106	Pleasant Run Parkway North Drive & Orange Street 39° 44' 55" N 86° 07' 31" W	Pleasant Run
107	Pleasant Run Parkway North Drive & Saint Paul Street 39° 44' 59" N 86° 07' 24" W	Pleasant Run
108	Pleasant Run Parkway North Drive & Saint Paul Street 39° 44' 58" N 86° 07' 24" W	Pleasant Run
109	Pleasant Run Parkway North Drive & Churchman Street 39° 44' 58" N 86° 07' 27" W	Pleasant Run
115	Henry Street & Kentucky Avenue 39° 45' 24" N 86° 10' 17" W	Pogues Run
116	Meikel Street & Ray Street 39° 45' 16" N 86° 10' 21" W	White River
117	Southern Avenue & White River 39° 43' 46" N 86° 10' 26" W	White River
118	White River Parkway East Drive & West Street 39° 44' 39" N 86° 10' 08" W	White River

119	Pleasant Run Parkway South Drive & Beecher Street 39° 44' 30" N 86° 08' 34" W	Pleasant Run
120	Pleasant Run Parkway South Drive & Southern Avenue 39° 43' 46" N 86° 09' 57" W	Pleasant Run
125	Meridian Street & South Street 39° 45' 41" N 86° 09' 30" W	Pogues Run
127	1325 South State Street 39° 44' 58" N 86° 07' 50" W	Pleasant Run
128	Senate Avenue & Merrill Street 39° 45' 30" N 86° 09' 55" W	Pogues Run
129	Meridian Street & Merrill Street 39° 45' 34" N 86° 09' 30" W	Pogues Run
130	Manual High School 39° 44' 05" N 86° 09' 07" W	Pleasant Run
131	Fall Creek Boulevard & Capitol Avenue 39° 48' 09" N 86° 09' 41" W	Fall Creek
132	Fall Creek Parkway North Drive & Pennsylvania Street 39° 48' 16" N 86° 09' 20" W	Fall Creek
133	Market Street & Pine Street 39° 46' 05" N 86° 08' 41" W	Pogues Run
135	Orchard Avenue & 39th Street 39° 49' 36" N 86° 07' 45" W	Fall Creek
136	New York Street & Dorman Street 39° 46' 16" N 86° 08' 26" W	Pogues Run
137	Pine Street & Ohio Street 39° 46' 10" N 86° 08' 33" W	Pogues Run

138	College Avenue & Washington Street 39° 46' 00" N 86° 08' 45" W	Pogues Run
141	Winthrop Avenue & 38th Street 39° 49' 31" N 86° 07' 53" W	Fall Creek
142	College Avenue & 38th Street 39° 49' 00" N 86° 08' 22" W	Fall Creek
143	Forest Manor Avenue & 21st Street 39° 47' 45" N 86° 05' 54" W	Pogues Run
145	Raymond Street & Kentucky Avenue 39° 44' 09" N 86° 11' 47" W	Big Eagle Creek
147	White River Parkway West Drive & Vermont Street 39° 46' 22" N 86° 11' 17" W	White River
148	Pleasant Run Parkway North Drive & Madison Avenue 39° 44' 02" N 86° 09' 16" W	Pleasant Run
149	Pleasant Run Parkway South Drive & Garfield Drive 39° 44' 22" N 86° 08' 46" W	Pleasant Run
150	Pleasant Run Parkway North Drive & Raymond Street 39° 44' 12" N 86° 08' 50" W	Pleasant Run
151	Pleasant Run Parkway North Drive & Beecher Street 39° 44' 30" N 86° 08' 33" W	Pleasant Run
152	Pine Street & Ohio Street 39° 46' 11" N 86° 08' 32" W	Pogues Run
153	Illinois Avenue & Merrill Street 39° 45' 34" N 86° 09' 37" W	Pogues Run

154	Pleasant Run Parkway North Drive & Michigan Street 39° 46' 29" N 86° 04' 43" W	Pleasant Run
205	Boulevard Place & Westfield Boulevard 39° 51' 10" N 86° 09' 51" W	White River
210	Indiana Avenue & 10th Street 39° 46' 53" N 86° 10' 36" W	Fall Creek
213	2900 North Hillside 39° 48' 31" N 86° 08' 34" W	Fall Creek
216	Crittenden Avenue & 42nd Street 39° 49' 56" N 86° 07' 32" W	Fall Creek
217	Gadsden Street & Lyons Avenue 39° 43' 34" N 86° 13' 59" W	State Ditch
218	Gadsden Street & Fleming Street 39° 43' 37" N 86° 14' 14" W	State Ditch
223	Victoria Street & Warman Avenue 39° 45' 35" N 86° 12' 38" W	Big Eagle Creek
224	Pleasant Run Parkway North Drive & Washington Street 39° 46' 13" N 86° 05' 03" W	Pleasant Run
227	5700 Emich 39° 46' 36" N 86° 04' 15" W	Pleasant Run
228	Michigan Street & Graham Avenue 39° 46' 33" N 86° 04' 07" W	Pleasant Run
229	Pleasant Run Parkway North Drive & Arlington Avenue 39° 46' 33" N 86° 03' 51" W	Pleasant Run
235	Shelby Street & Markwood Avenue 39° 41' 53" N 86° 08' 17" W	Lick Creek

275	4945 South Foltz	White River
	39° 41' 31" N	
	86° 13' 27" W	

Monitoring for the purpose of reporting on the CSO Monthly Report of Operation (State Form 50546 (R4/9-15)) shall be conducted at a location representative of untreated CSO discharges. Monitoring from a CSO regulator structure contributing flow to the CSO outfall is acceptable provided flows at this location are representative and comprised of untreated CSO flows ultimately discharged through the CSO outfall. Monitoring at the CSO outfall is considered representative except in those instances where non-CSO flows (treated effluents, separate stormwater, etc.) are also discharged through a common outfall. All non-CSO flows shall be excluded from reporting on the CSO Monthly Report of Operation.

II. Wet Weather Treatment Facility Effluent Limitations and Monitoring Requirements

A. The permittee is authorized to discharge treated combined sewage from Outfall 155 into the White River when the applicable portion of the collection system is maximized. The Wet Weather Treatment Facility (WWTF) is located near the intersection of 56th Street and Westfield Boulevard. Outfall 155 is located at Latitude: 39° 51' 16" N, Longitude: 86° 09' 46" W. Any discharge from Outfall 155 is subject to the requirements and provisions of this permit including the following requirements:

TABLE 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter [7]	Daily Maximum	Monthly Average	Units	Daily Maximum	Monthly Average	Units	Measurement Frequency	Sample Type
Flow [1]	Report	Report	MGD				Daily	24-Hr. Total
CBOD ₅				Report	Report	mg/l	Daily	Composite [6]
TSS				Report	Report	mg/l	Daily	Composite [6]

TABLE 2

Quality or Concentration			Monitoring Requirements			
Parameter [7]	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [8]	Report		Report	s.u.	Daily	Grab
TRC [2] [3]		0.01	0.02	mg/l	Daily	
E. coli [4] [5]		125	235	cfu/100 ml	Daily	Grab

[1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.

- [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. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Table 2 for Total Residual Chlorine (TRC) shall be in effect whenever chlorine is used.
- [3] In accordance with 327 IAC 5 2 11.1(f), compliance with this permit will be demonstrated if the measured effluent concentrations are less than the limit of quantitation (0.06 mg/l). If the measured effluent concentrations are above the water quality-based permit limitations and above the Limit of Detection (LOD) specified by the permit in any of three (3) consecutive analyses or any five (5) out of nine (9) analyses, the permittee is required to reevaluate its chlorination/dechlorination practices to make any necessary changes to assure compliance with the permit limitation for TRC. These records must be retained in accordance with the record retention requirements of Part I.B.8 of this permit.

Effluent concentrations greater than or equal to the LOD but less than the Limit of Quantitation (LOQ) shall be reported on the discharge monitoring report forms as the measured value. A note must be included with the DMR indicating that the value is not quantifiable. Effluent concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected at a concentration of 0.01 mg/l, report the value as < 0.01 mg/l. At present, two methods are considered to be acceptable to IDEM, amperometric and DPD colorimetric methods, for chlorine concentrations at the level of 0.06 mg/l.

Parameter	LOD	LOQ	
Chlorine	0.02 mg/l	0.06 mg/l	

Case-Specific MDL

The permittee may determine a case-specific Method Detection Level (MDL) using one of the analytical methods specified above, or any other test method which is approved by IDEM prior to use. The MDL shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the MDL. Other methods may be used if first approved by the U.S. EPA and IDEM.

- [4] The E. coli limitations and monitoring requirements apply from April 1 through October 31 annually. The monthly average E. coli value shall be calculated as a geometric mean.
- [5] For *E. coli*, the daily maximum shall be the geometric mean of all grab samples on any discharge day, provided that 3 or more grab samples are collected. If less than 3 grab samples are taken then the arithmetic mean shall be reported. The *E. coli* monthly

average shall be the geometric mean of all grab samples collected during the month, provided that 5 or more grab samples are collected. The goal of the effluent monitoring program is to collect at least 3 grab samples during each discharge event, and the samples shall be collected at shorter intervals at the onset of the event, if the permittee estimates that the event duration may be less than 6 hours.

If there are discharges on four (4) or more days, then the monthly average shall be reported on the Discharge Monitoring Report (DMR). For discharges of four (4) or more days during a calendar month, then the monthly average E. coli value shall be calculated as a geometric mean of all grab samples collected and reported on the DMR.

- [6] Effluent composite sampling, either by automatic sampler collecting samples at set intervals or by grab samples collected during discharges from the wet weather treatment component, shall be representative of the discharge and of sufficient quantity to ensure that the parameters of Table 1 of Attachment A can be measured; shall be initiated within 30 minutes from the beginning of a discharge event; and shall continue at intervals determined by the permittee, but no less than every 2 hours during the duration of the event. If an event lasts for more than 24 hours a new sampling period shall be initiated. Analysis for the parameters identified in Table 1 of Attachment A shall be from the composite sample collected as described above.
- [7] For purposes of reporting on a discharge event which lasts less than 24 hours, but occurs during two calendar days, the pollutant concentrations for the event shall be reported as daily values on the day when the majority of the discharge occurred.
- [8] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the minimum or maximum pH value of any individual sample during the month on the Discharge Monitoring Report forms.
- B. The permittee shall monitor and report discharges from Outfall 155 in accordance with Discharge Monitoring Report (DMR) forms and the Monthly Monitoring Report (MMR) for WWTF provided by IDEM.
- C. The Wet Weather Treatment Facility, located at Westfield Boulevard and 56th Street, also known as Lift Station 507, is designed to provide 95% capture at a flow rate of 35 MGD with approximately 34 minutes of detention time. Screening/ skimming, disinfection and dechlorination is provided. Flow rates up to 53 MGD have approximately 23 minutes of detention time. Flow rates greater than 53 MGD will receive screening and partial disinfection. Flow rates greater than 160 MGD will bypass the station entirely and be discharged into the White River via outfall 155. In addition, if the level at structure B3 reaches 707.5 feet or greater, the flow will automatically by-pass the station; if the river level gets to 706 feet, the station will also automatically be by-passed.

D. The permittee's approved CSOOP, LTCP and NPDES permit outline the wet weather operating procedures and design capabilities of the WWTP and Wet Weather Treatment Facility. All Wet Weather Treatment Facility discharges shall receive the specified treatment to the extent possible. In conditions where wet weather discharges from the Wet Weather Treatment Facility result from a storm event, rainfall amount, or intensity which exceed the design capacity of the facility, the permittee shall provide documentation that all conditions and requirements expressed in their NPDES permit, including Attachment A, were achieved. All documentation regarding performance of the WWTP and the Wet Weather Treatment Facility during storm events identified above, would be reviewable by IDEM with exercise of enforcement discretion for discharges from Outfall 155 accorded to it under IC 13 – 30 for these storm events.

III. <u>Minimum Narrative Limitations</u>

- A. At all times the discharge from any and all CSO outfalls herein 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 a degree as to create a nuisance;
 - d. are in amounts sufficient to be acutely toxic to, or 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.
 - 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.
- B. Dry weather discharges from any portion of the sewer collection system, except WWTP outfall Numbers 001 and 006, are prohibited. If such a prohibited discharge should occur, the permittee is required to report the discharge in accordance with the provisions in Part II.C.3 of this permit.

IV. Monitoring and Reporting Requirements

The permittee shall complete and submit accurate monitoring reports to the Indiana Department of Environmental Management. The permittee shall submit data specified on the CSO Monthly Report of Operation (MRO) for untreated CSO events (State Form 50546 (R5/11-21)). The CSO MRO form includes the following reporting parameters:

- WWTP Influent Data: average daily flow, and peak hourly flow.
- Precipitation Data: time precipitation began, precipitation duration, total daily precipitation, peak precipitation intensity, and rain gauge measurement interval.
- CSO Outfall Information: time discharge began, whether the outfall is metered or estimated, event duration, amount of CSO discharge.

The permittee has developed a hydraulics model of its sewer collection system. The model generates continuous volumes and discharges from each permitted outfall listed in Part I.A of this Attachment A. The permittee shall report those volumes and discharges, as produced by the hydraulic model, semiannually to the Office of Water Quality, Compliance Data Section using NetDMR. The semiannual hydraulic model reports ("Model Reports") shall be prepared for the six (6) month periods of January 1 through June 30 and July 1 through December 31 of each calendar year. The Model Reports shall be submitted six (6) months after the close of the preceding period. All NPDES permit holders are required to submit their monitoring data to IDEM using NetDMR.

The permittee shall monitor discharges from Outfall 155 in accordance with both Discharge Monitoring Report (DMR) forms and Monthly Monitoring Report (MMR) for WWTF forms provided by IDEM (State Form 56109). Submitted DMRs and MMRs shall contain results obtained during each month (a monitoring period) and shall be submitted no later than 28 days following each completed monitoring period. Discharge data from Outfall 155 shall not be included on the CSO MRO form for untreated CSO events (State Form 50546 (R5/11-21)).

V. CSO Operational Plan

- A. The permittee shall comply with the following minimum technology-based controls, in accordance with EPA's National CSO Control Policy:
 - 1. The permittee shall implement proper operation and regular maintenance programs for the sewer system and the CSOs. The purpose of the operation and maintenance programs is to reduce the magnitude, frequency and duration of CSOs. The programs shall consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
 - 2. The permittee shall implement procedures that will maximize the use of collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency and duration of CSOs.

- 3. The permittee shall review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from non-domestic users. The permittee shall identify all industrial users that discharge to the collection system upstream of any CSO outfalls; this identification shall also include the pollutants in the industrial user's wastewater and the specific CSO outfall(s) that are likely to discharge the wastewater.
- 4. The permittee shall operate the POTW at the maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.
- 5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to IDEM as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, it shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
- 6. The permittee shall implement measures to control solid and floatable materials in CSO discharges.
- 7. The permittee shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
- 8. The permittee shall implement a public notification process to inform citizens of when and where CSO discharges occur and their impacts. This notification must also be done in accordance with 327 IAC 5-2.1.
- 9. The permittee shall monitor to effectively characterize CSO impacts and the efficacy of CSO controls.
- B. The permittee's implementation of each of the minimum controls in Part V.A of this Attachment A shall be documented in its approved CSO Operational Plan (CSOOP). The permittee shall update the CSOOP, as necessary, to reflect changes in its operation or maintenance practices; changes to measures taken to implement the above minimum requirements; and changes to the treatment plant or collection system, including changes in collection system flow characteristics, collection system or WWTP capacity or discharge characteristics (including volume, duration, frequency and pollutant concentration). All updates to the CSOOP must be submitted to IDEM, Office of Water Quality, Municipal NPDES Permits Section for approval.

The CSOOP update(s) shall include a summary of the proposed revisions to the CSOOP as well as a reference to the page(s) that have been modified. Any CSOOP updates shall not result in:

- 1. a lower amount of flow being sent to and through the plant for treatment, or
- 2. more discharges (measured either by volume, duration, frequency, or pollutant concentration) occurring from the CSO outfalls.

The permittee shall maintain a current CSO Operational Plan, including all approved updates, on file at the POTW.

VI. Sewer Use Ordinance Review/Revision and Enforcement

The permittee's Sewer Use Ordinance must contain provisions which: (1) prohibit introduction of inflow sources to any sanitary sewer; (2) prohibit construction of new combined sewers outside of the existing combined sewer service area; and (3) provide that for any new building the inflow/clear water connection to a combined sewer shall be made separate and distinct from sanitary waste connection to facilitate disconnection of the former if a separate storm sewer subsequently becomes available. The permittee shall continuously enforce these provisions.

VII. Reopening Clauses

- A. This permit may be reopened to address changes in the EPA National CSO Policy or state or federal law.
- B. The permit may be reopened, after public notice and opportunity for hearing, to incorporate applicable provisions of IC 13-18.



National Pollutant Discharge Elimination System

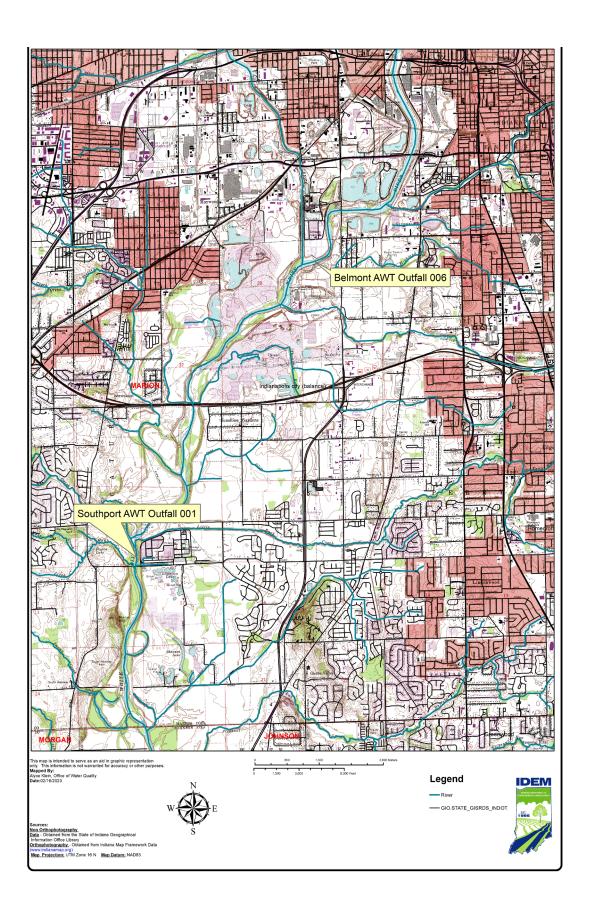
Fact Sheet for Indianapolis Belmont & Southport Advanced Wastewater Treatment (AWT) Plants

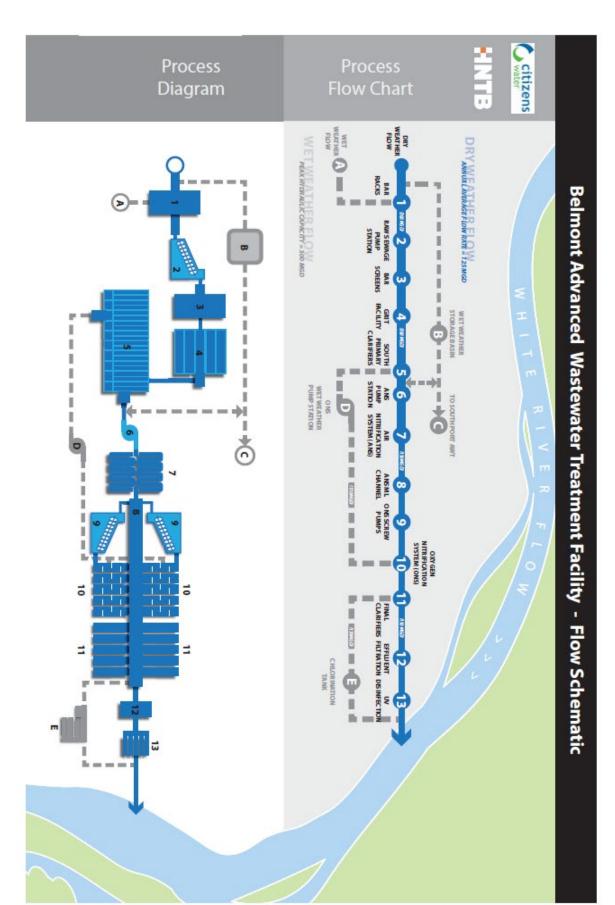
Draft: June 2023 Final: May 2024

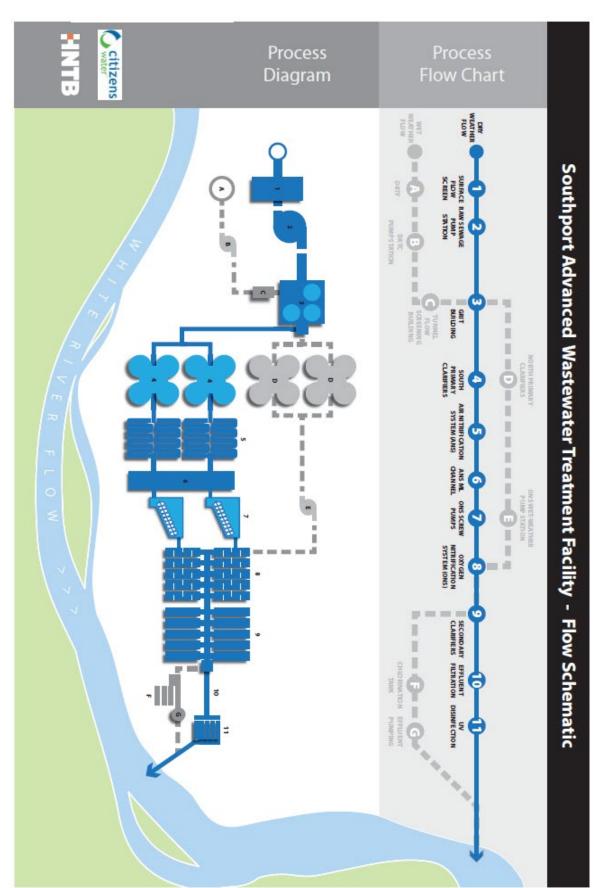
Indiana Department of Environmental Management

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

Downittoo	CN/A Authority Inc								
Permittee:	CWA Authority, Inc.								
	Mr. Jeffrey Willman, Vice President Water Operations								
	2020 North Meridian Street								
	Indianapolis, IN 46202								
	jwillman@citizensenergygroup.com, 317-927-6001								
Existing Permit	Permit Number: IN0023183								
Information:	Expiration Date: May 31, 2023								
Facility Contact:	Mr. Pete Corsaro, Manager of Wastewater Operations								
	pcorsaro@citizensenergygroup.com; 317-639-7109								
Facility Location:	Belmont: 2700 South Belmont Avenue								
	Southport: 3800 West Southport Road								
	Indianapolis, Indiana								
	Marion County								
Receiving Stream:	West Fork of the White River								
GLI/Non-GLI:	Non-GLI								
Proposed Permit Action:	Renewal								
Date Application Received:	November 11, 2022 & January 12, 2023								
Facility Category:	NPDES Major Municipal								
CSO Project	Kara Wendholt								
Manager:	kwendhol@idem.in.gov, 317-233-5961								
Permit Writer:	Alyce Klein								
	aklein@idem.in.gov, 317-233-6728								







Belmont Outfall 006 Location Latitude: 39° 43′ 5″ N

Longitude: 86° 11' 35" W

Southport Outfall 001 Location Latitude: 39° 39' 51" N

Longitude: 86° 14' 8" W

Background

This is the proposed renewal of the NPDES permit for the Belmont and Southport AWT plants which was issued on May 24, 2018, and has an expiration date of May 31, 2023. The permittee submitted an application for renewal which was received on November 11, 2022, with a revision to the application submitted on January 12, 2023.

Wastewater from the Indianapolis collection system is treated by one of two AWT plants, owned and operated by CWA Authority. The Belmont AWT plant receives flow predominantly from the central portions of Marion County, as well as wet weather flow. The Southport AWT plant receives flow predominantly from the collar areas of Marion County including satellite communities served by the permittee, which consist of the City of Greenwood, the City of Beech Grove, the City of Lawrence, the City of Fishers, Tri-County Conservancy District and Ben Davis Conservancy District, and flow from the permittee's DigIndy tunnel system. As further described below, flow from the Belmont AWT can be diverted to the Southport AWT during both wet and dry weather. The sludge generated at the Southport AWT plant is pumped to the Belmont AWT plant for treatment and ultimate disposal. Thus, the two AWT plants function and are operated as a single system.

The wastewater collection system is comprised of combined sanitary and storm sewers with 130 Combined Sewer Overflow (CSO) points and a Wet Weather Treatment Facility. Sanitary Sewer Overflows (SSOs) are strictly prohibited.

Belmont AWT Plant

The Belmont AWT Plant is a Class IV nitrification facility with influent flow monitoring, screening, grit removal tanks, primary clarifiers, oxygen/air nitrification system (ONS/ANS), final clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination, ultraviolet (UV) radiation, and effluent flow monitoring.

The Belmont AWT Plant has an average design flow of 120 MGD and a peak design flow of 300 MGD. The Belmont AWT Plant has two wet weather storage basins: a 30-million gallon basin (EQ basin 1) to store primary influent and/or primary effluent during wet weather and a 4-million gallon basin (EQ basin 2) to store primary effluent during wet weather. Sludge treatment includes gravity belt thickening, gravity thickening, equalization, centrifuges, dewatering, and incineration or landfilling.

The Belmont AWT Plant has the following flow diversions located within the facility:

- Primary Effluent Diversion Structures: A primary effluent diversion structure exists at the 96 Structure/Junction Structure No. 1. This diversion allows primary effluent to be diverted to the EQ basin 2 or the ONS Wet Weather Pump Station. A second primary effluent diversion structure exists at Junction Structure No. 2 which allows primary effluent to be diverted around ANS and directly to the ONS Wet Weather Pump Station.
- Effluent Filters Diversion: An ONS effluent diversion exists prior to the facility's effluent filters. All or a portion of the ONS effluent can be diverted around the effluent filters to the chlorine contact tanks.

The Belmont AWT Plant has the following flow diversions located in the collection system or at the AWT facility, all of which are capable of diverting flow from the Belmont AWT Plant to the Southport AWT Plant.

- 1. <u>Southwest (Southern Avenue) Diversion</u>: A raw wastewater flow diversion exists external to the Belmont AWT Plant at the Southwest Diversion Structure located near Southern Avenue. Raw wastewater may be diverted via a 60-inch diameter gravity sewer to the Southport AWT Plant depending on the system hydraulics and plant capacities.
- 2. Belmont Wet Weather Pump Station (Raw Wastewater): A raw wastewater diversion exists prior to the facility's headworks. Raw wastewater from the Belmont Interceptor may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant via a 42-inch force main to the Tibbs Interceptor. The Wet Weather Pump Station can also pump raw wastewater to Wet Weather Storage Basin No. 1. Depending on the system hydraulics, the pumping capacity is 28-30 MGD.
- 3. <u>Belmont Wet Weather Pump Station (Primary Effluent)</u>: A primary effluent flow diversion exists after the Belmont Primary Clarifiers. Primary effluent stored in Wet Weather Storage Basin No. 1 may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant via a 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is approximately 28-30 MGD.
- 4. Gravity Diversion (Primary Influent): A preliminary treatment flow diversion exists prior to the facility's primary clarifiers. Preliminary treatment flow from the diversion may be conveyed by gravity via the 42inch force main to the Southport AWT Plant via the Tibbs Interceptor. Depending on the system hydraulics, the diversion capacity is 16-18 MGD.

5. <u>Belmont Primary Effluent Pump Station (Primary Effluent)</u>: A primary effluent diversion exists after the facility's primary clarifiers. Primary effluent from the primary effluent channel may be pumped by the Belmont Primary Effluent Pump Station (PEPS) to the Southport AWT Plant via the 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is 30 to 35 MGD. This pump station can also pump primary effluent flow to EQ basin 1.

Southport AWT Plant

The Southport AWT Plant is a Class IV nitrification facility with influent flow monitoring, screening, grit removal tanks, primary clarifiers, oxygen and air nitrification system (ONS/ANS) reactors, secondary clarifiers, mixed media tertiary filters, effluent disinfection by chlorination/dechlorination and ultraviolet (UV) radiation, effluent flow monitoring, and effluent pumping.

The Southport AWT Plant has a design average flow of 125 MGD with a peak design flow of 250 MGD. Sludges are conveyed to and centrally processed by dewatering and incineration operations at the Belmont AWT Plant's Solids Handling Operations. The Southport AWT Plant has two equalization basins with a total storage capacity of 25 million gallons. These basins are used to store screened raw wastewater. The basins are designed to be used during wet weather when the plant's treatment capacity has been reached.

The Southport AWT Plant has the following flow diversions:

- Raw Wastewater Diversion: Raw wastewater can be diverted to either
 of the two equalization basins after the screening process. Excess flow
 is pumped from the Surface Flow Wet Weather Pump Station
 (SFWWPS) to the equalization basins. The stored wastewater is returned
 to Southport's Headworks for full treatment after the influent flow rate
 decreases.
- Grit Tank Diversion: A screened raw wastewater diversion exists prior to the grit facility. Flows can be diverted directly to the Mixed Liquor Channel from the SFWWPS bypassing the grit facility, primary clarifiers, and the ANS system.
- Grit Tank Effluent Diversion: A preliminary treatment effluent diversion exists that allows flows to be diverted around the primary clarifiers and the ANS system to the ONS system. This diversion is located at Junction Structure (JS) 101B and sends screened and degritted flows to the ONS WWPS or northwest primary clarifiers.

- 4. <u>Primary Influent Diversion</u>: A primary influent diversion exists at Junction Structure (JS) 102A. Flows can be diverted past the southeast primary clarifiers to the southwest primary clarifiers using the sluice gates at JS 102A.
- 5. <u>Primary Effluent Diversion</u>: A primary effluent diversion exists when using the northwest primary clarifiers. Flow from the two southern northwest primary clarifiers can be diverted to the mixed liquor channel at Junction Structure (JS) 105. Flow from the northern two primary clarifiers is conveyed to the ONS WWPS.
- 6. ONS Effluent Diversion to Disinfection System: An oxygen nitrification effluent diversion exists prior to the facility's tertiary filters. All or a portion of the ONS effluent after the secondary final clarifiers can be diverted through Junction Structure (JS) 111 around the tertiary filters. The flow is then conveyed by gravity to the Chlorine Contact Tank for disinfection.
- 7. <u>Effluent Filters Diversion</u>: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the ANS/ONS effluent (up to 150 MGD) can be diverted through a 42" butterfly valve at Junction Structure (JS) 112 in the Effluent Filter Building to the effluent disinfection system.
- 8. <u>UV System Flow Diversion</u>: A diversion exists prior to the UV system. All or a portion of the filter flow effluent can be diverted around the UV system at Junction Structure (JS) 113A. This diversion will require chlorination to occur at Junction Structure (JS) 110 which is located at the southwestern end of the secondary final clarifiers.

Permit Revision & Construction History

There were no permit modifications to this NPDES Permit since the last permit renewal. However, there were numerous construction permits issued to the Authority, including sanitary sewer construction permits, since the last permit renewal for various capital projects.

Collection System

The collection system is comprised of combined sanitary and storm sewers with 130 Combined Sewer Overflow (CSO) locations and one (1) Wet Weather Treatment Facility (WWTF) outfall; approximately 11% of the collection system has combined sewers. The CSO locations and WWTF outfall have been identified and permitted with provisions in Attachment A of the permit.

CSO Statutory or Regulatory Basis for Permit Provisions

CSOs are point sources subject to NPDES permit requirements, including both technology-based and water quality-based requirements of the CWA and state law. Thus the permit contains provisions IDEM deems necessary to meet water quality standards, as well as technology-based treatment requirements, operation and maintenance requirements, and best management practices. This permit is based on various provisions of state and federal law, including (1) Title 13 of the Indiana Code; (2) the water quality standards set forth in 327 IAC 2-1.5; (3) the NPDES rules set forth in 327 IAC 2 and 327 IAC 5, including 327 IAC 5-2-8 and 327 IAC 5-2-10; and (4) section 402(q) of the CWA (33 USC § 1342), which requires all permits or orders issued for discharges from municipal CSOs to conform with the provisions of EPA's National CSO Control Policy (58 Fed. Reg. 18688, April 19, 1994). EPA's CSO Policy contains provisions that, among other things, require permittees to develop and implement minimum technological and operational controls and long term control plans to meet state water quality standards. The permit's penalty provisions are based in large part on IC 13-30. In addition to the regulatory provisions previously cited, the data collection and reporting requirements are based in part on 327 IAC 5-1-3, 327 IAC 5-2-13 and section 402(q) of the CWA. The long term control plan provisions were included to ensure compliance with water quality standards.

Explanation of Effluent Limitations and Conditions

The effluent limitations set forth in Part III of Attachment A are derived in part from the narrative water quality standards set forth in 327 IAC 2-1-6. The narrative standards are minimum standards that apply to all waters at all times, and therefore are applicable to all discharges of pollutants. Because EPA has not issued national effluent limitation guidelines for this category of discharges, the technology-based BAT/BCT provisions are based on best professional judgment (BPJ) in addition to section 402(q) of the CWA. (CSO discharges are not subject to the secondary treatment requirements applicable to publicly owned treatment works because overflow points have been determined to not be part of the treatment plant. Montgomery Environmental Coalition v. Costle, 646 F.2d 568 (D.C. Cir. 1980).)

CSO Long Term Control Plan Requirements

CWA Authority, Inc. (CWA Authority) is currently implementing the approved Indianapolis CSO Long Term Control Plan (LTCP). The LTCP includes the use of storage/conveyance facilities in all major watersheds combined with advanced wastewater treatment plant improvements. Facilities will be designed to achieve 97 percent capture in a typical year on Fall Creek and 95 percent capture in a typical year on White River, Pleasant Run, Bean Creek, Pogues Run, and Eagle Creek. Sewer separation will be employed along Lick Creek, State Ditch and other isolated outfall locations. Flows will be collected from outfalls on a regional basis using conveyance facilities connected to a deep tunnel system. The deep tunnel will serve primarily as a storage facility, and the stored flows will be pumped to the Southport Advanced Wastewater Treatment (AWT) plant at the end of a storm event. The AWT facilities have been expanded and upgraded to provide treatment of wet weather flows. The LTCP also includes the use of near-surface collection conduits and satellite

near-surface storage facilities to control remotely located outfalls on upper White River and Pogues Run.

The key features of the plan are:

- The Deep Rock Tunnel Connector system along eight miles of the White River connecting to the central tunnel system (White River and Fall Creek tunnels) with a pumping facility located at the Southport AWT Plant.
- A collection interceptor for remote outfalls along Fall Creek and the White River to convey wet-weather flows into the central tunnel system.
- Satellite storage facilities for remotely located outfalls along upper White River and upper Pogues Run.
- Collection interceptors along Pogues Run, Pleasant Run and Bean Creek to convey wet-weather flows into the central tunnel system.
- A collection interceptor and tunnel along Eagle Creek to convey wet weather flows into the central tunnel system.
- Local sewer separation projects to eliminate isolated overflows on State Ditch, Lick Creek, White River and the upstream ends of Fall Creek, Pogues Run and Bean Creek.
- Belmont and Southport AWT plant improvements.
- Watershed improvements.

Currently, one CSO Wet Weather Treatment Facility exists in the collection system. The CSO Wet Weather Treatment Facility, located at Westfield Boulevard and 56th Street, also known as Lift Station 507, is designed to provide 95% capture at a flow rate of 35 MGD with approximately 34 minutes of detention time. Screening/skimming, disinfection and dechlorination is provided. Flow rates up to 53 MGD have approximately 23 minutes of detention time. Flow rates greater than 53 MGD will receive screening and partial disinfection. Flow rates greater than 160 MGD will bypass the station entirely and be discharged into the White River via outfall 155. In addition, if the level at structure B3 reaches 707.5 feet or greater, the flow will automatically by-pass the station; if the river level gets to 706 feet, the station will also automatically be by-passed. Refer to the Attachment A to the permit for additional requirements on this discharge.

The LTCP has an implementation schedule of approximately 20 years and is expected to achieve a level of control of 97 percent capture in a typical year of combined sewage flows on Fall Creek and 95 percent capture in a typical year of combined sewage flows on other waterways. The plan is expected to result in reducing the average annual CSO frequency from 60 storms per year to approximately two storms per year (in a typical year) on Fall Creek and four storms per year (in a typical year) on other waterways based on average rainfall statistics for Indianapolis. Full LTCP implementation must be completed no later than December 31, 2025. The implementation schedule is enforced through Federal Consent Decree No. 1:06-cv-01456-SEB-TAB.

CWA Authority submitted a Use Attainability Analysis (UAA) to IDEM in July 2019 seeking to apply Indiana's CSO wet weather limited use designation for seven waterbodies near Indianapolis. IDEM officially approved the UAA on August 23, 2019. IDEM then initiated

rulemaking to amend 327 IAC 2-1.3.1 concerning the CSO wet weather limited use designation and add 327 IAC 2-1.1-2 concerning the CSO wet weather limited use subcategory to the seven waterbodies listed in the rule. These were incorporated by Final Rule (LSA Document #19-510(F)) and became effective in Indiana code on April 27, 2020. IDEM received approval from US EPA Region 5 on July 29, 2020, to modify Indiana's water quality standards and apply the CSO Wet Weather Limited Use to the seven waterbodies.

The change in designated use will not become effective until after the LTCP is fully implemented in 2025.

Spill Reporting Requirements

Reporting requirements associated with the Spill Reporting, Containment, and Response requirements of 327 IAC 2-6.1 are included in Part II.B.2.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.

Solids Disposal

The permittee is required to dispose of its sludge in accordance with 329 IAC 10, 327 IAC 6.1, or 40 CFR Part 503. Solids are either incinerated or hauled to a landfill for disposal.

Receiving Stream

The receiving stream for Southport and Belmont AWT Plants is the West Fork of the White River, a tributary to the Wabash River, which has a $Q_{7,10}$ flow of 73 cfs and is in Hydrologic Unit Code (HUC-12) 051202011206. The West Fork of White River is covered under the non-Great Lakes WQ Rule 327 IAC 2-1, and is designated for full-body contact recreation and shall be capable of supporting a well-balanced, warm water aquatic community. There are no lakes or reservoirs within forty (40) miles downstream of the facility.

The West Fork of White River (upstream and at Outfall 006 for the Belmont AWT plant) in Assessment Unit INW01C5 07 is on the 2022 303(d) list, Category 5A, for PCBs in Fish

Tissue. The West Fork of the White River (downstream of Belmont AWT and upstream of Southport AWT) in Assessment Unit INW01C5_09 is on the 2022 303(d) list, Category 5A, for PCBs in Fish Tissue. The West Fork of White River (downstream of Southport AWT plant) in Assessment Unit INW01C5_04 is on the 2022 303(d) list for PCBs in Fish Tissue. A Total Maximum Daily Load (TMDL) for *E. coli* including both Indianapolis AWTs has been done for the West Fork of White River as a part of the West Fork White River TMDL Study approved by U.S. EPA on 3/31/2004. The *E. coli* limitations included in the permit and CSO LTCP are considered sufficient controls to meet the requirements of the TMDL.

Industrial Contributions

The permittee accepts industrial flow from 50 industries. Based on the industrial flow received by the treatment facility, the permittee is required to operate its industrial pretreatment program approved by the U.S. Environmental Protection Agency on March 29, 2016. Provisions for the industrial pretreatment program are included in Part III of this permit renewal. In addition, monitoring requirements for both Belmont and Southport AWT Plants for copper, zinc, fluoride, cyanide (free), sulfate, arsenic, cadmium, chromium, lead, nickel, chloride and hardness are being included in the permit renewal. Selenium limitations are being included for Southport AWT Plant, and monitoring requirements for selenium are being required for Belmont AWT Plant. Twice annual Whole Effluent Toxicity Testing (WETT) requirements are also being included for both Southport and Belmont AWT Plants.

<u>Antidegradation</u>

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.

This permit includes new or increased permit limitations for selenium for the Southport AWT Plant. In accordance with 327 IAC 2-1.3-1(b), the new or increased permit limitations are not subject to the Antidegradation Implementation Procedures in 327 IAC 2-1.3-5 and 2-1.3-6 as the new or increased permit limitations are not the result of a deliberate activity taken by the permittee. The need for a limitation was realized as a result of stream sampling and fish tissue sampling conducted by IDEM staff, which showed that Southport AWT Plant had a reasonable potential to contribute to an exceedance of water quality criteria in the receiving water. More information can be found in the "Final Effluent Limitations for Southport AWT Plant – Outfall 001" section for Selenium, beginning on page 17 of this Fact Sheet.

Effluent Limitations and Rationale

The effluent limitations proposed herein are based on Indiana Water Quality Standards, NPDES regulations, Wasteload Allocation (WLA) analyses performed by this Office's Permits Branch staff on October 28, 1996, November 26, 2012, and April 3, 2023, and a study completed by the permittee on March 4, 2015, which supplements a Mathematical Modeling and Load Allocation Study for the West Fork, White River, conducted by the Water Pollution Control Division of the Indiana State Board of Health in 1975. These limits are in accordance with antibacksliding regulations specified in 327 IAC 5-2-10(a)(11)(A). Monitoring frequencies are based upon facility size and type.

IDEM has waived the 85% removal requirement for CBOD₅ and TSS under the provisions of 40 CFR 133.103(a). The periodic improvements required under the permittee's LTCP would make the percent removal level a dynamic measurement and any limitation based on percent removal impractical.

The final effluent parameters to be limited and/or monitored include: Flow, Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia-nitrogen (NH₃-N), total phosphorus, total nitrogen, pH, Dissolved Oxygen (DO), Total Residual Chlorine (TRC), *Escherichia coli* (*E. coli*), selenium, copper, zinc, fluoride, cyanide (free), sulfate, arsenic, cadmium, chromium, lead, nickel, chloride and hardness.

<u>Final Effluent Limitations for Southport AWT Plant – Outfall 001</u>

The summer monitoring period runs from May 1 through November 30 of each year and the winter monitoring period runs from December 1 through April 30 of each year. The disinfection season runs from April 1 through October 31 of each year.

The mass limits for CBOD₅, TSS and ammonia-nitrogen have been calculated utilizing the peak design flow of 250 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

Influent Monitoring

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13 and Part I.B.2 of the permit. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. are the minimum frequencies required by the permit.

Flow

Flow is to be measured daily as a 24-hour total. Reporting of flow is required by 327 IAC 5-2-13.

CBOD₅

CBOD₅ is limited to 10 mg/l (20,863 lbs/day) as a monthly average and 15 mg/l (31,294 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, CBOD₅ is limited to 25 mg/l (52,156 lbs/day) as a monthly average and 40 mg/l (83,450 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The CBOD $_5$ concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis for BOD performed by this Office's Permits Branch staff on October 28, 1996, and are the same as the concentration limitations found in the facility's previous permit. The first permit that converted the WLA limitations for BOD to CBOD $_5$ was the permit issued on October 26, 2001.

TSS

TSS is limited to 10 mg/l (20,863 lbs/day) as a monthly average and 15 mg/l (31,294 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, TSS is limited to 30 mg/l (62,588 lbs/day) as a monthly average and 40 mg/l (83,450 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The TSS concentration limitations can first be found in the January 26, 1981, permit for Southport AWT Plant (IN0031950) and are the same as the concentration limitations found in the facility's previous permit.

Ammonia-nitrogen

Ammonia-nitrogen is limited to 1.4 mg/l (2,921 lbs/day) as a monthly average and 2.1 mg/l (4,381 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 2.5 mg/l (5,216 lbs/day) as a monthly average and 3.8 mg/l (7,928 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis performed by this Office's Permits Branch staff on November 26, 2012, and are the same as the concentration limitations found in the facility's previous permit.

Total Phosphorus

Excessive phosphorus in the discharge from wastewater treatment plants can result in harmful algal blooms that negatively impact fish habitat, cause fish kills, lower dissolved oxygen, and pose public health concerns related to increased exposure to toxic microbes. The effects of nutrient pollution can be observed both in local waters as well as downstream waters. IDEM has calculated that sanitary wastewater treatment plants with average design flows greater than or equal to 1 MGD constitute a significant percentage of the total load of phosphorus discharged to Indiana's waterways from sanitary wastewater treatment plants.

Consistent with IDEM's current Nonrule policy (WATER-019-NPD) which applies phosphorus reduction requirements to POTWs with average design flows greater than or equal to 1 MGD, monitoring requirements and an effluent limitation for total phosphorus have been included in the permit renewal. Total phosphorus is limited to 1.0 mg/l as a monthly average. Monitoring is to be conducted daily by 24-hour composite sampling.

Total Nitrogen

Nutrient pollution is one of our Nation's top environmental challenges and considerations for addressing it continue to be a priority for IDEM. Nutrient pollution can lead to public health issues and impacts the economy and is of particular concern with regard to harmful algal blooms in the State of Indiana and harmful algal blooms and hypoxia problems in further downstream waters. Of particular concern in further downstream waters is the loadings of the nutrient nitrogen.

In response to the nutrient pollution concerns, the U.S. EPA released a memorandum on September 22, 2016 entitled "Renewed Call to Action to Reduce Nutrient Pollution and Support Incremental Actions to Protect Water Quality and Public Health", which can be found at the following web address: https://www.epa.gov/sites/production/files/2016-09/documents/renewed-call-nutrient-memo-2016.pdf. EPA recommends all major sanitary dischargers begin monitoring for total nitrogen. To begin the process of total nitrogen data collection, IDEM is proposing that all major sanitary dischargers with average design flow ratings of 1.0 MGD or greater begin monitoring for total nitrogen.

The permit requires that total nitrogen be monitored and report at a minimum of one (1) time monthly. Both the concentration and associated loading values must be reported. Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and Nitrate + Nitrite Nitrogen and reporting the sum of the TKN and Nitrate + Nitrite results (reported as N). Nitrate + Nitrite can be analyzed together or separately.

рΗ

The pH limitations have been based on 40 CFR 133.102 which is cross-referenced in 327 IAC 5-5-3.

To ensure conditions necessary for the maintenance of a well-balanced aquatic community, the pH of the final effluent must be between 6.0 and 9.0 standard units in accordance with provisions in 327 IAC 2-1-6(b)(2).

pH must be measured daily by grab sampling. These pH limitations are the same as the limitations found in the facility's previous permit.

Dissolved Oxygen

Dissolved oxygen shall not fall below 7.0 mg/l as a daily minimum average during the summer monitoring period. During the winter monitoring period, dissolved oxygen shall not fall below 6.0 mg/l as a daily minimum average.

These dissolved oxygen limitations are water quality-based effluent limitations set in accordance with the WLA analysis performed by the Indiana State Board of Health in 1975, and the updated water quality model the permittee created and ran prior to the 2018 permit renewal (included in a memorandum dated March 4, 2015), and are the same as the concentration limitations found in the facility's previous permit.

Dissolved oxygen measurements must be based on the average of twelve (12) grab samples taken within a 24-hr. period. This monitoring is to be conducted daily.

Total Residual Chlorine

Disinfection of the effluent is required from April 1 through October 31, annually.

Effluent dechlorination will be required in order to protect aquatic life. In accordance with Indiana Water Quality Standards, the final effluent limits (end-of-pipe) for TRC are 0.01 mg/l monthly average and 0.02 mg/l daily maximum. Compliance will be demonstrated if the observed effluent concentrations are less than the limit of quantitation (0.06 mg/l). Disinfection requirements are established in 327 IAC 5-10-6. This monitoring is to be conducted daily by grab sampling.

E. coli

The *E. coli* limitations and monitoring requirements apply from April 1 through October 31, annually. *E. coli* is limited to 125 count/100 ml as a monthly average, and 235 count/100 ml as a daily maximum. The monthly average *E. coli* value shall be calculated as a geometric mean. This monitoring is to be conducted daily by grab sampling. These *E. coli* limitations are set in accordance with regulations specified in 327 IAC 5-10-6.

Metals & Non-conventional Pollutants

Effluent arsenic, cadmium, chromium, nickel, lead, cyanide, copper, zinc, fluoride, chloride and sulfate data was evaluated as part of the NPDES permit renewal. The initial evaluation of the monitoring data revealed that the discharge from the wastewater treatment plant did not show potential to exceed the water quality criterion for arsenic, cadmium, chromium, nickel, copper, fluoride and sulfate within the receiving waters. Therefore, copper effluent limitations have been removed.

Reasonable Potential to Exceed Evaluations (RPE) were performed in conjunction with the Wasteload Allocation Analysis performed by this Office's Permits Branch staff on April 3, 2023. In reviewing the RPE, the Projected Effluent Quality (PEQ) for lead, cyanide, zinc and chloride is less than the Projected Effluent Limitations (PEL). However, due to the industrial contributors to the Southport and Belmont AWT Plant collection system, twice monthly monitoring requirements for arsenic, cadmium, chromium, nickel, lead, cyanide, copper, zinc, fluoride, chloride and sulfate are being retained. Additionally, twice monthly hardness monitoring is being added to aid in future evaluations.

Selenium

On February 1, 2022, U.S. EPA approved Indiana's revision of its acute and chronic aquatic life criteria for selenium. The revision removed the acute criterion and replaced the chronic criterion with four criterion elements, two based on the concentration of selenium in fish tissue and two based on the concentration of selenium in the water column: (1) a fish egg/ovary element; (2) a fish whole-body or muscle element; (3) a water column element (30-day average) (one value for lentic (still water) and one value for lotic (flowing water) aquatic systems); and (4) a water column intermittent element to account for potential chronic effects from short-term exposures to high concentrations in lentic and lotic aquatic systems. Fish tissue data provide instantaneous point measurements that reflect integrative accumulation of selenium over time and space in fish populations at a given site. Therefore, the fish tissue elements are applied on a species-specific basis with a duration of instantaneous. The egg/ovary element takes precedence over the fish whole-body or muscle tissue elements, which in turn take precedence over the water column elements.

Indiana's revised criterion was based on EPA's 2016 update of its Clean Water Act section 304(a) recommended chronic aquatic life criterion for selenium in freshwater systems to reflect the latest scientific information (U.S. EPA 2021a). While a naturally occurring chemical element that is nutritionally essential in small amounts, selenium can become deleterious to aquatic organisms due to its bioaccumulative properties. Organisms in aquatic environments exposed to selenium accumulate it primarily through diet and not directly through water. The most current and robust research available to EPA at the time of criteria development indicated that selenium toxicity occurs primarily through maternal transfer of selenium during egg development and subsequent reproductive effects, with the reproductive life-stages of egg-laying vertebrates being the most sensitive. The assessment of the available data on chronic selenium exposure for fish, invertebrates, and

amphibians indicated that fish are the most sensitive, so a criterion element derived from fish is expected to be protective of the aquatic community as a whole.

Selenium accumulation in the eggs of exposed adult females prior to spawning was shown to provide the most robust relationship with occurrence of deformities and reduced survival of the offspring. Reproductive effects have been linked to observed reductions in the populations of sensitive fish species in waterbodies having elevated concentrations of selenium. EPA based the egg/ovary criterion element primarily on 17 reproductive studies representing 10 fish genera. The most sensitive fish genus was *Acipenser* (species White Sturgeon) with *Lepomis* (species Bluegill) ranking second. Both genera occur within the West Fork White River downstream of the Southport AWT plant.

EPA derived the whole-body, muscle and water column elements from the egg/ovary element for ease of implementation as a recommended 304(a) water quality criterion. The whole-body and muscle elements were derived from the egg/ovary element based on species-specific selenium partitioning between the different fish tissues. The water column elements were derived from the egg/ovary element by assessing food-chain bioaccumulation on a species-specific basis. Therefore, all of the criterion elements are based on reproductive effects in freshwater fish. The potential for selenium to bioaccumulate depends on several biogeochemical factors that characterize a particular aquatic system. To reduce uncertainty in the translation of the egg/ovary criterion to the water column element, a site-specific water column element can be derived. Indiana incorporated a process into the rule to modify the water column element on a site-specific basis with final approval required by EPA.

While the collection of water column data is relatively routine and can occur anytime, the collection of egg/ovary, whole-body and muscle data requires specialized equipment, licensing and targeting of fish species that are ultimately sacrificed. Therefore, the rule requires any proposal to sample fish tissue be submitted to IDEM for review and approval prior to initiation of sampling. In addition, the rule provides for IDEM to evaluate all representative fish tissue data to determine compliance with the egg/ovary, whole-body and muscle elements.

IDEM currently has a draft guidance to implement the rule. Draft guidance for the collection of fish tissue data and data interpretation has also been provided by EPA to assist with implementation of their recommended 304(a) water quality criterion for selenium (U.S. EPA 2021b, U.S. EPA 2021c). Any proposal to sample fish tissue must target specific species based on factors such as toxicological sensitivity to selenium, bioaccumulation potential, mobility and spawning period. Based on these factors, and the application of the fish tissue elements of the criterion on a species-specific basis, multiple species may initially be collected to account for differences in diet and uncertainty in site-specific factors affecting bioaccumulation. In addition, sampling for egg/ovary is conducted at a different time of year and has a narrower window of collection than sampling for whole-body and muscle.

To account for variability, either a composite of multiple fish of a particular species into one sample or collection and analysis of multiple single fish of a particular species is required. As species have different selenium bioaccumulation potentials and different sensitivities to selenium, it is not scientifically defensible to create a composite sample that consists of more than one species. Compositing individuals that are the same genus, but not the same species is not appropriate. Therefore, accurate taxonomic identification is essential to prevent the mixing of species in a sample. Since species-specific conversion factors were used to derive the whole-body and muscle elements from the egg/ovary element, any comparison of egg/ovary to whole-body or muscle tissue would have to be done within each fish species. If fish tissue data for a fish species exceeds the criterion, then the criterion is not met in the population of that species at the site.

In early 2019 IDEM added selenium to its statewide fixed station monthly water column monitoring network of rivers. This was due to the rulemaking in progress that would lower the chronic criterion from 35 ug/l based on total recoverable selenium to 3.1 ug/l based on dissolved selenium. Laboratory quantitation levels for selenium were initially 2.2 ug/l with a level of 1.1 ug/l currently achieved. IDEM has five fixed stations on West Fork White River downstream of the Southport AWT plant to its confluence with East Fork White River. Beginning in the Fall of 2019, quantifiable levels (above 2.2 ug/l) of selenium were observed at the first three downstream stations (WR-210 and WR-192 in Morgan County and WR-164 in Owen County), typically during the August through November low-flow periods.

Of these three fixed stations, only dissolved selenium data is collected at WR-192 in addition to total recoverable data. The highest concentrations occurred at WR-210, 9.8 miles downstream of the Southport AWT plant. In addition, both total recoverable and dissolved selenium data were collected along the entire reach of the White River mainstem in June, July and October 2020. A sample site located immediately upstream of the Southport AWT plant did not show quantifiable levels of selenium, but samples collected downstream to Owen County showed quantifiable levels in October. While multiple samples for total recoverable selenium since early 2019 have exceeded 3.1 ug/l, only two samples collected for dissolved selenium have exceeded the criterion.

The available water column data showed that quantifiable levels of selenium occurred during periods of low flow in the river, indicating that the source of selenium is a point source versus a nonpoint source. Southport AWT plant is the only point source along the river discharging volumes large enough to cause the selenium levels that could be quantified. IDEM has an established fish tissue contaminants program that routinely collects data around the state. While working in the Marion County watershed during the Fall of 2021, IDEM also targeted sites for fish tissue collection in West Fork White River from downstream of the Southport AWT plant to Paragon in Morgan County. Water column data was also collected at these sites, along with one river sample from upstream of the Southport AWT plant and one sample from the discharge plume.

The fish tissue data show that a composite fillet sample for Smallmouth Bass collected within a 500-meter reach downstream of the outfall (13.2 mg/kg) exceeded the muscle

element (11.3 mg/kg) and composite whole-body samples for Longear Sunfish collected 9.8 miles (10.8 mg/kg) and 20 miles (8.9 mg/kg) downstream of the outfall exceeded the whole-body element (8.5 mg/kg) of the criterion. The timing of the sampling was intended to collect fish whole-body and muscle tissue during the Fall collection period at least two months after spawning typically occurs; if whole-body or muscle tissue samples from female fish are collected directly pre- or post-spawn, then they may have reduced selenium concentrations that are not representative of typical concentrations due to the recent transfer of selenium to eggs. Just as timing for the collection of whole-body or muscle tissue is vital, collection of egg-ovary tissue for the implementation of the selenium criterion requires careful planning to ensure the egg-ovary samples are collected from the first Spring spawning period after selenium that was stored in the female fish has recently transferred to the eggs. Sampling during the first Spawning period is crucial as egg-ovary samples from this period typically have the highest selenium concentration compared to other Spawning events due to the greater length of time for selenium to accumulate in the female fish since the last spawning period, and is therefore representative of a "worst case" scenario and most protective of aquatic life. Timing errors in terms of collection of samples relative to the phase of fish reproduction may result in data that falsely indicate the selenium criterion is being met and do not fully represent the potential to effect the aquatic ecosystem.

While outside the ideal sampling period to collect the first produced eggs of the year, IDEM was able to collect egg samples from Common Carp for exploratory purposes. Although Common Carp typically spawn in the Spring, they are asynchronous and can spawn multiple times throughout the season. The Common Carp spawning season has been documented as May through August in the region, consequently the eggs collected in October are not indicative of the first Spring spawning event. Therefore, they should not be used to indicate that the selenium criterion is being met for Common Carp without comparable data from the first Spring spawning event. Single fish egg samples were collected downstream of the outfall and at the site 9.8 miles downstream. Composite egg samples for Common Carp were collected at two separate sites over 20 miles downstream. None of the egg samples exceeded the egg/ovary element of the criterion, although the single fish egg sample 9.8 miles downstream was 14.0 mg/kg compared to the criterion of 15.1 mg/kg. Also, as mentioned above, it is important to note that the hierarchical structure of the fish tissue elements of the criterion (i.e. egg-ovary data supersedes muscle/whole-body) apply within each fish species, and should not be applied across species as this would be inconsistent with the procedure used to derive the fish tissue elements of the criterion. Therefore, if fish tissue data for a fish species exceeds the criterion, with egg/ovary taking precedence, then the criterion is not being met in the population of that species at the site. In the context of the Fall 2021 IDEM sampling event, even if the Common Carp egg samples had been collected at the appropriate time, and were based on a composite sample instead of a single fish, the fact that there are composite muscle and whole-body exceedances in other species indicates the criterion is still being exceeded in the waterbody; only composite egg-ovary data from Smallmouth Bass and Longear Sunfish would supersede those exceedances and indicate the waterbody is meeting the criterion.

As noted above, assessment of compliance with the selenium criterion using fish tissue is species specific and requires data from composite samples to account for variability. While limited water column data for dissolved selenium since early 2019 only exceeded the criterion at two locations, composite whole-body samples for Longear Sunfish exceeded the criterion at two locations and one composite muscle sample for Smallmouth Bass exceeded the criterion at one location during the 2021 sampling event. The spatial extent of the fish tissue criterion exceedance extended from the outfall of the Southport AWT plant to at least 20 miles downstream. The water column sample collected upstream of the Southport AWT plant during the 2021 sampling was <1.1 ug/l for both total recoverable and dissolved selenium. The sample of the discharge plume was 8.7 ug/l for total recoverable and 9.6 ug/l for dissolved selenium.

Indiana rule 327 IAC 5-2-11.1(h)(1) requires that limitations control all pollutants that the commissioner determines are, or may be, discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criterion promulgated under 327 IAC 2-1-6. The fish tissue data collected by IDEM indicate that an excursion of the fish whole-body or muscle element of the selenium criterion is occurring for a segment of the West Fork White River extending from the Southport AWT plant to at least 20 miles downstream. Water column and discharge plume data collected by IDEM indicate that the Southport AWT plant is at least contributing to the excursion. Composite effluent data submitted to IDEM by the permittee confirm the Southport AWT does discharge selenium at levels above 3.1 ug/l on both a total recoverable and dissolved metal basis. These data include the following: (1) total recoverable selenium data collected in 2022 by the permittee for local limits development, and (2) total recoverable and dissolved selenium data collected on three separate days in both March and April 2023 as part of chronic Whole Effluent Toxicity testing required under their current permit. Therefore, since the Southport AWT is contributing to the excursion, IDEM is required to include water quality-based effluent limitations for selenium in the permit for the Southport AWT plant. The limitations were calculated by setting the wasteload allocation for selenium equal to the water column element without the benefit of stream dilution since an excursion of the selenium criterion is occurring. Monitoring-only requirements will be required for the Belmont AWT plant.

As the selenium limitation is a new requirement, a schedule of compliance has been granted and included in Part I.E of the permit. The permittee submitted a request for a compliance schedule concurrent with a request for a variance pursuant to IC 13-14-8-8 on April 17, 2023; for more information on the variance, see section below "IC 13-14-8-8 Variance Request." The permittee requested the maximum three (3) year schedule of compliance allowed under 327 IAC 5-2-12 for facilities in the non-Great Lakes basin, as well as a variance pursuant to IC 13-14-8-8 to add an additional five (5) years to the schedule of compliance. The combination of these requests extends the final compliance schedule to a total of eight (8) years.

Though IDEM agrees that more than three (3) years are warranted to achieve the necessary source identification and reduction work considering the size of the collection system, the full eight-year schedule requested has not been granted. Instead, a

compliance schedule of five years is being included (through the granting of a three (3) year Schedule of Compliance pursuant to 327 IAC 5-2-12 and concurrent approval of a two (2) year variance pursuant to IC 13-14-8-8), which IDEM believes is sufficient time to complete the activities outlined in the permittee's compliance schedule request.

During the term of the sixty (60) month schedule of compliance, weekly monitoring of influent and effluent are required. The final selenium limits are 0.0031 mg/l as a monthly average and 0.0075 mg/l as a daily maximum. Monitoring is to be conducted weekly by 24-hour composite sampling. The selenium concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis performed by this Office's Permits Branch staff on April 3, 2023, and are new limitations.

References Included Above

U.S. EPA 2021a. 2021 Revision to: Aquatic Life Ambient Water Quality Criterion for Selenium - Freshwater 2016. U.S. Environmental Protection Agency. EPA 822-R-21-006, August 2021.

U.S. EPA 2021b. Draft Technical Support for Fish Tissue Monitoring for Implementation of EPA's 2016 Selenium Criterion. U.S. Environmental Protection Agency. EPA 823-D-21-002. October 2021.

U.S. EPA 2021c. Draft Frequently Asked Questions: Implementing EPA's 2016 Selenium Criterion in Clean Water Act Sections 303(d) and 305(b) Assessment, Listing, and Total Maximum Daily Load Programs. U.S. Environmental Protection Agency. EPA 823-D-21-004. October 2021.

Influent Monitoring

In addition to effluent monitoring and limitations, the permittee is required to monitor the influent wastestream for cadmium, chromium, copper, cyanide (free), lead, fluoride, nickel, zinc, sulfate, chloride and arsenic at a frequency of two (2) times monthly and selenium at a frequency of once weekly utilizing 24-Hr. composite sampling for all parameters but cyanide (free), which requires grab sampling.

Whole Effluent Toxicity Testing

The permittee submitted Whole Effluent Toxicity Tests (WETT) with the renewal application as required in 327 IAC 5-2-3(g). The submitted WETT did not reveal any toxicity to the tested species. However, since the application was submitted, the Southport AWT Plant failed two consecutive WETT in March and April 2023, and is now starting a Toxicity Reduction Evaluation (TRE) for Outfall 001.

The permittee shall conduct the whole effluent toxicity tests described in Part I.D. of the permit to monitor the toxicity of the discharge from Outfall 001. This facility is currently required to complete a TRE and three months of post-TRE monitoring by April 11, 2026. IDEM has suspended toxicity testing requirements until successful completion of the TRE. Successful completion of the TRE will be demonstrated if the three consecutive monthly

post-TRE tests demonstrate no toxicity with any test species as described in Part I.D.1.g. After successful completion of the TRE, the toxicity tests established under Part I.D.1.b. must be conducted once every six (6) months, as calculated from the first day of the first month following successful completion of the post-TRE toxicity tests (see Part I.D.2.c.(4)), for the remainder of the permit term.

Once the TRE is completed, the permittee shall conduct the whole effluent toxicity tests described in Part I.D. of the permit to monitor the toxicity of the discharge from Outfall 001. This toxicity testing is to be performed biannually for the remainder of the NPDES permit. Acute toxicity will be demonstrated if the effluent is observed to have exceeded **1.0** TU_a(acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, which ever is more sensitive. Chronic toxicity will be demonstrated if the effluent is observed to have exceeded **1.1** TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas*. If acute or chronic toxicity is found in any of the tests specified above, another toxicity test using the specified methodology and same test species shall be conducted within two weeks. If any two tests indicate the presence of toxicity, the permittee must begin the implementation of a toxicity reduction evaluation (TRE) as is described in Part I.D.2. of the permit.

IC 13-14-8-8 Variance Request

On April 17, 2023, the permittee submitted a request for a compliance schedule to meet the new selenium limitation concurrent with a request for a variance from 327 IAC 5-2-12, pursuant to IC 13-14-8-8. Specifically, the permittee requested a variance from the maximum three (3) year schedule of compliance under 327 IAC 5-2-12(a)(3) for facilities in the non-Great Lakes basin. Pursuant to IC 13-14-8-8, if the Commissioner determines that immediate compliance with a rule would impose an undue hardship or burden upon an applicant for a variance, the Commissioner may grant a variance from the rule.

The permittee proposed an eight (8) year schedule of compliance. The permittee's request explained that an extended compliance schedule is necessary to ensure that the permittee "can complete a thorough assessment of its collection and treatment systems to identify sources of selenium into the system, assess the strategies and measures needed to reduce and/or control selenium, and then implement those strategies and measures, which may include a combination of administrative measures through its Industrial Pretreatment Program and operational changes at the Southport AWT plant necessary to comply with the anticipated effluent limit." See below for a summary table submitted by the permittee of activities to be completed during the requested eight-year schedule.

Task	Anticipated Timeframe	2023	2024	2025	2026	2027	2028	2029	2030	2031
Industrial Source and Collection System Assessment	12 – 18 Months	х	х							
Local Limits Development	6 - 12 Months		X	X						
Submit EPA/IDEM Review of Proposed Amendments to Local Limits for Selenium	45 Days ²			х						
Incorporation of Revised Selenium Limits into Resolution No. CWA 2-2011	4-6 Months ³			х	х					
Issuance of New and/or Amendments to Existing Industrial Discharge Permits	4 – 6 Months				х					
Revisions to Satellite Community Sewer Use Ordinances ⁴	8 – 12 Months				х					
Compliance Schedules for Industrial Users of the Authority and those within Satellite Communities	18 – 36 Months				х	х	х			
Assessment of the Authority's Wastewater Treatment Plants and Implementation of any Necessary and Appropriate Controls		х	х	х	х	х	х	х	х	
Authority's Demonstration of Compliance									X	X

In light of the information presented in the permittee's schedule of compliance and variance request, including but not limited to the foregoing, IDEM has determined that compliance with the maximum three (3) year schedule of compliance allowed under 327 IAC 5-2-12(a)(3) to meet the final selenium limits would impose an undue hardship or burden upon the permittee. However, IDEM does not agree that a five (5) year variance from 327 IAC 5-2-12(a)(3) is necessary. Specifically, IDEM does not feel the activities outlined in the compliance schedule request need to be spread out as far as they are, as some are already taking place. Additionally, schedules of compliance do not allow additional years built in to demonstrate compliance, such as this request included. Instead, IDEM is approving a two (2) year variance from 327 IAC 5-2-12(a)(3) and a three (3) year schedule of compliance, for a total of a five (5) year compliance schedule. IDEM believes this is sufficient time to complete the activities outlined in the permittee's compliance schedule and variance request.

Under IC 13-14-8-8(b), if the variance for which a person applies would be in effect for more than one (1) year, the person's application must include a demonstration of how the person would come into compliance with the rule within the period for which the variance would be in effect. During the term of the five (5) year compliance schedule, the permittee is required to submit written progress reports summarizing progress made towards achieving the specific actions, outlined in the table above, determined by the permittee to be necessary for meeting the final requirements for selenium. More information on the reporting requirements is included in Part I.E. of the permit. In addition, weekly monitoring of influent and effluent are required. Pursuant to IC 13-14-8-8(f), IDEM may revoke the variance for cause, including if the permittee does not meet the requirements of the compliance schedule.

Final Effluent Limitations for Belmont AWT Plant – Outfall 006

The summer monitoring period runs from May 1 through November 30 of each year and the winter monitoring period runs from December 1 through April 30 of each year. The disinfection season runs from April 1 through October 31 of each year.

The mass limits for CBOD₅, TSS and ammonia-nitrogen have been calculated utilizing the peak design flow of 300 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

Influent Monitoring

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13 and Part I.B.2 of the permit. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. are the minimum frequencies required by the permit.

Flow

Flow is to be measured daily as a 24-hour total. Reporting of flow is required by 327 IAC 5-2-13.

CBOD₅

CBOD₅ is limited to 10 mg/l (25,035 lbs/day) as a monthly average and 15 mg/l (37,553 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, CBOD₅ is limited to 20 mg/l (50,070 lbs/day) as a monthly average and 30 mg/l (75,105 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The CBOD $_5$ concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis performed by State technical staff in January 1975, and were able to be traced back to a NPDES permit for Belmont AWT as early as January 26, 1981. These limitations are the same as the concentration limitations found in the facility's previous permit.

TSS

TSS is limited to 10 mg/l (25,035 lbs/day) as a monthly average and 15 mg/l (37,553 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, TSS is limited to 20 mg/l (50,070 lbs/day) as a monthly average and 30 mg/l (75,105 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The TSS concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis performed by State technical staff in January 1975, and were able to be traced back to a NPDES permit for Belmont AWT as early as January 26, 1981. These limitations are the same as the concentration limitations found in the facility's previous permit.

Ammonia-nitrogen

Ammonia-nitrogen is limited to 1.4 mg/l (3,505 lbs/day) as a monthly average and 2.1 mg/l (5,257 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 2.5 mg/l (6,259 lbs/day) as a monthly average and 3.8 mg/l (9,513 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentration limitations included in this permit are water quality-based effluent limitations set in accordance with the WLA analysis performed by this Office's Permits Branch staff on November 26, 2012, and are the same as the concentration limitations found in the facility's previous permit.

Total Phosphorus

Excessive phosphorus in the discharge from wastewater treatment plants can result in harmful algal blooms that negatively impact fish habitat, cause fish kills, lower dissolved oxygen, and pose public health concerns related to increased exposure to toxic microbes. The effects of nutrient pollution can be observed both in local waters as well as downstream waters. IDEM has calculated that sanitary wastewater treatment plants with average design flows greater than or equal to 1 MGD constitute a significant percentage of the total load of phosphorus discharged to Indiana's waterways from sanitary wastewater treatment plants.

Consistent with IDEM's current Nonrule policy (WATER-019-NPD) which applies phosphorus reduction requirements to POTWs with average design flows greater than or equal to 1 MGD, monitoring requirements and an effluent limitation for total phosphorus have been included in the permit renewal. Total phosphorus is limited to 1.0 mg/l as a monthly average. Monitoring is to be conducted daily by 24-hour composite sampling.

Total Nitrogen

Nutrient pollution is one of our Nation's top environmental challenges and considerations for addressing it continue to be a priority for IDEM. Nutrient pollution can lead to public health issues and impacts the economy and is of particular concern with regard to harmful algal blooms in the State of Indiana and harmful algal blooms and hypoxia problems in further downstream waters. Of particular concern in further downstream waters is the loadings of the nutrient nitrogen.

In response to the nutrient pollution concerns, the U.S. EPA released a memorandum on September 22, 2016 entitled "Renewed Call to Action to Reduce Nutrient Pollution and Support Incremental Actions to Protect Water Quality and Public Health", which can be found at the following web address: https://www.epa.gov/sites/production/files/2016-09/documents/renewed-call-nutrient-memo-2016.pdf. EPA recommends all major sanitary dischargers begin monitoring for total nitrogen. To begin the process of total nitrogen data collection, IDEM is proposing that all major sanitary dischargers with average design flow ratings of 1.0 MGD or greater begin monitoring for total nitrogen.

The permit requires that total nitrogen be monitored and report at a minimum of one (1) time monthly. Both the concentration and associated loading values must be reported. Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and Nitrate + Nitrite Nitrogen and reporting the sum of the TKN and Nitrate + Nitrite results (reported as N). Nitrate + Nitrite can be analyzed together or separately.

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The pH limitations have been based on 40 CFR 133.102 which is cross-referenced in 327 IAC 5-5-3.

To ensure conditions necessary for the maintenance of a well-balanced aquatic community, the pH of the final effluent must be between 6.0 and 9.0 standard units in accordance with provisions in 327 IAC 2-1-6(b)(2).

pH must be measured daily by grab sampling. These pH limitations are the same as the limitations found in the facility's previous permit.

Dissolved Oxygen

Dissolved oxygen shall not fall below 7.0 mg/l as a daily minimum average during the summer monitoring period. During the winter monitoring period, dissolved oxygen shall not fall below 6.0 mg/l as a daily minimum average.

These dissolved oxygen limitations are water quality-based effluent limitations set in accordance with the WLA analysis performed by the Indiana State Board of Health in 1975, and the updated water quality model the permittee created and ran prior to the 2018 permit renewal (included in a memorandum dated March 4, 2015), and are the same as the concentration limitations found in the facility's previous permit.

Dissolved oxygen measurements must be based on the average of twelve (12) grab samples taken within a 24-hr. period. This monitoring is to be conducted daily.

Total Residual Chlorine

Disinfection of the effluent is required from April 1 through October 31, annually.

Effluent dechlorination will be required in order to protect aquatic life. In accordance with Indiana Water Quality Standards, the final effluent limits (end-of-pipe) for TRC are 0.01 mg/l monthly average and 0.02 mg/l daily maximum. Compliance will be demonstrated if the observed effluent concentrations are less than the limit of quantitation (0.06 mg/l). Disinfection requirements are established in 327 IAC 5-10-6. This monitoring is to be conducted daily by grab sampling.

E. coli

The *E. coli* limitations and monitoring requirements apply from April 1 through October 31, annually. *E. coli* is limited to 125 count/100 ml as a monthly average, and 235 count/100 ml as a daily maximum. The monthly average *E. coli* value shall be calculated as a geometric mean. This monitoring is to be conducted daily by grab sampling. These *E. coli* limitations are set in accordance with regulations specified in 327 IAC 5-10-6.

Metals & Non-conventional Pollutants

Effluent arsenic, cadmium, chromium, nickel, lead, cyanide, copper, zinc, fluoride, chloride and sulfate data was evaluated as part of the NPDES permit renewal. The initial evaluation of the monitoring data revealed that the discharge from the wastewater treatment plant did not show potential to exceed the water quality criterion for arsenic, cadmium, chromium, nickel, copper, fluoride and sulfate within the receiving waters. Therefore, copper effluent limitations have been removed.

Reasonable Potential to Exceed Evaluations (RPE) were performed in conjunction with the Wasteload Allocation Analysis performed by this Office's Permits Branch staff on April 3, 2023. In reviewing the RPE, the Projected Effluent Quality (PEQ) for lead, cyanide, zinc and chloride is less than the Projected Effluent Limitations (PEL). However, due to the industrial contributors to the Southport and Belmont AWT Plant collection system, twice monthly monitoring requirements for arsenic, cadmium, chromium, nickel, lead, cyanide, copper, zinc, fluoride, chloride and sulfate are included in the permit. Additionally, twice monthly hardness monitoring is being added to aid in future evaluations.

Selenium

Monitoring is to be conducted once weekly by 24-hour composite sampling. This monitoring requirements is being included as a result of stream and fish tissue sampling conducted by IDEM. More information can be found in the "Selenium" section for Southport AWT Plant, beginning on page 17 of this Fact Sheet.

Influent Monitoring

In addition to effluent monitoring and limitations, the permittee is required to monitor the influent wastestream for cadmium, chromium, copper, cyanide (free), lead, fluoride, nickel, zinc, sulfate, chloride and arsenic at a frequency of two times monthly and selenium at a frequency of once weekly utilizing 24-Hr. composite sampling for all parameters but cyanide (free), which requires grab sampling.

Whole Effluent Toxicity Testing

The permittee submitted Whole Effluent Toxicity Tests (WETT) with the renewal application as required in 327 IAC 5-2-3(g). The submitted WETT did not reveal any toxicity to the tested species.

The permittee shall conduct the whole effluent toxicity tests described in Part I.D. of the permit to monitor the toxicity of the discharge from Outfall 006. This toxicity testing is to be performed biannually for the duration of this NPDES permit. Acute toxicity will be demonstrated if the effluent is observed to have exceeded **1.0** TU_a(acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, which ever is more sensitive. Chronic toxicity will be demonstrated if the effluent is observed to have exceeded **1.1** TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas*. If acute or chronic toxicity is found in any of the tests specified above, another toxicity test using the specified methodology and same test species shall be conducted within two weeks. If any two tests indicate the presence of toxicity, the permittee must begin the implementation of a toxicity reduction evaluation (TRE) as is described in Part I.D.2. of the permit.

Backsliding

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

Reopening Clauses

Seven (7) reopening clauses were incorporated into the permit in Part I.C and two (2) reopening clauses were incorporated into Attachment A of the permit. One clause is to incorporate effluent limits from any further wasteload allocations performed; a second clause is to allow for changes in the sludge disposal standards; a third clause is to incorporate any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act; a fourth clause is to incorporate monitoring requirements and effluent limitations for arsenic, cadmium, chromium, chloride, copper, cyanide (free), lead, fluoride, nickel, sulfate, zinc, and/or selenium; a fifth clause is to include whole effluent toxicity limitations or to include limitations for specific toxicants; a sixth clause is to include a case-specific Method Detection Level (MDL); a seventh clause is to incorporate additional requirements or

limitations for specific toxicants if the required additional analyses in Part I.A. indicate that such additional requirements and/or limitations are necessary; an eighth clause is to address changes in the EPA National CSO Policy or state or federal law; and a ninth clause is to incorporate applicable provisions of IC 13-18.

Compliance Status

The permittee is subject to a Consent Decree (CD) for the control of CSOs and implementation of their Long Term Control Plan. The CD was originally filed on December 19, 2006, under 1:06-cv-1456-DFH-JMS. The first amendment to the CD was filed on April 23, 2009. The second amendment was filed on September 7, 2010, under 1:06-cv-01456-SEB-TAB. The final amendment was filed on July 26, 2013.

Expiration Date

A five-year NPDES permit is proposed.

Post Public Notice Addendum



The draft NPDES permit for Belmont and Southport AWT Plants was originally made available for public comment from October 13, 2023 through November 13, 2023, as part of Public Notice No. 20231013-IN0023183-D on IDEM's website at https://www.in.gov/idem/public-notices/public-notices-all-regions/. Erika Powers, on behalf of the permittee, requested a 60-day extension of the public comment period on October 25, 2023. In response, on November 8, 2023, IDEM extended the comment period for an additional thirty days after the original end date, with a revised response due date of December 13, 2023, as part of Public Notice No. 20231108-IN0023183-D-EXT.

During the comment period, comment letters were received from the following interested parties: Mr. Chad Stott, Environmental Manager with Sumco Group ("Sumco"), dated November 7, 2023; Mr. Mark Hoffman, Environmental Director with Ecobat Resources ("Ecobat"), dated December 13, 2023; Mr. Christopher Ray, Corporate Compliance Program Specialist with Heritage Environmental ("Heritage"), dated December 13, 2023; and Ms. Ann McIver, Director of Environmental Stewardship with Citizens Energy Group ("Citizens"), dated December 13, 2023, which incorporated comments from Mr. Rob Reash

of Reash Environmental LLC and Mr. Lial Tischler, Partner with Tischler/Kocurek Environmental Engineers.

The comments submitted by the above parties, and this Office's corresponding responses are summarized below. Any changes to the permit and/or Fact Sheet are so noted below. Substantively consistent comments submitted by multiple parties are grouped together, and noted as such.

- Comment 1: IDEM is engaging in rulemaking by permit and regulating by new rule through the use of draft guidance in sampling fish tissue and relying on IDEM and EPA draft guidance as a basis for setting selenium limits in the permit. (Citizens; Ecobat)
- Response 1: The selenium limitations were included in the permit pursuant to 327 IAC 5-2-11.1(h)(1) which requires that limitations control all pollutants that the commissioner determines are, or may be, discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criterion promulgated under 327 IAC 2-1-6. The monthly average and daily maximum water qualitybased effluent limitations (WQBELs) included were calculated using the chronic aquatic criterion for selenium based on the water column element monthly average exposure and procedures set forth in 327 IAC 5-2-11.1 and the 1991 U.S. EPA Technical Support Document for Water Quality Based Toxics Control. Based on all effluent (including data submitted to IDEM by the permittee for local limits development and as part of Whole Effluent Toxicity Tests), receiving stream and fish tissue data available for selenium, IDEM has determined that the permittee's discharge of selenium is contributing to an excursion of the fish whole-body or muscle element of the water quality criterion for selenium in the populations of the Smallmouth Bass and Longear Sunfish species; therefore, IDEM must include permit limits for selenium in this permit. No changes have been made to the permit nor Fact Sheet in response to this comment.
- Comment 2: IDEM misinterpreted EPA's 2016 Water Quality Criterion for Selenium by not acknowledging the hierarchical nature of the selenium criterion. (Citizens)
- Response 2: IDEM's interpretation of the water quality criterion and its hierarchical nature is outlined on pages 18 through 20 of the Fact Sheet. Changes have been made to the Fact Sheet on pages 17-21 to clarify IDEM's interpretation.
- Comment 3: Additional sampling and the full regulatory process must be conducted and followed prior to designating the White River as impaired. (Citizens; Heritage; Sumco)

- Response 3: A waterbody's impairment status in regards to the Clean Water Act Section 305(b) and the 303(d) list is part of the Integrated Report submitted to the United States Environmental Protection Agency (U.S. EPA) for review every two years, and utilizes methodology described in the Consolidated Assessment and Listing Methodology (CALM), also updated by IDEM every two years. The Fact Sheet has been updated on page 19 to clarify that a determination on the impaired status (pertaining to the 303(d) list of impaired waters) was not being made in the permit document nor Fact Sheet.
- Comment 4: Sampling conducted by IDEM was not done in accordance with IDEM's draft guidance (specifically by rejecting egg/ovary data for Common Carp collected during the October 2021 sampling event, sampling outside of the stream reach indicated by the draft guidance (1000 meters), and by including data from species deemed unacceptable for such evaluations), and fixed station data showing no exceedances were disregarded in making a claim of impaired status as well as determining a need for a limit. (Citizens; Heritage)
- Response 4: As stated in the guidance, IDEM's draft selenium guidance was developed to serve as a tool for permittees submitting fish tissue and/or water column sampling plans to IDEM for approval; the draft guidance provides information on developing robust plans for reasonable potential to exceed determinations based solely on water column data and/or for developing a site-specific water column criterion based on a site-specific bioaccumulation factor. The draft selenium guidance is still under development.

A waterbody's impairment status in regards to the Clean Water Act Section 305(b) and the 303(d) list is part of the Integrated Report submitted to U.S. EPA for review every two years, and utilizes methodology described in the Consolidated Assessment and Listing Methodology (CALM), also updated by IDEM every two years. Regarding inclusion of a limitation in the permit, pursuant to 327 IAC 5-2-11.1(h), when IDEM determines that a pollutant in a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above any numeric water quality criterion, the permit must contain effluent limits for that pollutant. Based on all effluent, receiving stream and fish tissue data available for selenium, IDEM has determined that the permittee's discharge of selenium is contributing to an excursion of the fish whole-body or muscle element of the water quality criterion for selenium in the populations of the Smallmouth Bass and Longear Sunfish species; therefore, IDEM must include permit limits for selenium in this permit. No changes have been made to the permit nor Fact Sheet in response to this comment.

- Comment 5: The Common Carp egg/ovary data should not be disregarded; a first spring spawning event is not needed, as they are asynchronous, and as a Group 1 molluscivorous species, is relevant based on IDEM's Draft Guidance. This takes precedence over other data due to the hierarchical nature of the criteria. (Citizens; Heritage)
- Response 5: IDEM's interpretation of the hierarchical nature of the criterion is included on pages 19 through 21 of the Fact Sheet, and determination of the applicability of the Common Carp egg/ovary data is included on page 20 of the Fact Sheet. When considering the single fish, instead of the required composite, Common Carp egg/ovary data collected outside of the ideal timeframe to reflect worst-case scenario conditions, the value of 14.0 mg/kg compared to the egg/ovary criterion of 15.1 mg/kg further supports IDEM's inclusion of a limitation pursuant to 327 IAC 5-2-11.1(h), despite it not exceeding the criterion. No changes have been made to the permit nor Fact Sheet in response to this comment.
- Comment 6: Data collected by IDEM supports a conclusion of no selenium impairment. (Citizens; Heritage)
- Response 6: A waterbody's impairment status in regards to the Clean Water Act Section 305(b) and 303(d) list is part of the Integrated Report submitted to U.S. EPA for review every two years, and utilizes methodology described in the Consolidated Assessment and Listing Methodology (CALM), also updated by IDEM every two years. Regarding inclusion of a limitation, pursuant to 327 IAC 5-2-11.1(h), when IDEM determines that a pollutant in a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above any numeric water quality criterion, the permit must contain effluent limits for that pollutant. Based on all effluent, receiving stream and fish tissue data available for selenium, IDEM has determined that the permittee's discharge of selenium is contributing to an excursion of the fish whole-body or muscle element of the water quality criterion for selenium in the populations of the Smallmouth Bass and Longear Sunfish species; therefore, IDEM must include permit limits for selenium in this permit. No changes have been made to the permit nor Fact Sheet in response to this comment.
- Comment 7: Other sources of selenium are indicated and should be investigated (Citizens; Heritage), including naturally occurring sources. (Ecobat)
- Response 7: Other point sources of selenium are not suspected based on the receiving stream and nearby discharger evaluation conducted as part of the WLA analysis performed by this Office's Permits Branch staff on April 3, 2023. This is further confirmed given the monitoring and sampling completed and

described in more detail on pages 19-21 of the Fact Sheet. The data show detectable levels of selenium downstream (but not upstream) of Southport's Outfall, and the presence of higher values during low-flow periods in the river, which indicate a point-source discharger. Additionally, the distance downstream that detectable levels were found indicate a large source, of which there are no other known sources in that reach of the White River. Furthermore, the presence of other sources would not change the requirement of 327 IAC 5-2-11.1(h)(1) to include a limitation for Southport AWT plant given the high selenium levels found in the discharge plume of the facility, as well as the effluent data available as part of the permittee's local limit development sampling and Whole Effluent Toxicity Testing sampling, and the evidence of aquatic life criterion excursions already occurring in the receiving water.

If other permittees are found to be discharging to impacted waters, their permits will be evaluated to ensure all necessary limitations are included. The impacts of naturally occurring sources would be captured and reflected in routine ambient stream sampling done throughout the state. No changes have been made to the permit in response to this comment. Changes were made to the Fact Sheet on page 21 to note the effluent selenium data submitted by the facility in addition to the discharge plume data collected by IDEM.

- Comment 8: EPA notes (in the Response to Public Comments on the proposed selenium criterion) the selenium criterion is focused on protection of populations, and the sample size of fish collected may not be a statistically significant sample size to support the impaired conclusion. More sampling is required in order to justify the limitation for Southport AWT Plant, and monitoring-only requirements should be placed in the permit in the interim. (Citizens; Ecobat; Heritage; Sumco)
- Response 8: A waterbody's impairment status in regards to the Clean Water Act Section 305(b) and 303(d) list is part of the Integrated Report submitted to U.S. EPA for review every two years, and utilizes methodology described in the Consolidated Assessment and Listing Methodology (CALM), also updated by IDEM every two years. Regarding inclusion of a limitation, pursuant to 327 IAC 5-2-11.1(h), when IDEM determines that a pollutant in a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above any numeric water quality criterion, the permit must contain effluent limits for that pollutant. Based on all effluent, receiving stream and fish tissue data available for selenium, IDEM has determined that the permittee's discharge of selenium is contributing to an excursion of the fish whole-bode or muscle element of the water quality criterion for selenium in the populations of the Smallmouth Bass and Longear Sunfish species; therefore, IDEM must include permit limits for selenium in this permit. There

is no sample size requirement for this determination. IDEM's determination is based on composite fish tissue samples to represent a population mean, not single fish samples. The spatial extent of the excursion for Longear Sunfish was at least 20 river miles downstream of the Southport AWT outfall. Monitoring-only requirements are being included for Belmont AWT Plant, as well as for Southport AWT during the fifty-nine month schedule of compliance. No changes have been made to the permit nor Fact Sheet in response to this comment.

- Comment 9: IDEM has not considered the home ranges or migratory patterns of certain fish species that exhibited elevated tissue concentrations of selenium. (Citizens)
- Response 9: The sampling conducted by IDEM in 2021 represented the three groups of target fish described in IDEM's <u>DRAFT Guidance for the Collection Fish Tissue and/or Water Column Data for Implementation of Indiana's Selenium Chronic Aquatic Life Criteria</u>. Group 3 (Target Whole Body Composite Sample of a sunfish or the most prominent minnow) is included to ensure that a species with a small home range is included and therefore sampling represents localized conditions.
- Comment 10: If retained, the proposed limitations for selenium should be revised as a daily maximum effluent limit is not appropriate given a statement from the Criterion Document that "EPA is not recommending a separate acute criterion...".

 (Citizens)
- Response 10: Since the discharge from the Southport AWT is continuous, the permit effluent limitations for selenium must be stated as maximum daily and average monthly discharge limitations in accordance with 327 IAC 5-2-11(d). The daily maximum and monthly average effluent limitations included in the permit were calculated using the 30-day average chronic aquatic criterion contained in 327 IAC 2-1-6. IDEM calculates water quality-based effluent limitations (WQBELs) using this chronic aquatic criterion and procedures set forth in 327 IAC 5-2-11.1 and the 1991 U.S. EPA Technical Support Document for Water Quality Based Toxics Control. A wasteload allocation (WLA) was calculated using conservation of mass equations for each water quality criterion, which for the case of selenium was a chronic aquatic life criterion and a human health noncancer nondrinking water criterion. The WLAs are converted into long term averages (LTAs) by using a log-normal distribution formula, and the most restrictive LTA is then converted to daily maximum and monthly average WQBELs using the log-normal distribution formula. The statistical procedures used to develop these monthly average and daily maximum permit limits help ensure the attainment of the chronic water quality criterion instream. The procedures used to calculate the

WQBELs are documented in Attachment 11 of the April 3, 2023, WLA Report for the Belmont and Southport AWT Plants (WLA002686). No changes have been made to the permit nor Fact Sheet in response to this comment.

- Comment 11: An eight (8) or nine (9) year schedule of compliance is needed in order to allow industrial users and Southport to comply with the new limitations. (Citizens; Ecobat; Heritage)
- Response 11: The permittee requested the maximum three (3) year schedule of compliance allowed under 327 IAC 5-2-12, as well as a variance pursuant to IC 13-14-8-8 to add an additional five (5) years to the schedule of compliance. The combination of these requests would have extended the final compliance schedule to a total of eight (8) years.

Though IDEM agrees that more than three (3) years are warranted to achieve the necessary source identification and reduction work considering the size of the collection system, the eight-year schedule requested has not been granted. Instead, a compliance schedule of five years is being included (through the granting of a three (3) year Schedule of Compliance pursuant to 327 IAC 5-2-12 and concurrent approval of a two (2) year variance pursuant to IC 13-14-8-8), which IDEM has determined is sufficient time to complete the activities outlined in the permittee's compliance schedule request. Should additional time be needed, and IDEM determines the permittee has demonstrated progress toward attaining the limitation, the additional three (3) years remaining of the allowed five (5) year variance under IC 13-14-8-8 can be requested, or a Compliance Plan as part of an Agreed Order can be pursued. No changes have been made to the permit nor Fact Sheet in response to this comment.

- Comment 12: IDEM has not considered the substantial costs and impacts that industrial contributors will incur to meet new selenium limitations. (Ecobat; Sumco)
- Response 12: IDEM is required to include limitations pursuant to 327 IAC 5-2-11.1(h).

 A five year schedule of compliance was included to allow time to examine strategies to achieve compliance with the limitation. No changes have been made to the permit nor Fact Sheet in response to this comment.
- Comment 13: Suitable habitat to support shovelnose sturgeon and paddlefish is not likely to be found in the West Fork of the White River in Marion and Morgan Counties, and alternate selenium criterion outlined in Table 6-1b at 327 IAC 2-1-6(a)(4)(A) should be used to develop limitations if monitor-only requirements are not acceptable. (Citizens)

- Response 13: Pursuant to 327 IAC 2-1-6(a)(4)(A) and (B), the Acipenseriformes-absent site specific criterion for selenium contained in Table 6-1b is not applicable unless IDEM has made, and the U.S. EPA has approved, a site specific determination that fishes in the Order Acipenseriformes do not occur at the site. Neither of these events have occurred; therefore, the selenium criterion in Table 6-1a under 327 IAC 2-1-6(a)(4)(A) is applicable, not the criterion contained in Table 6-1b. No changes were made to the Fact Sheet nor the permit in response to this comment.
- Comment 14: The publication date for the SNC notice for Industrial Pretreatment Program was changed from April 30 in the previous permit, to January 28, in Part III.A.6 (page 53). It is requested that this is reverted to April 30. (Citizens)
- Response 14: This change has been made and is reflected on page 53 of the permit.

STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PUBLIC NOTICE NO: 20240520 - IN0023183 - F

DATE OF NOTICE: May 20, 2024

The Office of Water Quality has issued the following FINAL NPDES PERMIT:

MAJOR – RENEWAL:

CWA AUTHORITY - BELMONT AND SOUTHPORT ADVANCED WASTEWATER TREATMENT (AWT) Facilities, NPDES Permit No. IN0023183, MARION COUNTY, located at 2700 S Belmont Avenue and 3800 West Southport Road, Indianapolis, IN. The Belmont AWT Facility has an average design flow of 120 million gallons per day (MGD) and discharges treated sanitary wastewater into the West Fork of the White River via Outfall 006, located at GPS coordinates: 39° 43′ 5″ N, 86°11′ 35″ W. The Southport AWT Facility has an average design flow of 125 MGD and discharges treated sanitary wastewater into the West Fork of the White River via Outfall 001 located at GPS coordinates: 39° 39′ 51″ N, 86°14′ 8″ W. Final sludge is incinerated at Belmont AWT Plant and/or hauled to a landfill. Permit Manager: Alyce Klein, 317/233-6728, AKlein@idem.IN.gov. Posted online at https://www.in.gov/idem/public-notices/.

Notice of Right to Administrative Review

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

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

Director Commissioner
Office of Environmental Adjudication Indiana Government
100 North Senate Avenue - Room N103
Indianapolis, Indiana 46204
Commissioner
Indiana Departm
Indiana Governm
100 North Senat
Indianapolis, Indianapolis, Indianapolis, Indianapolis, Indianapolis

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

The Petition must contain the following information:

- 1. The name, address, and telephone number of each petitioner.
- 2. A description of each petitioner's interest in the Permit.
- 3. A statement of facts demonstrating that each petitioner is:
 - a. a person to whom the order is directed.
 - b. aggrieved or adversely affected by the Permit.
 - c. entitled to administrative review under any law.
- 4. The reasons for the request for administrative review.

- 5. The particular legal issues proposed for review.
- 6. The alleged environmental concerns or technical deficiencies of the Permit.
- 7. The Permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
- 8. The identity of any persons represented by the petitioner.
- 9. The identity of the person against whom administrative review is sought.
- 10. A copy of the Permit that is the basis of the petition.
- 11. A statement identifying petitioner's attorney or other representative, if any.

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

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

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

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with Notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to Notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above. More information on the appeal review process is available on the website for the Office of Environmental Adjudication at http://www.in.gov/oea.