



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

December 26, 2007

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

VIA CERTIFIED MAIL

7002 0510 0002 5826 4321

The Honorable Bart Peterson, Mayor
City of Indianapolis
2460 City-County Building,
200 East Washington Street
Indianapolis, Indiana 46204

Re: Final NPDES Permit No. IN0023183
City of Indianapolis's Belmont & Southport Advanced
Wastewater Treatment Plants
Marion County

Dear Mayor Peterson:

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. Reporting is to be done on the Monthly Report of Operation (MRO) form. This form is available on the internet at the following web site:

<http://www.in.gov/idem/compliance/water/wastewater/compeval/forms/index.html>

You should duplicate this form as needed for future reporting.

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.

Mayor Bart Peterson
Page 2

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 you within 18 days from the date this letter is postmarked, by filing a request for an adjudicatory hearing with the Office of Environmental Adjudication (OEA), at the following address:

Office of Environmental Adjudication
Indiana Government Center North
100 North Senate Avenue, Room 1049
Indianapolis, IN 46204

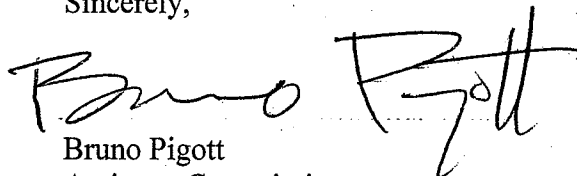
Please send a copy of any such appeal to me at IDEM, Office of Water Quality-Mail Code 65-42, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.

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 Jason House at 317/233-0470. Questions concerning appeal procedures should be directed to the Office of Environmental Adjudication, at 317/232-8591.

Sincerely,



Bruno Pigott
Assistant Commissioner
Office of Water Quality

Enclosures

cc: Tim Method, City of Indianapolis, Department of Public Works
Carlton Ray, City of Indianapolis Department of Public Works
Kumar Menon, Director, City of Indianapolis, Department of Public Works
Mario Mazza, City of Indianapolis, Department of Public Works
Larry Maddux, City of Indianapolis, Department of Public Works
Steve Stahley, City of Indianapolis, Department of Public Works
Carlton Ray, City of Indianapolis, Department of Public Works
James Parks, City of Indianapolis, Department of Public Works
Joe Watson, City of Indianapolis, Department of Public Works
Len Ashack, Bernardin Lochmueller & Associates, Inc.
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Tom Brown, United Water
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Beth Admire, IDEM, Office of Legal Counsel
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Todd Trinkle, IDEM, Wet Weather Section
Glenn Pratt, Sierra Club – Urban League
Dick Van Frank, Improving Kids Environment
Hoosier Environmental Council

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 "Act"), Title 13 of the Indiana Code, and regulations adopted by the Water Pollution Control Board, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

**CITY OF INDIANAPOLIS, DEPARTMENT OF PUBLIC WORKS
AND ITS CONTRACT OPERATOR, UNITED WATER SERVICES INDIANA**

hereinafter collectively referred to as "the permittee". The City of Indianapolis (the "City") owns and United Water Services Indiana operates the following advanced wastewater treatment plants and associated collection system:

Facility Name:	<i>Belmont Advanced Wastewater Treatment (AWT) Plant</i>	<i>Southport Advanced Wastewater Treatment (AWT) Plant</i>
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

The permittee is authorized to discharge to receiving waters named the West Fork of the White River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III and Attachment A hereof. The permittee is also authorized to discharge from combined sewer overflow outfalls listed in Attachment A of this permit to the receiving waters identified in this permit in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Attachment A of this permit.

Effective Date: February 1, 2008.

Expiration Date: January 31, 2013.

In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management. The application shall be submitted to the IDEM at least 180 days prior to the expiration date of this permit, unless a later date is allowed by the Commissioner in accordance with 327 IAC 5-3-2 and Part II.A.4 of this permit.

Issued this 26th day of December, 2007, for the Indiana Department of Environmental Management.

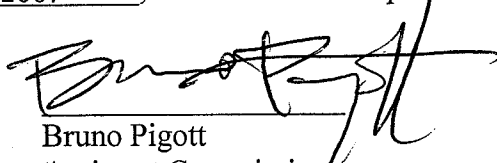

Bruno Pigott
Assistant Commissioner
Office of Water Quality

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TREATMENT FACILITY DESCRIPTIONS

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, west, north and east sides of Marion County. The Southport AWT plant receives flow predominantly from the east and south sides of Marion County and from the City of Greenwood. 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.

Belmont Advanced Wastewater Treatment (AWT) Plant

The Belmont Advanced Wastewater Treatment (AWT) Plant is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing system (BRS) towers, oxygen nitrification system (ONS) reactors, final clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination and effluent flow monitoring. The facility is also changing the method of disinfection to ozonation.

The AWT Plant has a design average flow of 120 MGD with a peak design flow of 150 MGD. The AWT Plant has two wet weather storage basins: a 30-million gallon basin to store primary influent and/or primary effluent during wet weather and a 4-million gallon basin to store primary effluent during wet weather. Sludge treatment includes gravity belt thickening (operational in 2008), gravity thickening, equalization, belt filter press dewatering, and incineration or landfilling. The mass limits for CBOD₅ and TSS at Outfall 006 are based on the peak design flow of 150 MGD.

As part of the City's CSO Long-Term Control Plan, the permittee will be replacing the existing Bio-Roughing System with a 150 MGD Trickling Filter/Solids Contact (TF/SC) secondary treatment process followed by a wet weather disinfection system which will increase the wet weather treatment capacity to a peak hourly rate of 300 MGD. When certain criteria are met the effluent from the TF/SC process may be diverted to the wet weather disinfection facilities and discharged to the river through Wet Weather Discharge Outfall 005.

The new 150 MGD Trickling Filter/Solids Contact (TF/SC) process includes construction of the following:

- new primary effluent conduits to enable various amounts of primary effluent to be split between the TF/SC process and the existing ONS system;
- new Bio-Roughing pump station
- new Bio-Roughing towers
- new Aerated Solids Contact and Reaeration tankage;
- new aeration equipment;
- new intermediate clarifiers;
- new conveyance lines to enable the effluent from the TF/SC process to be progressively shifted away from the ONS process during wet weather and discharged to the wet weather disinfection facilities;

- new chlorine contact tank and installation of related dechlorination facilities for seasonal disinfection of the TF/SC effluent sent to Outfall 005 (Latitude 39° 43' 34.18" N, Longitude. 86° 11' 25.40" W) during wet weather.

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

1. Bio-Roughing and TF/SC Diversions: A primary effluent diversion exists prior to the facility's existing bio-roughing towers (or TF/SC when it is constructed). A portion of the primary effluent can be diverted to the oxygen nitrification facilities.
2. Effluent Filters Diversion: An oxygen nitrification system effluent diversion exists prior to the facility's effluent filters. All or a portion of the oxygen nitrification system effluent up to 150 MGD can be diverted around the effluent filters to the ozone 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. 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. Actual flow rates during wet weather events have been 40 – 45 MGD.
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. Depending on the system hydraulics, the pumping capacity is 28-30 MGD. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont Primary Effluent Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
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. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Primary Effluent Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
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 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. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont

Primary Effluent Pump Station (Primary Effluent), or the Gravity Diversion (Primary Effluent) are activated.

5. Gravity Diversion (Primary Effluent): A primary effluent diversion exists after the facility's primary clarifiers. Primary effluent from the primary effluent channel 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 11-14 MGD. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont Primary Effluent Pump Station, or the Gravity Diversion (Primary Influent) are activated.
6. Belmont Primary Effluent Pump Station (Primary Effluent)(Future - 2008): A primary effluent diversion will exist after the facility's primary clarifiers. Primary effluent from the primary effluent channel will 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 diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), Belmont Wet Weather Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
7. Belmont-Southport Interplant Connection (Raw Sewage)(Future): The Interplant Connection between Belmont and Southport will consist of a 144-inch-diameter interceptor originating near CSO 117 and the Southwest Diversion Structure (east of the Belmont AWT Plant) terminating near the headworks of the Southport AWT Plant. Initially the interceptor would store 13 to 21 MG and convey up to 75 MGD of combined sewage captured from the Southwest Diversion Structure. The captured combined sewage from the future deep tunnel would also be treated at the Southport facility via expanded, upgraded and new equipment or at the Belmont facility.

Southport Advanced Wastewater Treatment (AWT) Plant

The Southport Advanced Wastewater Treatment (AWT) Plant is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing towers, oxygen and air nitrification reactors, secondary clarifiers, mixed media tertiary filters, effluent disinfection by chlorination/dechlorination, effluent flow monitoring, and effluent pumping. The permittee will be changing the method of disinfection to ozonation.

The Southport AWT Plant has a design average flow of 125 MGD with a peak design flow of 150 MGD. Sludges are conveyed to and centrally processed by thickening, dewatering and incineration operations at the Belmont AWT Plant's Solids Handling Section. Mass limits are calculated based upon the 150 MGD peak design flow. The Southport AWT Plant has an equalization basin storage capacity of 25 million gallons. This basin is used to store screened raw wastewater. The basin is designed to be used during wet weather when the plant's treatment capacity has been reached. The mass limits for CBOD₅ and TSS at Outfall 006 are based on the peak design flow of 150 MGD.

As part of the City's CSO Long-Term Control Plan, the Southport AWT Plant will be expanded to provide a total maximum treatment rate of 300 MGD with a maximum pumping rate of 350 MGD. The planned improvements will include expansion of the primary clarification facility, expansion of the air

nitrification system (ANS) from 30 MGD to 150 MGD with fine bubble aeration, new blowers, new final clarifiers, new disinfection facility, pump station, and new process/yard piping. The Southport AWT Facility has the following flow diversions:

1. Raw Wastewater Diversion: Raw wastewater can be diverted to the 25 MG equalization basin after the screening process. The stored wastewater is returned to Southport's Headworks for full treatment after the influent flow rate decreases. The screened wastewater can also be diverted around the grit tanks, primary clarifiers, and bio-roughing towers directly to the Air Nitrification System (ANS).
2. Grit Chamber Diversion: A screened raw wastewater flow diversion exists prior to the grit chambers that allows flow to be diverted around the grit tanks at Structure 2-B to either the primary clarifiers or the bio-roughing towers.
3. Preliminary Treatment Effluent Diversion/Bypass: A preliminary treatment effluent diversion exists that allows flows to be diverted around the primary clarifiers to the bio-roughing towers. This diversion is located at the effluent channel of the grit chambers and sends screened and dewatered flows to Structure 5-K and onto the bio-roughing towers. Under emergency conditions the preliminary treatment effluent flow can be mixed with primary effluent and bypassed via a 54-inch pipe to Little Buck Creek through Outfall 002 (formerly listed as Outfall 002B).
4. Primary Effluent Diversion/Bypasses: A primary effluent diversion exists after the primary clarifiers prior to the bio-roughing towers. Primary effluent can be diverted around the bio-roughing towers from Structures 7-F and 7-C directly to the ANS. Primary effluent can also be bypassed through Structure S-6 to a 60-inch pipe and discharged to Little Buck Creek through Outfall 004 (formerly listed as Outfall 002A). Primary effluent can also flow to Structure 5-K and be discharged through Outfall 002.
5. Bio-Roughing Diversion: Primary effluent diversions exist prior to the facility's bio-roughing towers. All or a portion of the primary effluent from the east and west primary clarifiers up to 90 MGD can be diverted to the oxygen nitrification facilities.
6. Air Nitrification Diversion: A bio-roughing tower effluent diversion exists which allows flow to be diverted to the air nitrification system.
7. ANS Effluent Diversion to Disinfection System: An air nitrification effluent diversion exists prior to the facility's tertiary filters. All or a portion of the air nitrification system effluent can be diverted around the intermediate pump station. This diversion system allows ANS effluent to be diverted around the effluent filters and flow by gravity to the effluent disinfection system.
8. Effluent Filters Diversion: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the air and oxygen nitrification system effluent (up to 150 MGD) can be diverted around the effluent filters to the effluent disinfection system.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from the outfalls listed below in accordance with the terms and conditions of this permit. The permittee shall take samples and measurements at a location representative of the 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. Outfall 001 - Southport AWT Plant Final Effluent

(Located at Latitude 39° 39' 51" N, Longitude 86° 14' 08" W)

Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001.

TABLE 1

<u>Parameter</u>	<u>Quantity or Loading</u>			<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow [1]	Report	Report	MGD	----	----	----	Continuous	24-Hr. Total
CBOD ₅								
Summer [2]	12,518	18,776	lbs/day	10	15	mg/L	Daily	24-Hr. Comp.
Winter [3]	31,294	50,070	lbs/day	25+	40	mg/L	Daily	24-Hr. Comp.
TSS								
Summer [2]	12,518	18,776	lbs/day	10	15	mg/L	Daily	24-Hr. Comp.
Winter [3]	37,553	50,070	lbs/day	30+	40	mg/L	Daily	24-Hr. Comp.
Ammonia-N								
Summer [2]	3,129	4,694	lbs/day	3.0	4.5	mg/L	Daily	24-Hr. Comp.
Winter [3]	6,154	9,284	lbs/day	5.9	8.9	mg/L	Daily	24-Hr. Comp.

+ Or 85% removal, whichever is more stringent.

TABLE 2

<u>Parameter</u>	<u>Quality or Concentration</u>			<u>Units</u>	<u>Monitoring Requirements</u>	
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Oxygen [4]						
Summer [2]	8.0	----	----	mg/L	Daily	12 Grabs/24-hr.
Winter [3]	6.0	----	----	mg/L	Daily	12 Grabs/24-hr.
pH [6]	6.0	9.0	----	s.u.	Daily	Grab
<i>E. coli</i> [*][5]						
Interim	----	Report	125	col/100 mL	Daily	Grab
Final		235	125	col/100 mL	Daily	Grab
TRC [5][7]	----	0.02	0.01	mg/L	Daily	Grab
Cyanide [*, 9,12,13,18,19]						
Interim (Amenable) [10]	----	0.027	----	mg/L	1 X Weekly	24 Hr. Comp.
Final (Free) [11]	----	0.019	0.01	mg/L	1 X Weekly	24 Hr. Comp.
Chloride [*,9,18,19]						
Interim	----	Report	Report	mg/L	1 X Weekly	24 Hr. Comp.
Final	----	404	201	mg/L	1 X Weekly	24 Hr. Comp.
Fluoride [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.
Sulfate [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.
TDS [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.

NOTE: Refer to Part I.E. of this permit for Whole Effluent Toxicity Requirements.

2. Outfall 006 – Belmont AWT Plant Final Effluent

(Located at Latitude 39° 43' 05" N, Longitude. 86° 11' 08" W)

Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 006.

TABLE 3

<u>Parameter</u>	<u>Quantity or Loading</u>			<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow [1]	Report	Report	MGD	----	----	----	Continuous	24-Hr. Total
CBOD ₅								
Summer [2]	12,518	18,776	lbs/day	10	15	mg/L	Daily	24-Hr. Comp.
Winter [3]	25,035	37,553	lbs/day	20+	30	mg/L	Daily	24-Hr. Comp.
TSS								
Summer [2]	12,518	18,776	lbs/day	10	15	mg/L	Daily	24-Hr. Comp.
Winter [3]	25,035	37,553	lbs/day	20+	30	mg/L	Daily	24-Hr. Comp.
Ammonia-N								
Summer [2]	3,129	4,694	lbs/day	3.0	4.5	mg/L	Daily	24-Hr. Comp.
Winter [3]	6,154	9,284	lbs/day	5.9	8.9	mg/L	Daily	24-Hr. Comp.

+ Or 85% removal, whichever is more stringent.

TABLE 4

<u>Parameter</u>	<u>Quality or Concentration</u>			<u>Units</u>	<u>Monitoring Requirements</u>	
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Oxygen [4]						
Summer [2]	8.0	----	----	mg/L	Daily	12 Grabs/24-hr.
Winter [3]	6.0	----	----	mg/L	Daily	12 Grabs/24-hr.
pH [6]	6.0	9.0	----	s.u.	Daily	Grab
<i>E. coli</i> [*][5]						
Interim	----	Report	125	col/100 mL	Daily	Grab
Final	----	235	125	col/100 mL	Daily	Grab
TRC [5][7]		0.02	0.01	mg/L	Daily	Grab
Cyanide [* , 9,12,13,18,19]						
Interim, (Amenable) [10]	----	0.027	----	mg/L	1 X Weekly	24 Hr. Comp.
Final, (Free) [11]	----	0.019	0.01	mg/L	1 X Weekly	24 Hr. Comp.
Chloride [* , 9,18,19]						
Interim	----	Report	Report	mg/L	1 X Weekly	24 Hr. Comp.
Final	----	404	201	mg/L	1 X Weekly	24 Hr. Comp.
Fluoride [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.
Sulfate [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.
TDS [9,19]	----	Report	Report	mg/L	2 X Monthly	24 Hr. Comp.

NOTE: Refer to Part I.E. of this permit for Whole Effluent Toxicity Requirements.

3. Outfall 005 – Belmont Trickling Filter/Solids Contact (TF/SC) Effluent

Limited Discharge Authorization for Outfall 005
(Located at Lat 39° 43' 34.18" N, Long. 86° 11' 25.40" W)

After the TF/SC facilities are operational, the permittee is authorized to discharge effluent from the TF/SC process through internal Outfall 305 to Outfall 005 only during those times when the flow rate to ONS is equal to or exceeds the AWT peak hourly rated capacity of 150 MGD. In addition, discharge is not allowed unless there has been a precipitation event of at least 0.10 inches within twenty-four (24) hours preceding initiation of the discharge from Outfall 005. The permittee shall take samples and measurements to meet the monitoring requirements at a location representative of the Outfall 005 discharge. Such discharge shall be limited and shall be monitored by the permittee as specified below:

TABLE 5

<u>Parameter</u>	<u>Quantity or Loading</u>			<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Stream Flow [14]	Report	Report	MGD	----	----	----	Continuous	Gauge
Influent Flow [14]	Report	Report	MGD	----	----	----	Continuous	24-Hr. Total
Effluent Flow [14]	Report	Report	MGD	----	----	----	Continuous	24-Hr. Total
CBOD ₅	Report	Report	lbs/day	Report	Report	mg/L	When Discharging	Composite [15]
TSS	Report	Report	lbs/day	Report	Report	mg/L	When Discharging	Composite [15]
Ammonia-N	Report	Report	lbs/day	Report	Report	mg/L	When Discharging	Composite [15]

TABLE 6

<u>Parameter</u>	<u>Quality or Concentration</u>				<u>Monitoring Requirements</u>	
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Effluent/Stream Ratio	Report	----	----	----	When Discharging	Instantaneous
Dissolved Oxygen [4]	Report	----	----	mg/L	When Discharging	12 grabs/24 Hr.
pH [6]	6.0	9.0	----	s.u.	When Discharging	Grab
TRC [7] [16]	----	0.02	0.01	mg/L	When Discharging	Grab
<i>E. coli</i> [5][16]	----	235	125	col/100 mL	When Discharging	Grab
Cadmium [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab
Copper [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab
Cyanide, Free [19]	----	Report	Report	mg/L	Quarterly**	Grab
Lead [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab
Mercury [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab
Nickel [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab
Zinc [8] [19]	----	Report	Report	mg/L	Quarterly**	Grab

** Shall be reported on the March, June, September, and December DMR forms.

4. Outfall 305 – Belmont Internal TF/SC Outfall

Limitations and Monitoring Requirements for Internal Outfall 305
(Located at Latitude 39° 43' 30.55" N, Longitude 86° 11' 32.72" W)

Beginning thirty (30) days after the permittee provides IDEM with notification that the TF/SC facilities have been constructed and are operational, the permittee is required to comply with the following requirements for the discharge from the TF/SC process. Such discharge shall be limited and monitored by the permittee as specified below:

TABLE 7

<u>Parameter</u>	<u>Quantity or Loading</u>			<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow [17]	Report	Report	MGD	----	----	----	Continuous	24-Hr. Total
CBOD ₅	Report	Report	lbs/day	25+	40	mg/L	Daily	Composite
TSS	Report	Report	lbs/day	30+	45	mg/L	Daily	Composite
Ammonia-N	Report	Report	lbs/day	Report	Report	mg/L	Daily	Composite

+ - percent removal shall be monitored and reported

TABLE 8

<u>Parameter</u>	<u>Quality or Concentration</u>				<u>Monitoring Requirements</u>	
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Oxygen [4]	Report	----	----	mg/L	Daily	12 grabs/24 Hrs.
pH [6]	6.0	9.0	----	s.u.	Daily	Grab

5. Storm Water Discharges Associated With Industrial Activity

Beginning on the effective date of this permit, the permittee is authorized to discharge storm water from the storm water retention basin which combines with the treated effluent prior to discharge from Outfall 001. Since the discharges from the retention basin to Outfall 001 rarely occur, the storm water is only required to be monitored in the event that such a discharge to Outfall 001 does occur.

Samples must be taken within the first thirty minutes of discharge from the retention basin after initiation of a storm event. In addition to any other pollutants which are expected to be present in the discharge, the permittee shall monitor for the following parameters:

TABLE 9

<u>Parameter</u>	<u>Quality or Concentration</u>		<u>Sample Type</u>
	<u>Daily Max</u>	<u>Units</u>	
Flow	Report	MGD	Estimated Total
Total Suspended Solids	Report	mg/L	Grab
pH	Report	s.u.	Grab
Oil & Grease	Report	mg/L	Grab
CBOD ₅	Report	mg/L	Grab
COD	Report	mg/L	Grab
Total Kjeldahl Nitrogen	Report	mg/L	Grab
Nitrate plus Nitrite Nitrogen	Report	mg/L	Grab
Total Phosphorus	Report	mg/L	Grab

Within 90 days of the effective date of the permit, the permittee shall review and modify as necessary, the Storm Water Pollution Prevention Plan (SWPPP) previously developed using the procedures outlined in 327 IAC 15-6-7 for the storm water runoff from the wastewater treatment plant site. The updated SWPPP shall be retained on-site at the Southport AWT Plant.

FOOTNOTES

- [*] Refer to Part I.D. of this permit for the Schedules of Compliance.
- [1] Flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [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] The reported daily average concentration of dissolved oxygen in the effluent shall be the arithmetic mean determined by summation of the twelve (12) daily grab sample results and dividing this sum by the number of grab samples taken. These samples are to be collected over equal time intervals.
- [5] The effluent shall be disinfected on a continuous basis such that violations above the *E. coli* limitations do not occur from April 1 through October 31, annually.

If the permittee uses chlorine as a back-up system for the ozonation disinfection process, pursuant to the Compliance Schedule in Part I.D., or for any reason at any time, then the limits and monitoring requirements in Tables 2, 4, and 6 for residual chlorine shall be in effect. If chlorine is not utilized during any reporting period the permittee shall report 'not required' on the monthly discharge monitoring report.

IDEM has specified the following methods as allowable for the detection and enumeration of *Escherichia coli* (*E. coli*):

1. Coliscan MF[®] Method
2. EPA Method 1103.1 using original m-TEC agar.
3. EPA revised Method 1103.1 using modified m-TEC agar.
4. *Standard Methods* 20th Edition Method 9223 B using Colilert[®]

- [6] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. For pH, the permittee must report the minimum or maximum value of any individual sample during the month on the Discharge Monitoring Report forms.
- [7] In accordance with 327 IAC 5-2-11.1(f), compliance with this permit requirement will be demonstrated if the observed effluent concentrations are less than the limit of quantitation (LOQ) (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. After submission of the first re-evaluation to IDEM- OWQ, the permittee shall only be required to complete

additional re-evaluations when the circumstances which caused the effluent concentration to exceed the LOD are different than the previous re-evaluation, or upon request of the IDEM, Office of Water Quality. If the permittee determines additional reevaluations of exceedances are not necessary because the cause of the exceedance is the same, the permittee shall document the basis for its determination. These records must be retained in accordance with the record retention requirements of Part I.B.8 of this permit.

Effluent concentrations less than the limit of quantitation shall be reported on the discharge monitoring report forms as the actual value. 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 0.02 mg/l, report the value as 0.02 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.

<u>Parameter</u>	<u>LOD/MDL</u>	<u>LOQ</u>
Chlorine	0.02 mg/L	0.06 mg/L

The permittee may determine a case-specific limit of detection (LOD) or limit of quantitation using the analytical method specified above. The limit of detection shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the limit of quantitation (LOQ) shall be set equal to 3.18 times the limit of detection. Other methods may be used if first approved by EPA and IDEM.

- [8] The above-noted parameters are intended to be analyzed by a test method which will measure the quantity of acid-soluble metal present; however, an approved analytical method for acid-soluble metal is not yet available. The permittee shall measure and report this parameter as total recoverable metal.
- [9] The permittee shall vary the day of the week on which the monitoring is performed throughout every month.
- [10] The interim cyanide limit is based upon amenable cyanide and is to be reported as amenable cyanide.
- [11] The final cyanide limits are based upon free cyanide and is to be reported as free cyanide.
- [12] The following test methods shall be utilized and are allowed as specified below:

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Cyanide, Free	1677 or 4500 CN-G	0.003 mg/l	0.0095 mg/l
Cyanide, Amenable	4500 CN-G	0.003 mg/l	0.0095 mg/l

- [13] The permittee may determine a case-specific limit of detection or limit of quantitation using the analytical method specified above. The limit of detection shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B,

and the limit of quantitation (LOQ) shall be set equal to 3.18 times the limit of detection. Other methods may be used if first approved by EPA and IDEM.

Effluent concentrations less than the limit of quantitation shall be reported on the discharge monitoring report forms as the actual value. 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 0.1 ug/l, report the value as 0.1 ug/l. If the measured effluent concentrations for a substance are above the water quality-based permit limitations and above the limit of detection specified by the permit in any three (3) consecutive analyses, or any five (5) out of nine (9) analyses, or the additional requirements, if any, required below indicate that the substance is present in the effluent at concentrations exceeding the water quality-based permit limitations, the discharger will be required to:

1. Determine the source of this substance through evaluation of sampling techniques, analytical/laboratory procedures, and industrial processes and waste streams, and
2. Increase the frequency of sampling and testing for the substance.

The permittee may also be required to take corrective action to reduce the pollutant in the effluent below the water quality-based effluent limit by means of the modification or revocation and reissuance of this permit.

- [14] The actual stream flow shall be measured at the Morris Street USGS Gauging Station – Gauge No. 03353000. Influent flow to the TF/SC process shall be measured at a point of entry into the TF/SC process. Effluent flow from the TF/SC process shall be measured at a point representative of the discharge into the White River. The flow meters shall be calibrated at least once annually.
- [15] A flow proportional composite sample shall be taken over the period of discharge. If the discharge occurs for more than 24 hours, then the sampling shall represent each calendar day consistent with the sampling requirements for Outfall 006. In addition, if there is more than one period of discharge during any calendar day, then the composite sample shall be representative of the total discharge during that calendar day.
- [16] The effluent shall be disinfected on a continuous basis such that violations of the *E. coli* limitations do not occur from April 1 through October 31, annually. If there are less than five (5) discharges in a calendar month, then the monthly average does not need to be reported on the Discharge Monitoring Form (DMR). If Outfall 005 discharges five (5) times or more during a calendar month, then the monthly average *E. coli* value shall be calculated as a geometric mean and shall be reported on the DMR. 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 6 for total residual chlorine shall be in effect whenever chlorine is used.

- [17] Influent and effluent flow to and from the TF/SC process shall be measured at a point that is representative of the volume of the TF/SC process.
- [18] The City of Indianapolis has submitted an application for a variance from the effluent limitations for free cyanide and chloride. Therefore, these effluent limitations for free cyanide and chloride are subject to the reopening clause in Part I.C.9 of this permit.
- [19] Metals shall be reported as total recoverable. 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 LOD 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".

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD, mg/L</u>	<u>LOQ, mg/L</u>
Arsenic	3113 B	0.001	0.0032
Cadmium	3113 B	0.0001	0.0003
Chloride	*	1.0	3.2
Chromium	3113C or 3113B	0.002	0.006
Copper	3113 B	0.001	0.003
Cyanide, Free	1677 or 4500 CN-G	0.003	0.0095
Cyanide, Amenable	4500 CN-G	0.003	0.0095
Fluoride	4500 F-E	0.016	0.050
Lead	3113 B - -	0.001	0.003
Nickel	3113 B	0.001	0.003
Sulfate	375.2, Revision 2.0	3.0	9.54
TDS	160.1 or 2540C	10.0	31.8
Zinc	200.7, Revision 4.4	0.002	0.006

* The permittee may use any method listed in the latest version of 40 CFR Part 136 provided that the method has a LOD less than or equal to the LOD listed above.

6. Minimum Water Quality Requirements

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

- a. including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants:
 - (1) that will settle to form putrescent or otherwise objectionable deposits;
 - (2) that are in amounts sufficient to be unsightly or deleterious;
 - (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
 - (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
 - (5) which 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 which 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.

7. Additional Monitoring Requirements

During the period beginning on the effective date of this permit, the permittee shall conduct the following monitoring activities:

a. Influent Monitoring

The permittee shall monitor the influent at both the Belmont and Southport AWT facilities for the following pollutants. Samples shall be representative of the raw influent, prior to mixing with any other wastewater (recycle streams, supernatant return, etc.).

Table 10

<u>Parameter</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
Arsenic [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Cadmium [1][2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Copper [1] [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Cyanide, Free [1] [2]	Report	Report	mg/L	1 X Weekly	24 hr. Comp.
Chromium [1] [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Lead [1] [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Mercury [1][3]	Report	Report	ng/L	2 X Annually	Grab
Nickel [1][2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Zinc [1][2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Chloride [2]	Report	Report	mg/L	1 X Weekly	24 hr. Comp.
Fluoride [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
Sulfate [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.
TDS [2]	Report	Report	mg/L	2 X Monthly	24 hr. Comp.

[1] The permittee shall measure and report this parameter as total recoverable metal. Cyanide shall be reported as free cyanide.

[2] The following EPA test methods and/or Standard Methods and associated LODs and LOQs are recommended for use in the analysis of the influent samples.

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".

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD, mg/L</u>	<u>LOQ, mg/L</u>
Arsenic	3113 B	0.001	0.0032
Cadmium	3113 B	0.0001	0.0003
Chloride	*	1.0	3.2
Chromium	3113C or 3113B	0.002	0.006
Copper	3113 B	0.001	0.003
Cyanide, Free	1677 or 4500 CN-G	0.003	0.0095
Fluoride	4500 F-E	0.016	0.050
Lead	3113 B	0.001	0.003
Nickel	3113 B	0.001	0.003
Sulfate	375.2, Revision 2.0	3.0	9.54
TDS	160.1 or 2540C	10.0	31.8
Zinc	200.7, Revision 4.4	0.002	0.006

* The permittee may use any method listed in the latest version of 40 CFR Part 136 provided that the method has a LOD less than or equal to the LOD listed above.

- [3] Mercury influent monitoring shall be conducted two times yearly for the term of the permit. Monitoring shall be conducted in the months of February and August of each year. Mercury monitoring and analysis will be performed using EPA Test Method 1631, Revision E. If Method 1631, Revision E is further revised during the term of this permit, the permittee and/or its contract laboratory is required to utilize the most current version of the method as soon as practicable after approval by EPA. The permittee shall measure and report this parameter as total recoverable metal.

8. Additional Discharge Monitoring Requirements

- a. Beginning on the effective date of the permit, the effluent from Outfalls 001 & 006 shall be monitored by the permittee as follows:

Table 11

<u>Pollutant</u>	<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Unit</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Arsenic [2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Cadmium [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Chromium [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Copper [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Lead [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Mercury [1] [3]	Report	Report	ng/l	2 X Annually	Grab
Nickel [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Zinc [1][2]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.

- [1] The permittee shall measure and report this parameter as total recoverable metal.

- [2] 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 LOD 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".

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD</u>	<u>LOQ</u>
Arsenic	3113 B	0.001 mg/l	0.0032 mg/l
Cadmium	3113 B	0.0001 mg/l	0.00032 mg/l
Chromium	3111 C or 3113 B	0.002 mg/l	0.0064 mg/l
Copper	3113 B	0.001 mg/l	0.0032 mg/l
Lead	3113 B	0.001 mg/l	0.0032 mg/l
Nickel	3113 B	0.001 mg/l	0.0032 mg/l
Zinc	200.7, Revision 4.4	0.002 mg/l	0.0064 mg/l

- [3] Mercury effluent monitoring shall be conducted two times yearly for the term of the permit. Monitoring shall be conducted in the months of February and August of each year. Mercury monitoring and analysis will be performed using EPA Test Method 1631, Revision E. If Method 1631, Revision E is further revised during the term of this permit, the permittee and/or its contract laboratory is required to utilize the most current version of the method as soon as practicable after approval by EPA. The permittee shall measure and report this parameter as total recoverable metal.

b. Organic Pollutant Monitoring

The permittee shall conduct an annual inventory of organic pollutants and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge at both the Belmont and Southport AWT facilities. The analytical report shall be sent to the Pretreatment Group, Office of Water Quality. This report is due December 31st 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 production levels. The samples shall be 24-hour flow proportional composites, except for 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 624, 625 and 608 in 40 CFR 136 or applicable methods in SW 846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods". 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 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 program effectiveness review, Part III.A.7, should identify the additional steps necessary to determine whether the pollutants 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 discharge 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 the presence or peak concentrations of any parameter.

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. of this permit are the minimum frequencies required by this permit.

3. Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report and the Monthly Report of Operation. The Permittee must submit the CSO Hydraulic Model Report as described in Attachment A.II.A to the Compliance Evaluation Section. Permittees with Pretreatment Programs, Non-delegated Pretreatment Programs or metals monitoring requirements shall also complete and submit the Indiana Monthly Monitoring Report Form (MMR-State Form 30530) or an equivalent form to report their influent and/or effluent data for metals and other toxics. All reports, with the exception of the CSO Discharge Monitoring Reports, shall be mailed to IDEM, Office of Water Quality, Data & Information Services Section, 100 N. Senate Ave. Mail Code 65-42, Indianapolis, Indiana 46204. 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 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 on 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 reasonably represents the calendar day for the purpose of sampling.
- (4) The 24-hour Composite Sample consists of at least 12 grab samples collected over equal time intervals during the period of operator attendance. The grab samples for the composites shall be proportioned to flow. A flow-proportioned composite sample is 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.
- (5) CBOD₅: 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.
- (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 about 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 current version of 40 CFR, Part 136, unless otherwise specified within this permit. Multiple editions of Standard Methods for the Examination of Water and Wastewater are currently approved for most

methods; however, 40 CFR Part 136 should be checked to ascertain if a particular method is approved for a particular analyte. The approved methods may be included in the texts listed below. However, different but equivalent methods are allowable if they receive the prior written approval of the State agency and the U.S. Environmental Protection Agency.

- a. Standard Methods for the Examination of Water and Wastewater
18th, 19th and 20th Edition, 1992, 1995 or 1998 American Public Health Association, Washington, D.C. 20005.
- b. A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis
1972 American Society for Testing and Materials, Philadelphia, PA 19103.
- c. Methods for Chemical Analysis of Water and Wastes
June 1974, Revised, March 1983, Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, 1014 Broadway, Cincinnati, OH 45202.

6. Recording of 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 and monitoring 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 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 the 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 forms. 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 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:

1. 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 total maximum daily load (TMDL), wasteload allocation, additional stream studies, new or increased discharges of a pollutant(s) by industrial users, changes in water quality standards, or other information 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 in whole or in part, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under Sections 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 conditions 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 alternately, revoked and reissued after public notice and opportunity for hearing to include whole effluent toxicity limitations or to include limitations for specific pollutants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary.
5. 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.
6. 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 pollutants 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.
7. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to include and/or modify limitations to reflect any change in Indiana water quality standards.

8. 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 effluent constituents when an approved EPA analytical protocol is developed for endocrine disruption.
9. This permit may be modified or, alternatively, revoked and reissued, after public notice and opportunity for hearing to incorporate revised effluent limits relating to the permittee's submission of a complete application for and subsequent IDEM and U.S. EPA approval of a variance from the water quality criteria for free cyanide and/or chloride.
10. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to include effluent limitations for arsenic, cadmium, chromium, copper, fluoride, mercury, nickel, lead, sulfate, and/or zinc should they be found to be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above the water quality criterion as contained under 327 IAC 2-1.
11. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to include alternate ammonia-nitrogen limitations if the City of Indianapolis does not timely change its wastewater effluent disinfection system from chlorination to ozonation.

D. SCHEDULES OF COMPLIANCE

1. Free Cyanide

This schedule of compliance shall not commence until a final determination on the free cyanide variance submittal is made by the commissioner. Until a final determination on the variance request is made, the permittee shall continue to evaluate whether additional control technologies or pollution prevention measures exist to comply with the final effluent limitations or reduce the level of those pollutants currently being discharged to the sewer system or by the AWT plants. This evaluation shall be submitted to IDEM, OWQ, Compliance Evaluation Section every twelve (12) months from the effective date of the permit. Monitoring and reporting of influent (free cyanide) and effluent (amenable) cyanide is required during the interim period.

In the event IDEM denies the permittee's variance as requested for free cyanide, the permittee shall comply with the following schedule:

- a. The permittee shall submit a written progress report to the Compliance Evaluation Section, Office of Water Quality nine (9) months from the effective date of the variance denial. Beginning with the first progress report after a denial of the variance application, the progress report shall, among other items, include a description of the method(s) selected for meeting the final requirements for free cyanide. The permittee shall submit written progress reports to the Compliance Evaluation Section, Office of Water Quality beginning nine (9) months after the submittal of the initial nine (9) month progress report and every nine (9) months thereafter until the completion of this compliance schedule. Monitoring and reporting of influent (free cyanide) and effluent (amenable) cyanide is required during the interim period.
- b. If the permittee determines that construction and/or changes in the local limits are not required to meet the final limits for free cyanide within the thirty-six month schedule of compliance, the permittee shall immediately notify the Compliance Evaluation Section, Office of Water Quality (OWQ). Upon receipt of such notification by the OWQ, the final limitations for free cyanide will become effective, but no later than thirty-six (36) months from the effective date of the denial of the variance application.
- c. The permittee shall comply with all final effluent limitations no later than thirty-six (36) months from the effective date of the denial of the permittee's variance application.
- d. **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 Evaluation Section 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.

2. *E. Coli*

The permittee is changing its primary method of disinfection from chlorination to ozonation. The permittee shall achieve compliance with the final effluent limits for *E. coli* in accordance with the following schedule:

- a. The permittee shall submit a written progress report to the Compliance Evaluation Section, Office of Water Quality nine (9) months from the effective date of the permit and every nine (9) months thereafter until the completion of this compliance schedule. The final effluent limitations for *E. coli* are deferred for the term of this compliance schedule, unless the final effluent limitations can be met at an earlier date. The permittee shall notify the Compliance Evaluation Section of OWQ as soon as the final effluent limitations for *E. coli* can be met. Upon receipt of such notification by OWQ, the final limitations for *E. coli* will become effective, but no later than twenty-four (24) months from the effective date of this permit. Monitoring and reporting of effluent *E. coli* is required during the interim period. The monthly average limitation is effective during the schedule of compliance.
- b. The change of disinfection method from chlorination to ozonation shall be completed within twenty-three (23) months from the effective date of the permit. The permittee shall submit a written progress report to the Compliance Evaluation Section, Office of Water Quality when construction has been completed.
- c. The permittee shall comply with all final requirements no later than twenty-four (24) months from the effective date of the permit.
- d. **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 Evaluation Section 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.

3. Chlorides

This schedule of compliance shall not commence until a final determination on the chlorides variance submittal is made by the commissioner. Until a final determination on the variance request is made, the permittee shall continue to evaluate whether additional control technologies or pollution prevention measures exist to comply with the final effluent limitations or reduce the level of those pollutants currently being discharged to the sewer system or by the AWT plants. This evaluation shall be submitted to IDEM, OWQ, Compliance Evaluation Section every twelve (12) months beginning with the effective date of the permit. Monitoring and reporting of influent and effluent chlorides is required during the interim period.

In the event IDEM denies the permittee's variance as requested for chlorides, the permittee shall comply with the following schedule:

- a. The permittee shall submit a written progress report to the Compliance Evaluation Section, Office of Water Quality, nine (9) months from the effective date of the variance denial. The progress report shall, among other items, include a description of the method(s) selected for meeting the final requirements for chlorides. The permittee shall submit written progress reports to the Compliance Evaluation Section, Office of Water Quality beginning nine (9) months after the submittal of the initial nine (9) month progress report and every nine (9) months thereafter until the completion of this compliance schedule. Monitoring and reporting of influent and effluent chlorides is required during the interim period.
- b. If the permittee determines that construction and/or changes in the local limits are not required to meet the final limits for chlorides within the thirty-six month schedule of compliance, the permittee shall immediately notify the Compliance Evaluation Section, Office of Water Quality (OWQ). Upon receipt of such notification by the OWQ, the final limitations for chlorides will become effective, but no later than thirty-six (36) months from the effective date of the denial of the variance application.
- c. The permittee shall comply with all final effluent limitations no later than thirty-six (36) months from the effective date of the denial of the permittee's variance application.
- d. **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 Evaluation Section 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.**

E. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited. In support of this policy the U.S. EPA in 1995 amended the 40 CFR 136.3 (Tables IA and II) by adding testing methods for measuring acute and short-term chronic toxicity of whole effluents and receiving waters. To adequately assess the character of the effluent, and the effects of the effluent on aquatic life, the permittee shall conduct Whole Effluent Toxicity Testing. Part 1 of this section describes the testing procedures, Part 2 describes the Toxicity Reduction Evaluation which is only required if the effluent demonstrates toxicity, as described in paragraph f.

1. Whole Effluent Toxicity Tests

The permittee shall conduct the series of bioassay tests described below to monitor the toxicity of the discharge from Outfalls 001 and 006. If toxicity is demonstrated as defined under paragraph f below, the permittee is required to conduct a toxicity reduction evaluation (TRE).

a. Bioassay Test Procedures and Data Analysis

- (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Fourth Edition Section 13, Cladoceran (*Ceriodaphnia dubia*) Survival and Reproduction Test Method 1002.0; and Section 11, Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test Method, (1000.0) EPA 821-R-02-013, October 2002, or most recent update.
- (2) Any circumstances not covered by the above methods, or that require deviation from the specified methods shall first be approved by the IDEM's Environmental Toxicology and Chemistry Section.
- (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA 821-R-02-013), Fourth Edition, October 2002 or most recent update.

b. Types of Bioassay Tests

The permittee shall conduct a 7-day Cladoceran (*Ceriodaphnia dubia*) Survival and Reproduction Test and a 7-day Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test on samples of the final effluent. All tests will be conducted on 24-hour composite samples of final effluent. All test solutions shall be renewed daily. On days

three and five fresh 24-hour composite samples of the effluent collected on alternate days shall be used to renew the test solutions.

If in any control more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test shall be repeated. In addition, if in the *Ceriodaphnia* test control the number of newborns produced per surviving female is less than 15, or if 60% of surviving control females have less than three broods; and in the fathead minnow test if the mean dry weight of surviving fish in the control group is less than 0.25 mg, that test shall also be repeated. Such testing will determine whether the effluent affects the survival, reproduction, and/or growth of the test organisms. Results of all tests regardless of completion must be reported to IDEM.

c. Effluent Sample Collection and Chemical Analysis

- (1) Samples for the purposes of Whole Effluent Toxicity Testing will be taken at a point that is representative of the discharge, but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of the 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.
- (2) Chemical analysis must accompany each effluent sample taken for bioassay test. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

d. Frequency and Duration

The toxicity tests specified in paragraph b. shall be conducted once every six months for the duration of the permit.

If toxicity is demonstrated as defined under paragraph f (1), (2) or (3), the permittee is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2.

e. Reporting

- (1) Results shall be reported according to EPA 821-R-02-013, Section 10 (Report Preparation). Two copies of the completed report for each test shall be submitted to the Compliance Evaluation Section of the IDEM no later than sixty days after completion of the test.
- (2) For quality control, the report shall include the results of appropriate standard reference toxic pollutant tests for chronic endpoints and historical reference toxic pollutant data with mean values and appropriate ranges for the respective test species *Ceriodaphnia dubia* and *Pimephales promelas*. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.

- (3) Statistical procedures used to analyze and interpret toxicity data including critical values of significance used to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

f. Demonstration of Toxicity

- (1) Acute toxicity will be demonstrated if the effluent is observed to have LC_{50} of less than 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, whichever is more sensitive.
- (2) Chronic toxicity will be demonstrated if the No Observed Effect Level (NOEL) is less than 92% for *Ceriodaphnia dubia* or *Pimephales promelas*.
- (3) If chronic toxicity is found in any of the tests specified above, a confirmation toxicity test using the specified methodology and same test species shall be conducted within two weeks of receiving the chronic toxicity test results. If any two (2) consecutive tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended (upon approval from IDEM) while the TRE is being conducted.

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE (including any post-TRE biomonitoring requirements) is only required if toxicity is demonstrated as defined by Paragraph 1.f.

a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee shall submit plans for an effluent toxicity reduction evaluation (TRE) to the Compliance Evaluation Section of the IDEM. The TRE plan shall include appropriate measures to characterize the causative toxicant and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

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

Phase II Toxicity Identification Procedures (EPA 600R92-080), September 1993.

Phase III Toxicity Confirmation Procedures (EPA 600R92-081), September 1993

- (2) Methods for Chronic Toxicity Identification
Phase I Characterization of Chronically Toxic Effluents EPA/600/6-91/005, June 1991.
- (3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations
(EPA/600/2-88/070), March 1989.
- (4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants
(EPA/600/2-88/062), April 1989.

b. Conduct the Plan

Within 30 days after submission of the TRE plan to the IDEM, the permittee must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Compliance Evaluation Sections of the Office of Water Quality (OWQ) beginning 90 days after initiation of the TRE study.

c. Reporting

Within 90 days of the TRE study completion, the permittee shall submit to the Compliance Evaluation Sections of the Office of Water Quality (OWQ) the final study results and a schedule for reducing the toxicity to acceptable levels through control of the toxicant source or treatment of whole effluent.

d. Compliance Date

The permittee shall complete items a, b, and c from Section 2 and reduce the toxicity to acceptable levels as soon as possible but no later than three years after the date of determination of toxicity.

e. Post-TRE Biomonitoring Requirements (Only Required After Completion of a TRE)

After the TRE, the permittee shall conduct monthly toxicity tests with 2 or more species for a period of three months. Should three consecutive monthly tests demonstrate no toxicity, the permittee shall conduct chronic tests every six months for the duration of the permit.

If toxicity is demonstrated as defined in paragraph 1.f after the initial three month period, testing must revert to a TRE as in Part 2 (TRE). These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Tests Section.

PART II

A. GENERAL CONDITIONS

1. Duty to Comply

The permittee shall comply with all conditions of this permit in accordance with 327 IAC 5-2-8(1) and all applicable 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. In the event of a permit violation and/or applicable regulation, the City of Indianapolis and/or United Water may be held liable.

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 5-2-8(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or

operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. 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 to 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

The City of Indianapolis and its contract operator, United Water, are both listed as permittees on this permit. If this contractual relationship is terminated, the City of Indianapolis becomes the sole permittee. The City of Indianapolis must notify IDEM if it contracts with another entity or person other than an employee of the City to operate the facility.

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)(A), 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. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; 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 Water Pollution Control 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 commits a class C infraction. Pursuant to IC 13-30-10, a person who intentionally, knowingly, or recklessly violates any provision of this permit, the water pollution control laws or a rule or standard adopted by the Water Pollution Control Board commits a class D felony punishable by the term of imprisonment established under IC 35-50-2-7(a) (up to one year), and/or by a fine of not less than five thousand dollars (\$5,000) and not more than fifty thousand dollars (\$50,000) per day of violation. A person convicted for a violation committed after a first conviction of such person under

this provision is subject to a fine of not more than one hundred thousand dollars (\$100,000) per day of violation, or by imprisonment for not more than two (2) years, or both.

12. Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(9), the permittee shall comply with monitoring, recording, and reporting requirements of this permit. The Clean Water Act, as well as IC 13-30-10, provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under a permit shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

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 direct supervision 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(b) 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(10), "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(a), 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 Requirements

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 Evaluation Section of the Office of Water Quality in writing.

16. Inspection and Entry

In accordance with 327 IAC 5-2-8(7), the permittee shall allow the Commissioner, or an authorized representative (including an authorized contractor acting as a representative of the Commissioner), upon the presentation of credentials and other documents as may be required by law, to:

- a. enter upon the permittee's premises where a point source, regulated facility, or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. inspect at reasonable times any facilities, equipment or methods(including monitoring and control equipment), practices, or operations regulated or required under 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. Annual Fees

In accordance with IC 13-18-20, each facility is required to pay annual fees. Since this permit regulates both the Belmont AWT and Southport AWT facilities, the permittee is responsible for payment of annual fees for each of these facilities.

B. MANAGEMENT REQUIREMENTS

1. Facility Operation, Maintenance and Quality Control

- a. In accordance with 327 IAC 5-2-8(8), the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) 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(8), 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.

- 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. 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 Section, Office of Water Quality in accordance with 327 IAC 3-2-1. 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(11):

- a. Terms as defined in 327 IAC 5-2-8(11)(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 herein, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined herein;
 - (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 conditions under Part II.B.2.f, h, i, and j below are met.
- c. In accordance with 327 IAC 2-6.1, bypasses which result or may result in death, acute injury or illness to animals or humans are subject to the "Spill Reporting Requirements" in Part II.C.9 of this permit.
- 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. The written 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.
- 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 assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.d and e of this permit.

g. The Belmont and Southport AWT facilities have the following bypass points (outfalls):

<u>Outfall No.</u>	<u>Location (Latitude/Longitude)</u>	<u>Receiving Stream</u>
007	Belmont Primary Effluent Bypass 39° 43' 34.18" N; 86° 11' 25.40" W	West Fork White River
002	Southport Primary Influent Bypass 39° 40' 10.87" N; 86° 13' 33.02" W	Little Buck Creek
004 (Formerly 002B)	Southport Primary Effluent Bypass 39° 40' 10.93" N; 86° 13' 28.35" W	Little Buck Creek

Belmont Primary Effluent Bypass: A primary effluent bypass exists after the primary clarifiers and prior to the TF/SC system. Primary effluent from this bypass discharges over adjustable weirs located in the Primary Effluent Diversion Structure and enters the White River via Outfall 007.

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

Southport Primary Effluent Bypass: Primary effluent diversions exist after the primary clarifiers prior to the bio-roughing towers. Primary effluent from these diversions flow through 60-inch pipes and enters Little Buck Creek via Outfall 004 and/or Outfall 002.

h. Belmont and Southport AWT Facilities

The bioroughing towers or TF/SC process, oxygen nitrification and air nitrification facilities listed in the Treatment Facility Description will be treated as one combined unit treatment process for the purpose of providing secondary/biological treatment in order to give the permittee flexibility to produce the best quality effluent possible. Diversions around individual components of this combined unit will not be considered bypasses provided:

- (1) the final effluent quality is in strict compliance with the permit limits;
- (2) the permittee maximizes the treatment capability of the plant during wet weather events as described in the facility's Wet Weather Standard Operating Procedures; and
- (3) the permittee maintains the records required under subdivision i. below.

Diversions of flow around the entire integrated biological treatment system shall be considered bypasses subject to Part II.B.2.a - f of this permit.

Belmont AWT Dry Weather Operation:

The trickling filter/solids contact (TF/SC) and oxygen nitrification (ONS) processes listed in the Treatment Facility Description will be treated as an integrated biological treatment system during dry weather to give the permittee operational flexibility to optimize effluent quality. Splitting the primary effluent flow between the TF/SC and ONS processes is a necessary feature of the integrated system during dry weather as well as wet weather periods. The ability to split the BRS effluent flow between the contact/reaeration tankage and ONS is another desirable feature of the integrated system. Such flow splitting between individual unit operations and processes within the integrated biological treatment system are necessary and will not be considered bypasses or diversions provided that:

- (1) the final effluent quality at Outfalls 005 and 006 is in strict compliance with the permit limits;
- (2) the permittee maximizes the treatment capability of the plant during wet weather events as described below; and
- (3) the permittee maintains the records required under subdivision (i) below.

Belmont AWT Wet Weather Operation: When the flow to ONS reaches or exceeds its 150 MGD peak hourly rated capacity, the integrated system may be uncoupled and effluent from the TF/SC system may be diverted to the wet weather disinfection facilities and discharged through Outfall 005. During the period when TF/SC effluent is discharged to Outfall 005 (including half-hour discretionary periods before, during and after wet-weather episodes), the flow through ONS must be maintained at or above the 150 MGD peak hourly rated capacity. The effluent limits contained in Tables 5 and 6 (Part I.A.3) apply to the effluent as long as the discharge occurs. The effluent limits contained in Tables 7 and 8 (Part I.A.4 of the permit) apply to the discharge from the TF/SC process, but prior to entering Outfall 005. Within a half-hour after the flow to the integrated biological system has decreased to less than 150 MGD, the discharge from Outfall 005 must cease.

Sixty 60 days before the TF/SC process is placed in full-time operation at the Belmont AWT Plant, the standard operating procedures (SOPs) must be updated to include the conditions in which partial diversion of flow occurs, including the flow-splitting of primary effluent between the TF/SC and the ONS processes.

- i. For each day that a diversion occurs for either wet weather or dry weather, the permittee shall maintain records that document that the criteria listed in subdivision h. above have been satisfied. The records must include documentation of the portion of each unit treatment process utilized to comply with the above criteria. The records shall include the time that an individual component of the unit treatment process is removed from service or placed back into service.

- j. The permittee must submit updated standard operating procedures (SOPs) to the Compliance Branch documenting the use of the unit treatment processes both during wet and dry weather conditions.

The SOPs for both the Belmont and Southport AWT facility must be reviewed and revised as the improvements are constructed consistent with the approved CSO Long-Term Control Plan. These SOPs shall also be included in the CSOOP as required by Attachment A of this permit.

- k. The partial diversion of flow around the effluent filters is authorized provided that the effluent filters are operated consistent with the SOPs.

3. Upset Conditions

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

- 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, if possible;
 - (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 "Twenty-Four Hour Reporting Requirements", Part II.C.3, or 327 IAC 2-6.1, whichever is applicable.

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 methods established in 329 IAC 10 and 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 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(13), in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. provide an alternative power source, such as a dual power feed, 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.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(10)(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(9), 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. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(10), the permittee shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time the permittee becomes aware of such noncompliance. If the noncompliance meets the requirements of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made within those prescribed time frames.

- a. any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. any noncompliance which may pose a significant danger to human health or the environment. Reports under this item must be made as soon as the permittee becomes aware of the noncomplying circumstances by calling 317/233-7745 (888/233-7745 toll free in Indiana);
- c. any upset (as defined in Part II.B.3 above) that exceeds any technology-based effluent limitations in the permit;
- d any discharge from the sanitary sewer system;
- e. any dry weather discharge from a combined sewer overflow which is identified in this permit; or

f. any violation of a maximum daily discharge limitation for the following toxic pollutant:

Cyanide

The permittee can make the oral reports by calling 317/232-8670 during regular business hours 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 noncompliance and its cause; the period of noncompliance, including exact dates and times; and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a "Bypass/ Overflow Incident Report" or a "Noncompliance Notification Report," whichever is applicable" to IDEM at 317/232-8637. If a complete fax submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(10)(D), the permittee shall report any instance of noncompliance not reported under the "Twenty-Four Hour Reporting Requirements" in Part II.C.3, not related to the failure to report planned changes in the permitted facility, or not relating to any compliance schedules, 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(10)(E), where the permittee becomes aware of a failure to submit any relevant facts or submitted incorrect information in a permit application or in any report, the permittee shall promptly submit such facts or corrected information to the Commissioner.

The permittee shall submit to the Compliance Branch an annual report on April 1 of each year informing OWQ of any changes to the description of the operational capacity (hydraulic and organic loading) of each unit process of the treatment system, Standard Operating Procedures for the AWT plant during wet weather and dry weather, or the process flow schematic, made during the preceding calendar year.

6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(14):

- 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. Certification. 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(14) 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 or 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(10)(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(10)(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.

D. ADDRESSES

1. Cashiers Office

Indiana Department of Environmental Management
Cashiers Office – Mail Code 50-10C
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Cashiers Office:

- a. NPDES permit applications (new, renewal or modifications) with fee
- b. Construction permit applications with fee

2. Municipal Permits Section

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Municipal Permits Section
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

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

- a. Preliminary Effluent Limits request letters
- b. Comment letters pertaining to draft NPDES permits
- c. NPDES permit transfer of ownership requests
- d. NPDES permit termination requests
- e. Notifications of substantial changes to a treatment facility, including new industrial sources

3. Data & Information Services Section

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Data & Information Services Section
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Data & Information Services Section:

- a. Discharge Monitoring Reports (DMRs), Monthly Reports of Operation (MROs), and Monthly Monitoring Reports (MMRs)

4. Compliance Evaluation Section

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Compliance Evaluation Section
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

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

- a. Gauging station and flow meter calibration documentation
- b. Compliance schedule progress reports
- c. Completion of Construction notifications
- d. Whole Effluent Toxicity Testing reports
- e. Toxicity Reduction Evaluation (TRE) plans and progress reports
- f. Bypass/Overflow reports
- g. Anticipated Bypass reports
- h. CSO Discharge Monitoring Reports

5. Wet Weather Section

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Wet Weather Section
100 N. Senate Avenue
Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Wet Weather Section:

- a. Combined Sewer Overflow (CSO) Operational Plans
- b. CSO Long Term Control Plans (LTCP)
- c. Stream Reach Characterization and Evaluation Reports (SRCER)

6. Pretreatment Group

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Compliance Evaluation 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 Guides (ERG)
- 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 January 11, 1985 and modified as approved on March 3, 1994. To ensure the program is operated as approved and consistent with 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 327 IAC 5-18. The Control Authority shall perform a technical re-evaluation of local limits at least once during the term of this permit. The local limit re-evaluation shall be in accordance with EPA Guidance document Local Limits Development Guidance (EPA 833-R-04-002A), July 2004.
2. **PERMIT ISSUANCE** - In accordance with 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 Control Authority 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 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 Procedures (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 January 28, 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 a list of the SIUs published along with the newspaper clipping.
7. **ANNUAL REPORT** - Pursuant to 327 IAC 5-16-5(d), the CA is required to submit an annual report to the IDEM, OWQ, Pretreatment Group by April 1 of each year. The annual report will be submitted in accordance with the State supplied "POTW PRETREATMENT PROGRAM ANNUAL REPORT GUIDANCE".
8. **RECORDS RETENTION** - 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 or the operation of the Belmont AWT Plant's pretreatment program or when requested by IDEM or the U.S. EPA.
9. **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.
10. **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.
11. **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).
12. **POTW PRETREATMENT PROGRAM REVISION REQUIREMENTS** - Unless already completed, the CA is required to update its pretreatment program and SUO in accordance with the Pretreatment Implementation Review Task Force (PIRT) revisions and the Domestic Sewage Study (DSS) rule. The updating shall be completed according to the following schedule:
 - a. The CA shall re-evaluate its pretreatment program for consistency with 40 CFR 403, particularly the PIRT and DSS revisions, then submit a draft of any program modification, with a request for approval of the modification under 40 CFR 403.18, to the Pretreatment Group and the U.S. EPA, Region 5, within twelve (12) months of the effective date of this permit. The pretreatment program modification shall include a technical evaluation of the need to revise local pretreatment limitations 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.

The request must identify or highlight the new provisions in the modification (or pre-existing provisions in the original program) that fulfill the requirements of the PIRT and DSS revisions.

- b. The CA shall make any changes to its pretreatment program necessary for the program to be consistent with 40 CFR 403, particularly the PIRT and DSS revisions, within 90 days after approval by the approval authority.
- c. The CA shall issue pretreatment permits to all SIUs (or modify existing SIU permits) that are affected by the revisions within one year after approval of the revisions by the approval authority.

13. 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 survey.

NOTE: A summary of the revisions to the General Pretreatment Regulations (40 CFR 403) is available from the Pretreatment Group.

ATTACHMENT A
PRECIPITATION RELATED COMBINED SEWER OVERFLOW AUTHORIZATION REQUIREMENTS

I. Discharge Requirements

- A. 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.

<u>Outfall Number</u>	<u>Location (Latitude/Longitude)</u>	<u>Receiving Water</u>
003	Raw Wastewater Overflow prior to Southport AWT Plant's headworks 39° 40'10.94" N; 86° 13'29.31" W	Little Buck Creek
008	Raw Wastewater Overflow prior to Belmont AWT Plant's headworks 39° 43'41.58" N; 86° 11'17.03" W	White River
011	Minnesota Street & Pershing Avenue 39° 44'36.48" N; 86° 12'4.05" W	Big Eagle Creek
012	Raymond Street & West Street 39° 44'11.94" N; 86° 10'9.75" W	White River
013	Meridian Street & Adler Street 39° 44'31.55" N; 86° 10'5.45" W	White River
015	Southern Avenue & Manker Avenue 39° 43'47.87" N; 86° 8'30.88" W	Bean Creek
016	Shelby Street & Willow Drive 39° 43'44.04" N; 86° 8'22.60" W	Bean Creek
017	Boyd Avenue & Nelson Avenue 39° 43'44.22" N; 86° 8'4.19" W	Bean Creek
019	Pleasant Run Parkway North Drive & Meridian Street 39° 43'55.33" N; 86° 9'29.00" W	Pleasant Run
020	Pleasant Run Parkway North Drive & Pennsylvania Street 39° 43' 58.01" N; 86° 9'23.24" W	Pleasant Run

021	Pleasant Run Parkway North Drive & Ransdell Street 39° 44'5.69" N; 86° 9'6.24" W	Pleasant Run
022	Pleasant Run Parkway North Drive & Raymond Street 39° 44'13.90" N; 86° 8'46.85" W	Pleasant Run
023	Pleasant Run Parkway North Drive & Iowa Street 39° 44'36.78" N; 86° 8'34.64" W	Pleasant Run
025	Pleasant Run Parkway North Drive & Shelby Street 39° 44'41.43" N; 86° 8'23.61" W	Pleasant Run
027	Pleasant Run Parkway South Drive & Cottage Avenue 39° 44'51.00" N; 86° 8'5.89" W	Pleasant Run
028	Pleasant Run Parkway South Drive & State Street 39° 44'58.20" N; 86° 7'50.31" W	Pleasant Run
029	Orange Street & Randolph Street 39° 44'55.96" N; 86° 7'39.48" W	Pleasant Run
030	Pleasant Run Parkway South Drive & Randolph Street 39° 44'54.81" N; 86° 7'37.87" W	Pleasant Run
031	Pleasant Run Parkway South Drive & Churchman Avenue 39° 44'57.69" N; 86° 7'28.16" W	Pleasant Run
032	Morris Street & Warman Avenue 39° 45'3.31" N; 86° 12'27.02" W	Big Eagle Creek
033	Vermont Street & Somerset Avenue 39° 46'17.98" N; 86° 13'19.03" W	Big Eagle Creek
034	Michigan Street & Dorman Street 39° 46'25.57" N; 86° 8'20.58" W	Pogues Run
035	Arsenal Avenue & 10th Street 39° 46'52.53" N; 86° 7'58.73" W	Pogues Run

036	Nowland Avenue & Tecumseh Street 39° 47'8.44" N; 86° 7'34.49" W	Pogues Run
037	Washington Street & Geisendorff Street 39° 46'2.78" N; 86° 10'22.63" W	White River
038	New York Street & Agnes Street 39° 46'8.54"N; 86° 10'33.33" W	White River
039	New York Street & Beauty Avenue 39° 46'13.98" N; 86° 10'46.80" W	White River
040	New York Street & Koehne Street 39° 46'17.96" N; 86° 11'12.61" W	White River
041	White River Parkway West Drive & Michigan Street 39° 46'28.76" N; 86° 11'21.80" W	White River
042	Saint Clair Street & Lynn Avenue 39° 46'43.72" N; 86° 11'29.04" W	White River
043	Harding Street & Waterway Boulevard 39° 47'8.98" N; 86° 11'15.18" W	White River
044	Waterway Boulevard & Riverside Drive 39° 47'10.97" N; 86° 11'27.60" W	White River
045	White River Parkway West Drive & Belmont Avenue 39° 47'9.39" N; 86° 11'40.42"W	White River
046	Lafayette Road & 19th Street 39 47'29.51" N; 86 12'3.85" W	White River
049	Stadium Drive & Fall Creek 39° 46'54.70" N; 86° 10'38.47" W	Fall Creek
050	Fall Creek Boulevard & Burdsal Parkway 39° 48'1.94" N; 86° 10'28.07" W	Fall Creek

051	Capitol Avenue & 22nd Street 39° 47'50.26" N; 86° 9'44.50" W	Fall Creek
052	Fall Creek Boulevard & Boulevard Place 39° 48'5.79" N; 86° 9'45.83" W	Fall Creek
053	Fall Creek Parkway North Drive & Illinois Street 39° 48'10.07" N; 86° 9'32.30" W	Fall Creek
054	Fall Creek Parkway North Drive & Meridian Street 39° 48'13.53" N; 86° 9'24.29" W	Fall Creek
055	28th Street & Talbot Street 39° 48'18.64" N; 86° 9'15.46" W	Fall Creek
057	28th Street & Washington Boulevard 39° 48'20.80" N; 86° 9'6.84" W	Fall Creek
058	28th Street & New Jersey Street 39° 48'20.75" N; 86° 9'2.48" W	Fall Creek
059	Fall Creek Parkway North Drive & Central Avenue 39° 48'21.03" N; 86° 8'57.97" W	Fall Creek
060	Sutherland Avenue & Central Avenue 39° 48'20.22" N; 86° 8'56.34" W	Fall Creek
061	Fall Creek Parkway North Drive & Ruckle Street 39° 48'23.09" N; 86° 8'53.16" W	Fall Creek
062	Guilford Avenue & 30th Street 39° 48'37.49" N; 86° 8'30.94" W	Fall Creek
063	Fall Creek Parkway North Drive & 32nd Street 39° 48'50.37" N; 86° 8'36.54" W	Fall Creek
064	Winthrop Avenue & 34th Street 39° 49'0.25" N; 86° 8'22.03" W	Fall Creek

065	Sutherland Avenue & 34th Street 39° 49'3.83" N; 86° 8'14.83" W	Fall Creek
066	Fall Creek Boulevard & Balsam Avenue 39° 49'15.68" N; 86° 8'9.66" W	Fall Creek
072	Pleasant Run Parkway North Drive & Saint Peter Street 39° 44'59.96" N; 86° 7'20.32" W	Pleasant Run
073	Pleasant Run Parkway North Drive & Keystone Avenue 39° 45'1.82" N; 86° 7'15.28" W	Pleasant Run
074	Pleasant Run Parkway North Drive & Prospect Street 39° 45'8.80" N; 86° 7'3.93" W	Pleasant Run
075	Pleasant Run Parkway North Drive & Southeastern Avenue 39° 45'28.70" N; 86° 6'30.88" W	Pleasant Run
076	Pleasant Run Parkway North Drive & English Avenue 45'35.10" N; 39°86° 6'17.91" W	Pleasant Run
077	Pleasant Run Parkway North Drive & Sherman Drive 39° 45'47.03" N; 86° 6'7.45" W	Pleasant Run
078	Pleasant Run Parkway North Drive & Brookville Road 39° 45'50.23" N; 86° 5'43.15" W	Pleasant Run
080	Pleasant Run Parkway North Drive & Wallace Avenue 39° 46'2.22" N; 86° 5'18.83" W	Pleasant Run
081	Pleasant Run Parkway North Drive & Riley Avenue 39° 46'10.34" N; 86° 5'9.30" W	Pleasant Run
083	Hawthorne Lane & Lowell Avenue 39° 46'23.36" N; 86° 4'47.61" W	Pleasant Run

084	Pleasant Run Parkway North Drive & Michigan Street 39° 46'31.88" N; 86° 4'39.96" W	Pleasant Run
085	Pleasant Run Parkway North Drive & Ritter Avenue 39° 46'32.61" N; 86° 4'25.68" W	Pleasant Run
086	Pleasant Run Parkway North Drive & Ritter Avenue 39° 46'32.95" N; 86° 4'25.82" W	Pleasant Run
087	Pleasant Run Parkway North Drive & Audubon Road 39° 46'35.27" N; 86° 4'11.41" W	Pleasant Run
088	Pleasant Run Parkway North Drive & Graham Avenue 39° 46'33.03" N; 86° 4'5.84" W	Pleasant Run
089	Pleasant Run Parkway North Drive & Arlington Avenue 39° 46'33.14" N; 86° 3'50.75" W	Pleasant Run
090	Lowell Avenue & Sheridan Avenue 39 46'30.24" N; 86 3'36.59" W	Pleasant Run
091	Pleasant Run Parkway South Drive & Kenmore Road 39° 46'31.37" N; 86° 3'30.23" W	Pleasant Run
092	Pleasant Run Parkway South Drive & Ridgeview Drive 39° 46'31.87" N; 86° 3'27.11" W	Pleasant Run
095	Brookside Parkway North Drive & Coyner Avenue 39° 47'11.67" N; 86° 7'27.22" W	Pogues Run
096	Brookside Parkway South Drive & Nowland Avenue 39° 47'12.00" N; 86° 7'27.28" W	Pogues Run
097	Brookside Parkway South Drive & Keystone Avenue 39° 47'11.18" N; 86° 7' 14.59" W	Pogues Run

098	Tacoma Avenue & Nowland Avenue 39° 47'9.96" N; 86° 7'10.68" W	Pogues Run
099	Brookside Parkway South Drive & Temple Avenue 39° 47'8.35" N; 86° 7'5.27" W	Pogues Run
100	Brookside Parkway South Drive & Rural Street 39° 47'8.71" N; 86° 7'2.34" W	Pogues Run
101	Sherman Drive & Brookside Parkway North Drive 39° 47'29.94" N; 86° 6'14.14" W	Pogues Run
102	Forest Manor Avenue & 19th Street 39° 47'32.31" N; 86° 6'2.67" W	Pogues Run
103	Sherman & Denwood Drs. Lift Station 39 49'44.67" N; 86 6'10.16" W	Meadow Brook
106	Pleasant Run Parkway North Drive & Orange Street 39° 44'54.53" N; 86° 7'31.19" W	Pleasant Run
107	Pleasant Run Parkway North Drive & Saint Paul Street 39° 44'58.77" N; 86° 7'23.70" W	Pleasant Run
108	Pleasant Run Parkway North Drive & Saint Paul Street 39° 44'58.21" N; 86° 7'23.81" W	Pleasant Run
109	Pleasant Run Parkway North Drive & Churchman Street 39° 44'58.05" N; 86° 7'27.45" W	Pleasant Run
115	Henry Street & Kentucky Avenue 39° 45'22.43" N; 86° 10'20.55" W	Pogues Run
116	Meikel Street & Ray Street 39° 45'16.26" N; 86° 10'22.37" W	White River
117	Southern Avenue & White River 39° 43'46.60" N; 86° 10'26.43" W	White River

118	White River Parkway East Drive & West Street 39° 44'38.80" N; 86° 10'8.17" W	White River
119	Pleasant Run Parkway South Drive & Beecher Street 39° 44'30.15" N; 86° 8'34.09" W	Pleasant Run
120	Pleasant Run Parkway South Drive & Southern Avenue 39° 43'46.15" N; 86° 9'57.60" W	Pleasant Run
125	Meridian Street & South Street 39° 45'41.40" N; 86° 9'29.79" W	Pogues Run
127	1325 South State Street 39° 44'57.99" N; 86° 7'50.12" W	Pleasant Run
128	Senate Avenue & Merrill Street 39° 45'33.10" N; 86° 9'49.36" W	Pogues Run
129	Meridian Street & Merrill Street 39° 45'33.50" N; 86° 9'33.55" W	Pogues Run
130	Manual High School 39° 44'5.25" N; 86° 9'6.69" W	Pleasant Run
131	Fall Creek Boulevard & Capitol Avenue 39° 48'8.59" N; 86° 9'41.58" W	Fall Creek
132	Fall Creek Parkway North Drive & Pennsylvania Street 39° 48'16.29" N; 86° 9'19.51" W	Fall Creek
133	Market Street & Pine Street 39° 46'5.29" N; 86° 8'40.70" W	Pogues Run
135	Orchard Avenue & 39th Street 39° 49'36.17" N; 86° 7'45.15" W	Fall Creek
136	New York Street & Dorman Street 39° 46'15.94" N; 86° 8'25.78" W	Pogues Run
137	Pine Street & Ohio Street 39° 46'10.20" N; 86° 8'32.71" W	Pogues Run

138	College Avenue & Washington Street 39° 46'0.44" N; 86° 8'44.91" W	Pogues Run
141	Winthrop Avenue & 38th Street 39° 49'31.05" N; 86° 7'52.49" W	Fall Creek
142	College Avenue & 38th Street 39° 49'2.09" N; 86° 8'19.28" W	Fall Creek
143	Forest Manor Avenue & 21st Street 39° 47'45.18" N; 86° 5'54.45" W	Pogues Run
145	Raymond Street & Kentucky Avenue 39° 44'9.44" N; 86° 11'47.10" W	Big Eagle Creek
147	White River Parkway West Drive & Vermont Street 39° 46'22.73" N; 86° 11'17.29" W	White River
148	Pleasant Run Parkway North Drive & Madison Avenue 39° 44'1.70" N; 86° 9'16.07" W	Pleasant Run
149	Pleasant Run Parkway South Drive & Garfield Drive 39° 44'22.36" N; 86° 8'46.46" W	Pleasant Run
150	Pleasant Run Parkway North Drive & Raymond Street 39° 44'12.33" N; 86° 8'49.45" W	Pleasant Run
151	Pleasant Run Parkway North Drive & Beecher Street 39° 44'30.20" N; 86° 8'33.52" W	Pleasant Run
152	Pine Street & Ohio Street 39° 46'10.27" N; 86° 8'32.79" W	Pogues Run
153	Illinois Avenue & Merrill Street 39° 45'33.75" N; 86° 9'36.95" W	Pogues Run
154	Pleasant Run Parkway North Drive & Michigan Street 39° 46'29.19" N; 86° 4'43.06" W	Pleasant Run

155	Pennsylvania Street & 54th Street 39° 51'14.55" N; 86° 9'46.84" W	White River
205	Boulevard Place & Westfield Boulevard 39° 51'9.63" N; 86° 9'51.76" W	White River
210	Indiana Avenue & 10th Street 39° 46'53.24" N; 86° 10'35.93" W	Fall Creek
213	2900 North Hillside 39° 48'31.32" N; 86° 8'34.29" W	Fall Creek
216	Critenden Avenue & 42nd Street 39° 49'56.15" N; 86° 7'31.36" W	Fall Creek
217	Gadsden Street & Lyons Avenue 39° 43'33.99" N; 86° 13'58.47" W	State Ditch
218	Gadsden Street & Fleming Street 39° 43'37.20" N; 86° 14'14.21" W	State Ditch
223	Victoria Street & Warman Avenue 39° 45'34.96" N; 86° 12'37.95" W	Big Eagle Creek
224	Pleasant Run Parkway North Drive & Washington Street 39° 46'13.02" N; 86° 5'3.71" W	Pleasant Run
227	5700 Emich 39° 46'36.37" N; 86° 4'15.22" W	Pleasant Run
228	Michigan Street & Graham Avenue 39° 46'32.96" N; 86° 4'6.71" W	Pleasant Run
229	Pleasant Run Parkway North Drive & Arlington Avenue 39° 46'33.02" N; 86° 3'51.23" W	Pleasant Run
235	Shelby Street & Markwood Avenue 39° 41'53.44" N; 86° 8'16.86" W	Lick Creek
275	4945 South Foltz 39° 41'33.36" N; 86° 13'25.63" W	White River

50A	Northwestern Avenue & 24th Street 39° 48'1.92" N; 86° 10'27.97" W	Fall Creek
63A	Fall Creek Parkway North Drive & 32nd Street 39° 48'50.10" N; 86° 8'36.82" W	Fall Creek
89A	North Arlington Avenue 39° 46'33.26" N; 86° 3'50.39" W	Pleasant Run
A38	Davidson Street & Washington Street 39° 46'0.94" N; 86° 8'44.48" W	Pogues Run

B. Discharge from the CSO outfalls herein shall not cause receiving waters:

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

C. Dry weather discharges from any portion of the sewer collection system, including the outfalls listed in Part I.A of this Attachment A, are prohibited. If a dry weather discharge occurs, the permittee shall notify the Office of Water Quality, Compliance Evaluation Section, by phone within 24 hours and in writing within five days of the occurrence in accordance with the requirements in Part II.C.3 of this permit. The correspondence shall include the duration and cause of the discharge as well as the remedial action taken to end the discharge.

II. Monitoring and Reporting Requirements

- A. 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 hydraulics model, semiannually to the Office of Water Quality, Compliance Evaluation Section. 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. If the permit becomes effective on a date other than January 1 or July 1, the Model Report for the partial period between the effective date and the following January 1 or July 1 shall be submitted six (6) months after the close of the partial period.
- B. The permittee has calibrated and verified the model according to the Hydraulics Model Calibration and Verification Plan (HMCVP) submitted to IDEM August 20, 2003 and incorporated herein by reference. The permittee shall continue to implement the HMCVP to assure that the model is calibrated and verified to assure representative reporting of CSO frequency, duration, and volumes on the Model Report.
- C. The permittee shall monitor and report all CSO outfalls listed in Part I.A of this Attachment A consistent with the requirements in Part II.A of this Attachment A. All submittals under this provision shall be subject to the reporting requirements of this permit, including, but not limited to, Part II, Section C.6 ("Signatory Requirements"), Section C.7 ("Availability of Reports"), and Section C.8 ("Penalties for Falsification of Reports") of this Permit.

III. CSO Operational Plan

- A. The permittee shall comply with the following minimum technology-based controls, in accordance with the EPA 1994 National CSO Policy:
 1. The permittee shall implement a proper operation and regular maintenance program for the sewer system and the CSOs. The purpose of the operation and maintenance program is to reduce the magnitude, frequency and duration of CSOs. The program 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 the 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 AWT facilities at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency and duration of CSOs. The permittee shall operate the AWT facilities consistent with the WW SOP as required in Part II.B.2. of the permit.
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.

B. The permittee's implementation of each of the minimum controls in Part III.A of this Attachment A shall be documented in its CSO Operational Plan (CSOOP), which was submitted in December 1995, approved on September 26, 1997, and updated on May 20, 2003. The permittee shall update the CSOOP as needed consistent with the implementation of the long-term CSO control plan described in Part V of this Attachment A. The permittee shall submit CSOOP updates to IDEM, Office of Water Quality, Wet Weather Section.

The CSOOP update(s) shall include a summary of the 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 AWTs.

IV. Sewer Use Ordinance Review/Revision

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.

V. Long-Term CSO Requirements

- A. The permittee has developed a CSO Long-Term Control Plan (LTCP) that includes a request for a wet-weather limited use subcategory and a Use Attainability Analysis in support to ensure that when the LTCP is fully implemented, CSO discharges will comply with the technology-based and water quality-based requirements of the Clean Water Act (CWA) (including section 402(q) of the CWA) and state law (IC 13-11-2-120.5 and applicable state water quality standards). The permittee's CSO LTCP was approved by IDEM on January 4, 2007.
- B. The permittee shall perform the activities and construct CSO control measures numbers 1-14 that are set forth in Table 7-5 of the City's September 2006 LTCP, in accordance with the descriptions, design criteria and schedule contained in Table 7-5. In order to maintain authorization to discharge from CSOs beyond the date of expiration of this permit, the permittee shall continue to implement CSO control measures numbers 1-14, and shall submit the approved LTCP, or any approved revised LTCP, with the other required information and permit renewal application forms to the Office of Water Quality, Permits Branch no later than 180 days prior to the date of expiration.
- C. The permittee will conduct post-construction monitoring, as set forth in the approved LTCP, to determine whether CSO control measures are performing as designed and whether, upon completion of the LTCP, water quality standards are being achieved.
- D. The permittee shall review the feasibility of implementing additional or new CSO control alternatives necessary to comply with the water quality standards. The permittee shall conduct such a review periodically, but not less than every five (5) years. The permittee shall submit amendments to the LTCP to IDEM. The LTCP amendments may be imposed through modification of this permit, after public notice and opportunity for hearing.
- E. The permittee shall submit a progress report to the Office of Water Quality (OWQ), Data and Information Services Section, on the implementation of the approved LTCP on or before February 1 of each year, or part of the year, that the permit is effective, including any period of administrative extension. Progress reports shall include:
 - 1. a general description of the work completed during the prior year and, to the extent known, a statement as to whether the work completed in that period meets applicable design criteria;
 - 2. a projection of work to be performed during the next year, if different from that specified in the LTCP implementation schedule;

3. information, if any, generated in accordance with the Post-Construction Monitoring Program contained in the approved LTCP; and
4. a general description of any revisions to the approved LTCP that are considered necessary or are otherwise anticipated by the permittee.

VI. Reopening Clauses

- A. After LTCP implementation, if IDEM has evidence that a CSO discharge is causing or contributing to exceedences of water quality standards, then additional control measures, effluent limitations, and/or monitoring requirements may be imposed on the CSO through a modification of this permit, after public notice and opportunity for hearing.
- B. This permit may be reopened, after public notice and opportunity for hearing, to address changes in the EPA National CSO Policy or state or federal law.
- C. The permit may be reopened, after public notice and opportunity for hearing, to incorporate applicable provisions of IC 13-18.
- D. The permit may be reopened if the permittee's request for a wet-weather limited use subcategory is denied or approved for a level of control inconsistent with the level of control in the permittee's approved LTCP.

ATTACHMENT B – SANITARY SEWER OVERFLOWS

Overflows in the sanitary sewer system or in a sanitary portion of a combined sewer system are expressly **prohibited** from discharging at any time. If any release from the sanitary sewer system occurs, the permittee is required to notify the Compliance Evaluation Section of the Office of Water Quality orally within twenty-four (24) hours and in writing within five (5) days of the event in accordance with the requirements in Part II.C.3.d of this permit. The correspondence shall include the duration and cause of discharge as well as the remedial action taken to abate it.

The following SSO points are present in the collection system and shall be eliminated by December 31, 2007:

<u>Overflow Point</u>	<u>Location (Latitude, Longitude)</u>	<u>Receiving Water</u>
105	Fall Creek & Shadeland Avenue 39° 52' 6.924" N; 86° 02' 43.970" W	Fall Creek
113	Rodney Drive & Country Club Road 39° 47' 54.885" N; 86° 18' 33.995" W	Union Creek
124	Landborough South Drive. & Creekside Lane Lift Station 39° 52' 34.723" N; 86° 03' 17.229" W	Blue Creek

Fact Sheet

June 2007

Updated: December 2007

The City of Indianapolis's Belmont Advanced Wastewater Treatment (AWT) Plant is located at 2700 South Belmont Avenue, Indianapolis, Indiana, Marion County. The treated effluent is discharged via Outfall 006, which is located at Latitude 39° 43' 05" N, Longitude 86° 11' 08" W.

The City of Indianapolis's Southport AWT Plant is located at 3800 West Southport Road, Indianapolis, Indiana, Marion County. The treated effluent is discharged via Outfall 001, which is located at Latitude 39° 39' 51" N, Longitude 86° 14' 08" W.

NPDES Permit No. IN0023183

The NPDES Permit applies to the following co-permittees: 1.) City of Indianapolis Department of Public Works (Owner); 2.) United Water Services Indiana (Operator)

Background

This is the proposed renewal of the NPDES permit for the City of Indianapolis's Belmont and Southport AWT Plants. The proposed renewal combines the two facilities into one NPDES Permit (IN0023183). NPDES Permit No. IN0031950 (Southport AWT Plant) will be terminated upon the issuance of the renewal permit and both facilities will be regulated under NPDES Permit No. IN0023183. The Southport AWT Plant's NPDES Permit and the Belmont AWT Plant's NPDES Permit were last issued on October 26, 2001 and expired on September 30, 2006. However, the NPDES Permits are considered to be administratively extended due to the submittal of a timely permit renewal application. Two comment letters were provided during the public comment period. These comments resulted in minor changes being made to the permit and this fact sheet. Please refer to the "Post Public Notice Addendum" section of this fact sheet for details related to the comments and this Office's responses.

The two AWT Plants serve residents, industries, and commercial establishments in the City of Indianapolis, the City of Lawrence, the City of Beech Grove, the City of Greenwood, and the Ben Davis & Tri-County Conservancy District.

Facilities 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, west, north and east sides of Marion County. The Southport AWT plant receives flow predominantly from the east and south sides of Marion County and from the City of Greenwood. 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.

Belmont Advanced Wastewater Treatment (AWT) Plant

The Belmont Advanced Wastewater Treatment (AWT) Plant is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing system (BRS) towers, oxygen nitrification system (ONS) reactors, final clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination and effluent flow monitoring. The facility is also changing the method of disinfection to ozonation.

The AWT Plant has a design average flow of 120 MGD with a peak design flow of 150 MGD. The AWT Plant has two wet weather storage basins: a 30-million gallon basin to store primary influent and/or primary effluent during wet weather and a 4-million gallon basin to store primary effluent during wet weather. Sludge treatment includes gravity belt thickening (operational in 2008), gravity thickening, equalization, belt filter press dewatering, and incineration or landfilling. The mass limits for CBOD₅ and TSS at Outfall 006 are based on the peak design flow of 150 MGD.

As part of the City's CSO Long-Term Control Plan, the permittee will be replacing the existing Bio-Roughing System with a 150 MGD Trickling Filter/Solids Contact (TF/SC) secondary treatment process followed by a wet weather disinfection system which will increase the wet weather treatment capacity to a peak hourly rate of 300 MGD. When certain criteria are met the effluent from the TF/SC process may be diverted to the wet weather disinfection facilities and discharged to the river through Wet Weather Discharge Outfall 005.

The new 150 MGD Trickling Filter/Solids Contact (TF/SC) process includes construction of the following:

- new primary effluent conduits to enable various amounts of primary effluent to be split between the TF/SC process and the existing ONS system;
- new Bio-Roughing pump station
- new Bio-Roughing towers
- new Aerated Solids Contact and Reaeration tankage;
- new aeration equipment;
- new intermediate clarifiers;
- new conveyance lines to enable the effluent from the TF/SC process to be progressively shifted away from the ONS process during wet weather and discharged to the wet weather disinfection facilities;
- new chlorine contact tank and installation of related dechlorination facilities for seasonal disinfection of the TF/SC effluent sent to Outfall 005 (Latitude 39° 43' 34.18" N, Longitude. 86° 11' 25.40" W) during wet weather.

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

1. Bio-Roughing and TF/SC Diversions: A primary effluent diversion exists prior to the facility's existing bio-roughing towers (or TF/SC when it is constructed). A portion of the primary effluent can be diverted to the oxygen nitrification facilities.
2. Effluent Filters Diversion: An oxygen nitrification system effluent diversion exists prior to the facility's effluent filters. All or a portion of the oxygen nitrification system effluent up to 150 MGD can be diverted around the effluent filters to the ozone 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. 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. Actual flow rates during wet weather events have been 40 – 45 MGD.
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. Depending on the system hydraulics, the pumping capacity is 28-30 MGD. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont Primary Effluent Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
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. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Primary Effluent Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
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 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. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont Primary Effluent Pump Station (Primary Effluent), or the Gravity Diversion (Primary Effluent) are activated.

5. Gravity Diversion (Primary Effluent): A primary effluent diversion exists after the facility's primary clarifiers. Primary effluent from the primary effluent channel 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 11-14 MGD. This diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), the Belmont Wet Weather Pump Station (Primary Effluent), the Belmont Primary Effluent Pump Station, or the Gravity Diversion (Primary Influent) are activated.
6. Belmont Primary Effluent Pump Station (Primary Effluent)(Future - 2008): A primary effluent diversion will exist after the facility's primary clarifiers. Primary effluent from the primary effluent channel will 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 diversion cannot be utilized when either the Belmont Wet Weather Pump Station (Raw Wastewater), Belmont Wet Weather Pump Station (Primary Effluent), the Gravity Diversion (Primary Influent), or the Gravity Diversion (Primary Effluent) are activated.
7. Belmont-Southport Interplant Connection (Raw Sewage)(Future): The Interplant Connection between Belmont and Southport will consist of a 144-inch-diameter interceptor originating near CSO 117 and the Southwest Diversion Structure (east of the Belmont AWT Plant) terminating near the headworks of the Southport AWT Plant. Initially the interceptor would store 13 to 21 MG and convey up to 75 MGD of combined sewage captured from the Southwest Diversion Structure. The captured combined sewage from the future deep tunnel would also be treated at the Southport facility via expanded, upgraded and new equipment or at the Belmont facility.

Southport Advanced Wastewater Treatment (AWT) Plant

The Southport Advanced Wastewater Treatment (AWT) Plant is a Class IV, nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing towers, oxygen and air nitrification reactors, secondary clarifiers, mixed media tertiary filters, effluent disinfection by chlorination/dechlorination, effluent flow monitoring, and effluent pumping. The permittee will be changing the method of disinfection to ozonation.

The Southport AWT Plant has a design average flow of 125 MGD with a peak design flow of 150 MGD. Sludges are conveyed to and centrally processed by thickening, dewatering and incineration operations at the Belmont AWT Plant's Solids Handling Section. Mass limits are

calculated based upon the 150 MGD peak design flow. The Southport AWT Plant has an equalization basin storage capacity of 25 million gallons. This basin is used to store screened raw wastewater. The basin is designed to be used during wet weather when the plant's treatment capacity has been reached. The mass limits for CBOD₅ and TSS at Outfall 006 are based on the peak design flow of 150 MGD.

As part of the City's CSO Long-Term Control Plan, the Southport AWT Plant will be expanded to provide a total maximum treatment rate of 300 MGD with a maximum pumping rate of 350 MGD. The planned improvements will include expansion of the primary clarification facility, expansion of the air nitrification system (ANS) from 30 MGD to 150 MGD with fine bubble aeration, new blowers, new final clarifiers, new disinfection facility, pump station, and new process/yard piping.

The Southport AWT Facility has the following flow diversions:

1. Raw Wastewater Diversion: Raw wastewater can be diverted to the 25 MG equalization basin after the screening process. The stored wastewater is returned to Southport's Headworks for full treatment after the influent flow rate decreases. The screened wastewater can also be diverted around the grit tanks, primary clarifiers, and bio-roughing towers directly to the Air Nitrification System (ANS).
2. Grit Chamber Diversion: A screened raw wastewater flow diversion exists prior to the grit chambers that allows flow to be diverted around the grit tanks at Structure 2-B to either the primary clarifiers or the bio-roughing towers.
3. Preliminary Treatment Effluent Diversion/Bypass: A preliminary treatment effluent diversion exists that allows flows to be diverted around the primary clarifiers to the bio-roughing towers. This diversion is located at the effluent channel of the grit chambers and sends screened and degritted flows to Structure 5-K and onto the bio-roughing towers. Under emergency conditions the preliminary treatment effluent flow can be mixed with primary effluent and bypassed via a 54-inch pipe to Little Buck Creek through Outfall 002 (formerly listed as Outfall 002B).
4. Primary Effluent Diversion/Bypasses: A primary effluent diversion exists after the primary clarifiers prior to the bio-roughing towers. Primary effluent can be diverted around the bio-roughing towers from Structures 7-F and 7-C directly to the ANS. Primary effluent can also be bypassed through Structure S-6 to a 60-inch pipe and discharged to Little Buck Creek through Outfall 004 (formerly listed as Outfall 002A). Primary effluent can also flow to Structure 5-K and be discharged through Outfall 002.
5. Bio-Roughing Diversion: Primary effluent diversions exist prior to the facility's bio-roughing towers. All or a portion of the primary effluent from the east and west primary clarifiers up to 90 MGD can be diverted to the oxygen nitrification facilities.

6. Air Nitrification Diversion: A bio-roughing tower effluent diversion exists which allows flow to be diverted to the air nitrification system.
7. ANS Effluent Diversion to Disinfection System: An air nitrification effluent diversion exists prior to the facility's tertiary filters. All or a portion of the air nitrification system effluent can be diverted around the intermediate pump station. This diversion system allows ANS effluent to be diverted around the effluent filters and flow by gravity to the effluent disinfection system.
8. Effluent Filters Diversion: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the air and oxygen nitrification system effluent (up to 150 MGD) can be diverted around the effluent filters to the chlorination/dechlorination disinfection contact tanks.

Collection System

The City of Indianapolis's wastewater collection system is partially separate and partially combined sanitary and storm sewer system by design. One hundred and thirty-one (131) CSO points exist in the collection system and are identified, and are subject to, the provisions contained in Attachment A of the permit. Additionally, three (3) sanitary sewer overflow (SSO) points are known in the collection system. The sanitary sewer overflow points are listed in the Attachment B of the permit and are strictly prohibited from discharging. The SSO points are to be eliminated by December 31, 2007.

Statutory or Regulatory Basis for CSO 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, this permit renewal 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. Language within this permit renewal 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; (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. 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 CSO Effluent Limitations and Conditions

The effluent limitations set forth in Part I 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. Consistent with their plain language, the narrative limitations in Section I of Attachment A to NPDES permits prohibit CSO discharges that contain high levels of *E. coli* that cause or contribute to substantial in-stream exceedences of Indiana's *E. coli* criteria, or that are in amounts sufficient to impair the designated uses of a water body. 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).)

Indianapolis CSO Long Term Control Plan, Use Attainability Analysis and Compliance with other Consent Decree Requirements

The U.S EPA, and the Indiana Department of Environmental Management (IDEM), Office of Water Quality (OWQ) have conducted a substantive review of the City of Indianapolis' (the City) Long Term Control Plan (LTCP). On October 4, 2006, the United States, on behalf of the United States Environmental Protection Agency, and the State of Indiana, filed a complaint against the City in connection with the City's operation of its municipal wastewater and sewer system. Concurrent with the filing of the Complaint, the United States lodged with the Court a Consent Decree that has been finalized by the United States, the State of Indiana, and the City of Indianapolis. The Consent Decree requires the City to comply with its approved Nine Minimum Controls Program (NMC), its CMOM Program, O & M and Mitigation Requirements of Indianapolis' current permit. The Consent Decree requires the City to carry out Sanitary Sewer System Capital Improvement Projects to alleviate Sanitary Sewer Overflows and identifies a Supplemental Environmental Project to alleviate septic system contamination.

The Consent Decree also incorporates the City's Long Term Control Plan (LTCP). The Indianapolis LTCP proposes to achieve 97 percent capture of combined sewage flows on Fall Creek and 95 percent capture on other waterways. The selected plan is expected to result in reducing the average annual combined sewer overflow frequency from 60 overflow events per year to approximately two overflow events per year on Fall Creek and four overflow events per year on other waterways, based on average rainfall statistics for Indianapolis.

The plan proposes 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 on Fall Creek and 95 percent capture 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 single deep tunnel. The deep tunnel will serve primarily as a storage facility, and the stored flows will be pumped out to the Advanced Wastewater Treatment (AWT) plants at the end of a storm event. The AWT facilities will be expanded and upgraded to provide treatment of wet-weather flows. The plan 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:

- A central tunnel system along Fall Creek and the White River, with a pumping facility located near the Southwest Diversion Structure
- 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 along Eagle Creek to convey wet weather flows to the Belmont AWT plant
- An interplant connection interceptor from the Southwest Diversion Structure to the Southport AWT plant to convey stored tunnel flows to the Southport plant for treatment
- 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

The LTCP allows for a few residual CSOs to occur during storms that exceed the LTCP design and performance criteria. Because of this, the City has also submitted as a part of the LTCP, a Use Attainability Analysis (UAA), as provided for in both federal and state law. The UAA is a process to identify attainable use designations for CSO receiving waters. The City believes the UAA supports the assertion that complete elimination of combined sewer overflow impacts to water quality would be both unaffordable and infeasible, and requests approval of a refinement to the recreational designated use in waterways affected by Indianapolis CSOs. The UAA, if approved, will require a formal change to the water quality standard for the affected waterways.

This renewal permit reaffirms the fact that EPA and IDEM have approved Sections 1 through 8 of the Indianapolis LTCP, pursuant to paragraph M. of the Federal Consent Decree and IDEM's letter dated January 4, 2007. Section 9 of the Indianapolis LTCP is their UAA submission, which is currently under review by this Office. IDEM will provide written notice to the City when it deems the UAA and supporting information to be complete. IDEM will either initiate the process to revise water quality standards or issue a final agency decision that a water quality standards revision will not be undertaken.

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 exceedences 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 exceedence 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.

Receiving Stream

The Southport AWT Plant and the Belmont AWT Plant discharge to the West Fork of the White River via Outfall 006 and Outfall 001. The receiving stream has a seven-day, ten-year low flow ($Q_{7,10}$) of 69 cubic feet per second (44.5 MGD) at the outfall locations. The receiving stream is designated for full body contact recreational use and shall be capable of supporting a well-balanced warm water aquatic community in accordance with 327 IAC 2-1.

Solids Disposal

The permittees are required to dispose of sludge in accordance with 329 IAC 10, 327 IAC 6.1, 40 CFR Part 503, or any applicable Land Application Approval issued by IDEM.

Industrial Contributions/Pretreatment

The City of Indianapolis is designated as a City that is required by U.S. EPA to have a federal pretreatment program in place to control its significant industrial users. The City of Indianapolis operates a pretreatment program, which was approved on January 11, 1985 and was modified as approved on March 3, 1994.

Since the City of Indianapolis is required by U. S. EPA to have a federal delegated pretreatment program to control industrial users; the NPDES permit contains comprehensive requirements for the continued operation of a pretreatment program (see Part III of the permit). In addition to the pretreatment requirements contained in Part III of the permit, the permit renewal has requirements for the monitoring of specific metals, specific dissolved solids, cyanide, and semi-annual (2 X per year) whole effluent toxicity testing.

Organic Pollutant Monitoring

The permittee shall conduct an annual inventory of organic pollutants and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge at both the Belmont and Southport AWT facilities. The analytical report shall be sent to the Pretreatment Group, Office of Water Quality. This report is due December 31st each year. The inventory shall consist of:

Sampling and Analysis of Influent and Effluent

Sampling shall be conducted on a day when industrial discharges are occurring at normal production levels. The samples shall be 24-hour flow proportional composites, except for 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.

Sampling and Analysis of Sludge

Sampling collection, storage, and analysis shall conform to the U.S. EPA recommended procedures equivalent to methods 624, 625 and 608 in 40 CFR 136 or applicable methods in SW 846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods". 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.

Additional Pollutant Identification

In addition to the priority 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 program effectiveness review, Part III. A.7, should identify the additional steps necessary to determine whether the pollutants 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.

Effluent Limitations and Rationale for Southport AWT Plant's Outfall 001

The effluent limitations proposed herein are based on NPDES regulations, State of Indiana Water Quality Standards, Wasteload Allocation Analyses (WLA) performed by this Office's Permits Technical Support Section staff on October 28, 1996, June 14, 2001, and April 10, 2007, and the facility's previous NPDES. Monitoring frequencies are based upon facility size, type, and past compliance.

The parameters to be limited and/or monitored during the permit period include: Flow, 5-Day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia-nitrogen, pH, Dissolved Oxygen, Total Residual Chlorine (TRC), *Escherichia coli* (*E. coli*), Arsenic, Cyanide, Mercury, Chloride, Fluoride, Sulfate, Total Dissolved Solids, Cadmium, Chromium, Copper, Lead, Nickel, Zinc, and Whole Effluent Toxicity.

The summer monitoring period runs from May 1 through November 30 of each year. The winter monitoring period runs from December 1 through April 30 of each year.

Final Effluent Limitations

Flow

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

CBOD₅

CBOD₅ is limited to 10 mg/l (12,518 lbs/day) as a monthly average and 15 mg/l (18,776 lbs/day) as a weekly average during the summer monitoring period. CBOD₅ is limited to 25 mg/l (31,294 lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 40 mg/l (50,070 lbs/day) as a weekly average during the winter monitoring period. Monitoring is to be conducted daily by 24-hour composite sampling. The CBOD₅ concentration limitations included in this permit are the same concentration limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on October 28, 1996.

TSS

TSS is limited to 10 mg/l (12,518 lbs/day) as a monthly average and 15 mg/l (18,766 lbs/day) as a weekly average during the summer monitoring period. TSS is limited to 30 mg/l (37,553

lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 40 mg/l (50,070 lbs/day) as a weekly average during the winter monitoring period. Monitoring is to be conducted daily by 24-hour composite sampling. The TSS concentration limitations included in this permit are the same limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on October 28, 1996.

Ammonia-nitrogen

Ammonia-nitrogen is limited to 3.0 mg/l (3,129 lbs/day) as a monthly average and 4.5 mg/l (4,694 lbs/day) as a weekly average during the summer monitoring period. Ammonia-nitrogen is limited to 5.9 mg/l (6,154 lbs/day) as a monthly average and 8.9 mg/l (9,284 lbs/day) as a weekly average. Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentrations limitations included in this permit are the same limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on June 14, 2001.

pH

The pH limitations are 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 limitations contained in the facility's previous permit.

Dissolved Oxygen

Dissolved oxygen shall not fall below 8.0 mg/l as a daily minimum average during the summer monitoring period. Dissolved oxygen shall not fall below 6.0 mg/l as a daily minimum average during the winter monitoring period. Dissolved oxygen measurements must be based on the average of twelve (12) grab samples taken within a 24-hr. period and is to be monitored daily. These dissolved oxygen limitations are the same limitations found in the facility's previous permit and are in accordance with the WLA conducted on October 28, 1996.

E. coli

The *E. coli* limitations in the previous permits were stayed by order of the Office of Environmental Adjudication and never became effective limitations.

Indiana water quality standards for *E. coli* are applicable April 1 through October 31. The permit contains both interim and final limitations along with a schedule of compliance (24 months) to meet the final limitations. The schedule of compliance is being granted due to a switch in disinfection methods from chlorination to ozonation. Refer to Part I.D of the permit.

Interim Limitations:

During this period, *E. coli* is limited to 125 col/100 mL as a monthly average. The monthly average *E. coli* values shall be calculated as a geometric mean. The daily maximum limit of 235 col/100 mL is deferred until the limit can be met or when the schedule of compliance period ends, whichever occurs first. *E. coli* must be measured daily by grab sample. The daily maximum *E. coli* result shall be reported during this period.

Final Limitations:

During this period, *E. coli* is limited to 235 col/100 mL as a daily maximum and 125 col/100 mL as a monthly average. The monthly average *E. coli* values shall be calculated as a geometric mean. *E. coli* must be measured daily by grab sample. The *E. coli* limitations included in this permit are identical to the limitations contained in the facility's previous permit and are being retained in accordance with 327 IAC 5-2-10(11) and 327 IAC 5-10-6(d).

TRC

Disinfection of the effluent is required from April 1 through October 31, annually. Effluent dechlorination is required in order to protect aquatic life. In accordance with Indiana Water Quality Standards; final effluent limits 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 Quantification of 0.06 mg/l. TRC shall be measured daily by grab sample. The TRC limitations included in this permit are the same limitations found in the facility's previous permit and are in accordance with the WLA conducted on October 28, 1996.

The permittee is changing its method of disinfection from chlorination to ozonation, but will retain the chlorination system as a back-up. Therefore, the TRC limitations will be maintained in the permit. However, if chlorination is not used during any reporting period the permittee is to report 'not required' on the monthly discharge monitoring report. However, if chlorination is used, then the applicable monitoring requirements and effluent limitations shall apply to the discharge.

Mercury

The previous permits contained limitations for mercury. However, the WLA conducted on April 10, 2007 included a reasonable potential to exceed (RPE) analysis which concluded that the discharge did not have a reasonable potential to exceed the water quality criteria for mercury in the receiving water. Therefore, the limitations have been removed from the permit. The permit requires that mercury sampling (influent and effluent) be conducted two (2) times annually for the term of the permit as a report only requirement so that this Office has data to make future permitting decisions dealing with mercury.

Cyanide

The previous permit contained interim amenable cyanide limitations and final total cyanide limitations; however, the final limits were stayed by order of the Office of Environmental

Adjudication and never became effective limitations. Please note that the final limitations were a measure of the total cyanide in the discharge as the water quality criterion was represented as total cyanide at the time of the permit issuance. The water quality criteria for cyanide is currently represented as free cyanide, this includes the West Fork of the White River site-specific criteria for cyanide applicable to Belmont and Southport. As the final limitations for cyanide never became effective and the water quality criterion for cyanide has changed since the last permit was issued; the permittee is eligible for a schedule of compliance to meet the new water quality based effluent limits for free cyanide. Refer to Part I.D of the permit for information pertaining to the three (3) year compliance schedule for free cyanide. During the public comment period, the permittee submitted a variance application for free cyanide. The schedule of compliance shall not commence until the commissioner makes a final determination on the variance submittal. This Office is currently reviewing the variance submittal.

Interim Limitation: Amenable Cyanide

The interim limitation included is the same limitation included in the previous permit. During the interim period amenable cyanide is limited to 0.027 mg/l as a daily maximum. Amenable cyanide is to be monitored one (1) time weekly.

Final Limitations: Free Cyanide

During this period, free cyanide is limited to 0.01 mg/l as a monthly average and 0.019 mg/l as a daily maximum. Free cyanide is to be monitored one (1) time weekly. The final limitations are in accordance with the WLA conducted on April 10, 2007.

Chloride

The WLA conducted on April 10, 2007 by this Office's Permits Technical Support Section staff included a Reasonable Potential to Exceed (RPE) analysis for chloride. The RPE analysis concluded that the discharge from Outfall 001 has the potential to exceed the water quality criteria for chloride in the receiving water. Therefore, a permit limitation is required for chloride. As the limitation is a new requirement the permittee is eligible for a schedule of compliance and will be granted a three (3) year compliance schedule for meeting the final effluent limitations due to the nature of reducing and/or treating chlorides. During the public comment period, the permittee submitted a variance application for chloride. The schedule of compliance shall not commence until the commissioner makes a final determination on the variance submittal. This Office is currently reviewing the variance submittal.

Interim Requirements:

During the interim period when the three (3) year schedule of compliance is in effect the permittee is required to monitor and report chloride one (1) time weekly as a daily maximum and as a monthly average.

Final Limitations:

After the three (3) year schedule of compliance or when the permittee is capable of complying with the final limitations, whichever occurs first, the final limitations will become effective. When the final limitations become effective, the permittee shall meet a monthly average chloride

limitation of 201 mg/l and a daily maximum limitation of 404 mg/l. The permittee is required to monitor chloride one (1) time weekly.

Fluoride and Sulfate

The WLA conducted on April 10, 2007 by this Office's Permits Technical Support Section staff included a RPE analysis for fluoride and sulfate. The result of the analysis concluded that these parameters did not have the potential to exceed the water quality criteria for either of these parameters. Therefore, no limitations are being included in the permit. However, the permittee is required to monitor these parameters two (2) times monthly for additional data collection so that this Office can make appropriate future permitting decisions regarding these parameters.

Total Dissolved Solids

Total dissolved solids are to be monitored two (2) times monthly in the wastewater influent and effluent. This is the same requirement contained in the previous NPDES permit.

Effluent Limitations and Rationale for Belmont AWT Plant's Outfall 006

The effluent limitations proposed herein are based on NPDES regulations, State of Indiana Water Quality Standards, Wasteload Allocation Analyses (WLA) performed by this Office's Permits Technical Support Section staff on October 28, 1996, June 14, 2001, and April 10, 2007, and the facility's previous NPDES. Monitoring frequencies are based upon facility size, type, and past compliance.

The parameters to be limited and/or monitored during the permit period include: Flow, 5-Day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia-nitrogen, pH, Dissolved Oxygen, Total Residual Chlorine (TRC), *Escherichia coli* (*E. coli*), Arsenic, Cyanide, Mercury, Chloride, Fluoride, Sulfate, Total Dissolved Solids, Cadmium, Chromium, Copper, Lead, Nickel, Zinc, and Whole Effluent Toxicity.

The summer monitoring period runs from May 1 through November 30 of each year. The winter monitoring period runs from December 1 through April 30 of each year.

Final Effluent Limitations

Flow

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

CBOD₅

CBOD₅ is limited to 10 mg/l (12,518 lbs/day) as a monthly average and 15 mg/l (18,776 lbs/day) as a weekly average during the summer monitoring period. CBOD₅ is limited to 20 mg/l (25,035

lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 30 mg/l (37,553 lbs/day) as a weekly average during the winter monitoring period. Monitoring is to be conducted daily by 24-hour composite sampling. The CBOD₅ concentration limitations included in this permit are the same limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on October 28, 1996.

TSS

TSS is limited to 10 mg/l (12,518 lbs/day) as a monthly average and 15 mg/l (18,776 lbs/day) as a weekly average during the summer monitoring period. TSS is limited to 20 mg/l (25,035 lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 30 mg/l (37,553 lbs/day) as a weekly average during the winter monitoring period. Monitoring is to be conducted daily by 24-hour composite sampling. The TSS concentration limitations included in this permit are the same limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on October 28, 1996.

Ammonia-nitrogen

Ammonia-nitrogen is limited to 3.0 mg/l (3,129 lbs/day) as a monthly average and 4.5 mg/l (4,694 lbs/day) as a weekly average during the summer monitoring period. Ammonia-nitrogen is limited to 5.9 mg/l (6,154 lbs/day) as a monthly average and 8.9 mg/l (9,284 lbs/day) as a weekly average. Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen limitations included in this permit are the same concentration limitations found in the facility's previous permit and reflect the WLA performed by this Office's Permits Technical Support Section staff on June 14, 2001.

pH

The pH limitations are 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 limitations contained in the facility's previous permit.

Dissolved Oxygen

Dissolved oxygen shall not fall below 8.0 mg/l as a daily minimum average during the summer monitoring period. Dissolved oxygen shall not fall below 6.0 mg/l as a daily minimum average. Dissolved oxygen measurements must be based on the average of twelve (12) grab samples taken within a 24-hr. period and is to be monitored daily. These dissolved oxygen limitations are the same limitations found in the facility's previous permit and are in accordance with the WLA conducted on October 28, 1996.

TRC

Disinfection of the effluent is required from April 1 through October 31, annually. Effluent dechlorination is required in order to protect aquatic life. In accordance with Indiana Water Quality Standards; final effluent limits 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 Quantification of 0.06 mg/l. TRC shall be measured daily by grab sample. The TRC limitations included in this permit are the same limitations found in the facility's previous permit and are in accordance with the WLA conducted on October 28, 1996.

The permittee is changing its method of disinfection from chlorination to ozonation, but will retain the chlorination system as a back-up. Therefore, the TRC limitations will be maintained in the permit. However, if chlorination is not used during any reporting period the permittee is to report 'not required' on the monthly discharge monitoring report. However, if chlorination is used, then the applicable monitoring requirements and effluent limitations shall apply to the discharge.

E. coli

The *E. coli* limitations in the previous permits were stayed by order of the Office of Environmental Adjudication and never became effective limitations.

Indiana water quality standards for *E. coli* are applicable April 1 through October 31. The permit contains both interim and final limitations along with a schedule of compliance (24 months) to meet the final limitations. The schedule of compliance is being granted due to a switch in disinfection methods from chlorination to ozonation. Refer to Part I.D of the permit.

Interim Limitations:

During this period, *E. coli* is limited to 125 col/100 mL as a monthly average. The monthly average *E. coli* values shall be calculated as a geometric mean. The daily maximum limit of 235 col/100 mL is deferred until the limit can be met or when the schedule of compliance period ends, whichever occurs first. *E. coli* must be measured daily by grab sample. The daily maximum *E. coli* result shall be reported during this period.

Final Limitations:

During this period, *E. coli* is limited to 235 col/100 mL as a daily maximum and 125 col/100 mL as a monthly average. The monthly average *E. coli* values shall be calculated as a geometric mean. *E. coli* must be measured daily by grab sample. The *E. coli* limitations included in this permit are identical to the limitations contained in the facility's previous permit and are being retained in accordance with 327 IAC 5-2-10(11) and 327 IAC 5-10-6(d).

Mercury

The previous permits contained limitations for mercury. However, the WLA conducted on April 10, 2007 included a reasonable potential to exceed (RPE) analysis which concluded that the

discharge did not have a reasonable potential to exceed the water quality criteria for mercury in the receiving water. Therefore, the limitations have been removed from the permit. The permit requires that mercury sampling (influent and effluent) be conducted two (2) times annually for the term of the permit as a report only requirement so that this Office has data to make future permitting decisions dealing with mercury.

Cyanide

The previous permit contained interim amenable cyanide limitations and final total cyanide limitations; however, the final limits were stayed by order of the Office of Environmental Adjudication and never became effective limitations. Please note that the final limitations were a measure of the total cyanide in the discharge as the water quality criterion was represented as total cyanide at the time of the permit issuance. The water quality criteria for cyanide is currently represented as free cyanide, this includes the West Fork of the White River site-specific criteria for cyanide applicable to Belmont and Southport. As the final limitations for cyanide never became effective and the water quality criterion for cyanide has changed since the last permit was issued; the permittee is eligible for a schedule of compliance to meet the new water quality based effluent limits for free cyanide. Refer to Part I.D of the permit for information pertaining to the three (3) year compliance schedule for free cyanide. During the public comment period, the permittee submitted a variance application for free cyanide. The schedule of compliance shall not commence until the commissioner makes a final determination on the variance submittal. This Office is currently reviewing the variance submittal.

Interim Limitation: Amenable Cyanide

The interim limitation included is the same limitation included in the previous permit. During the interim period amenable cyanide is limited to 0.027 mg/l as a daily maximum. Amenable cyanide is to be monitored one (1) time weekly.

Final Limitations: Free Cyanide

During this period free cyanide is limited to 0.01 mg/l as a monthly average and 0.019 mg/l as a daily maximum. Free cyanide is to be monitored one (1) time weekly. The final limitations are in accordance with the WLA conducted on April 10, 2007.

Chloride

The WLA conducted on April 10, 2007 by this Office's Permits Technical Support Section staff included a Reasonable Potential to Exceed (RPE) analysis for chloride. The RPE analysis concluded that the discharges from Outfall 006 have the potential to exceed the water quality criteria for chloride in the receiving water. Therefore, a permit limitation is required for chloride. As the limitation is a new requirement the permittee is eligible for a schedule of compliance and will be granted a three (3) year compliance schedule for meeting the final effluent limitations due to the nature of reducing and/or treating chlorides. During the public comment period, the permittee submitted a variance application for chloride. The schedule of compliance shall not commence until the commissioner makes a final determination on the variance submittal. This Office is currently reviewing the variance submittal.

Interim Requirements:

During the interim period when the three (3) year schedule of compliance is in effect, the permittee is required to monitor and report chloride in the wastewater influent and effluent one (1) time weekly as a daily maximum and as a monthly average.

Final Limitations:

After the three (3) year schedule of compliance or when the permittee can meet the final limitations, whichever occurs first, the final limitations will become effective. When the final limitations become effective the permittee shall meet a monthly average chloride limitation of 201 mg/l and a daily maximum limitation of 404 mg/l. The permittee is required to monitor wastewater influent and effluent chloride one (1) time weekly.

Fluoride and Sulfate

The WLA conducted on April 10, 2007 by this Office's Permits Technical Support Section staff included a RPE analysis for fluoride and sulfate. The result of the analysis concluded that these parameters did not have the potential to exceed the water quality criteria for either of these parameters. Therefore, no limitations are being included in the permit. However, the permittee is required to monitor these parameters two (2) times monthly for additional data collection so that this Office can make appropriate future permitting decisions regarding these parameters.

Total Dissolved Solids

Total dissolved solids are to be monitored two (2) times monthly in the wastewater influent and effluent. This is the same requirement contained in the previous NPDES permit.

Other Non-Conventional Parameters for Outfalls 001 & 006

Due to the significant amount of industrial wastewater received by the facilities, monitoring of specific metals is being required in the permit. The wastewater influent and effluent of both AWT Plants are to be monitored and reported two (2) times monthly for arsenic, cadmium, chromium, copper, lead, nickel, and zinc. This data will be used in future permitting actions to determine if additional monitoring and/or limitations are warranted to protect waters of the state.

The previous NPDES permit contained limitations for cadmium. During the permit renewal process a WLA and Reasonable Potential to Exceed (RPE) Analysis was conducted. The result of the WLA/RPE Analysis conducted by this Office's Permits Technical Support Section staff on April 10, 2007, concluded that cadmium discharged from Outfall 001 and 006 did not show RPE the State of Indiana Water Quality Standards in the receiving waterway. Since no RPE existed for cadmium; no limits were included in the renewal permit. However, due to the significant amount of industrial contribution to the WWTP, monitoring of the wastewater influent and effluent is being required. Additionally, a reopening clause is being included in Part I.C of the renewal permit to include additional monitoring and limitations for arsenic, cadmium, chromium, copper, fluoride, lead, mercury, nickel, sulfate, and zinc if it is determined that such monitoring and limitations are required to ensure that the receiving waterway is protected.

Whole Effluent Toxicity Testing

The permittee shall conduct the whole effluent toxicity tests described in Part I.E of the permit to monitor the toxicity of the discharge from Outfall 001 & 006. This toxicity testing is to be conducted two (2) times annually for the duration of the permit.

Chronic toxicity will be demonstrated if the no observed effect level (NOEL) is less than 92% in-stream waste concentration (IWC) for *Ceriodaphnia dubia* and *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.E.2 of the permit.

The IWC determination of chronic toxicity of 92 % was developed by the use of the following formula:

$$IWC = \frac{Q_e}{Q_e + 1/4(Q_{7,10})}$$

Q_e = Facility Effluent Flow

Storm Water Discharges from the Southport AWT Plant Storm Water Retention Basin

The Southport AWT Plant is subject to 327 IAC 15-6, commonly referred to Rule 6. These requirements were included in the previous permit and will be retained in the permit renewal.

Discharges from the stormwater retention basin are directed through the main plant outfall, Outfall 001. When a discharge from the retention basin occurs the permittee is required to monitor and sample via a grab sample the following parameters: TSS, pH, Oil & Grease, CBOD₅, COD, Total Kjeldahl Nitrogen, Nitrate plus Nitrite Nitrogen, and Total Phosphorus. Flow is to be reported as an estimated total. Samples must be taken within the first thirty minutes of discharge from the retention basin after initiation of a storm event.

Additionally, within 90 days of the effective date of the permit, the permittee shall review and modify as necessary, the Storm Water Pollution Prevention Plan (SWPPP) previously developed using the procedures outlined in 327 IAC 15-6-7 for the storm water runoff from the wastewater treatment plant site. The updated SWPPP shall be retained on-site at the Southport AWT facility.

Wet Weather Outfalls 005 and 305

The permittee plans to use Outfall 005 when the flow from the TF/SC process exceeds the capacity (150 MGD) of the ONS process at the Belmont AWT Plant. Due to the infrequent nature of the discharges from Outfall 005, it is proposed to have two (2) monitoring locations to determine compliance with the NPDES permit for the wet weather discharges from the TF/SC

process. Outfall 005 shall be the monitoring point that is representative of the actual discharge which bypasses the ONS process. Outfall 305 shall be the internal monitoring point that is representative of the daily flows through the TF/SC process, regardless of whether those flows result in further treatment through the ONS process or result in discharges through Outfall 005 (to the West Fork of the White River).

Outfall 005 is located at Lat 39° 43' 34.18", Long 86°11' 25.40"

Outfall 305 is located at Lat 39° 43' 30.55", Long 86°11' 32.72"

The following parameters shall be monitored and/or limited at Outfall 005: stream flow, effluent flow, influent flow, CBOD₅, TSS, ammonia-nitrogen, pH, TRC, *E. coli*, stream/effluent dilution ratio, dissolved oxygen, cadmium, copper, free cyanide, lead, mercury, nickel, and zinc. Monitoring (only) shall be required for all of these parameters except for pH, TRC, and *E. coli*. All parameters related to flow, CBOD₅, TSS, pH, TRC, *E. coli* and ammonia-nitrogen shall be monitored daily during periods of discharge. The permittee shall use the Morris Street USGS Gauging Station – Gage No. 03353000 for monitoring the stream flow. Metals and free cyanide shall be monitored on a quarterly basis. The pH shall be no less than 6.0 standard units and no greater than 9.0 standard units. *E. coli* is limited 125 col/100mL monthly average calculated as a geometric mean and 235 col/100mL daily maximum during the recreational season of April 1 through October 31, annually. For any calendar month in which there are less than five (5) total discharge events, the monthly average value is not required to be reported on the Discharge Monitoring Report (DMR) form.

TRC is limited to 0.01 mg/l monthly average and 0.02 daily maximum. Since these limits are less than the LOQ value for TRC, compliance with these limits will be demonstrated as long as the values are less than the LOQ value of 0.06 mg/l.

Additionally, discharges from Outfall 005 are restricted to those times when the flow rates through the ONS process exceed 150 MGD and when there has been a precipitation event of at least 0.10 inches.

The following parameters shall be monitored and/or limited at Outfall 305: effluent flow, CBOD₅, TSS, ammonia-nitrogen, dissolved oxygen, and pH. All parameters shall be monitored on a daily basis. CBOD₅ is limited to 25 mg/l monthly average and 40 mg/l weekly average. TSS is limited to 30 mg/l monthly average and 45 mg/l weekly average. Dissolved oxygen and ammonia-nitrogen shall be monitored and reported. The pH shall be no less than 6.0 standard units and no greater than 9.0 standard units. The effluent limitations are in accordance with the federal secondary treatment requirements set forth in 327 IAC 5-5-3 and 40 CFR 133.102. Sampling for CBOD₅, TSS, and ammonia-nitrogen shall be conducted as 24-hour composite samples. The percent removal for the monthly average CBOD₅ and TSS shall also be monitored and reported. Monitoring for pH and dissolved oxygen shall be via grab sample.

Reopening Clauses

Eleven reopening clauses were incorporated into the Part I.C of the renewal 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 ensure compliance with applicable effluent limits or standards of the Clean Water Act; a fourth clause is to include limitations for whole effluent toxicity, if deemed necessary; a fifth clause is to include a case-specific MDL; a sixth clause to include limitations and additional requirements for specific pollutants, if deemed necessary; a seventh clause to include or modify any limitation to reflect a change in Indiana water quality standards; an eighth clause to include requirements and/or limitations for endocrine disruption, if an EPA approved analytical protocol is developed; a ninth clause to include a revised limitation for cyanide and/or chloride due to a IDEM and EPA approved variance; a tenth clause to include effluent limitations for arsenic, cadmium, chromium, copper, fluoride, mercury, nickel, lead, sulfate and/or zinc, if deemed necessary; and an eleventh clause to include alternate ammonia-nitrogen limitations if the ozonation disinfection system is not timely constructed and utilized.

Compliance Status

The permittee is subject to a Federal Consent Decree dated October 5, 2006. Information pertaining to the Federal Consent Decree can be obtained by contacting EPA Region 5.

Backsliding

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

Expiration Date

A five-year NPDES permit is proposed.

Drafted by: Jason House
June 2007

Updated by: Jason House
December 2007

POST PUBLIC NOTICE ADDENDUM: November 2007

The draft NPDES permit renewal for the City of Indianapolis' Belmont and Southport Advanced Wastewater Treatment Plants was made available for public comment from September 13 through November 15, 2007 as part of Public Notice No. 2007-9B-RD. During this comment period, a comment letter dated October 13, 2007, from Mr. Glenn Pratt was received as well as a comment letter from the City of Indianapolis dated November 15, 2007 and a subsequent follow-up comment letter submitted on December 7, 2007. The comments submitted by Mr. Pratt, the City of Indianapolis, and this Office's corresponding responses are summarized below. Any changes to the permit and/or fact sheet are so noted below.

Comments provided by Mr. Glenn Pratt:

Comment 1: The City is to be complimented for returning to ozonation vs. chlorination as their primary method of final disinfection. While adequately providing disinfection, of major importance is that ozonation should provide significant control of "endocrine disruptors", materials which cause intersex development of fish and perhaps other aquatic or terrestrial life. To be able to measure the success of this anticipated reduction, a permit requirement needs to be added to require effluent testing before and after the installation of ozone treatment.

Response 1: The State of Indiana does not have any water quality standards for endocrine disruptors. Additionally, there is not an EPA approved analytical protocol for the measurement of endocrine disrupting agents. Therefore, accurately assessing the success or lack of success of ozonation to reduce those disruption agents is not possible at this time. However, this Office has included a reopening clause to place additional requirements, if warranted for endocrine disruptors when analytical protocols are developed by EPA (please refer to the reopening clause 8 in Part I.C of the permit).

Comment 2: The NPDES program requires that new permits implement "Best Available Treatment" controls and programs. An increasing concern is of the quantity of medications that pass thru the treatment system and impact uses of the receiving waters. Therefore, a permit requirement needs to be added to the permit that establishes a medication reduction program via collection of unused medications that are presently flushed down the sewers.

Response 2: The State of Indiana does not have the regulatory authority to require a medication reduction program. No changes are being made to the permit due to this comment.

Comment 3: In large part because of my suggestion the previous permit required an evaluation of mercury as to significant sources and the fate of the mercury. This study has never been adequately completed. It is believed that while the plant discharge meets water quality requirements, this is only because the mercury is concentrated in the plant sludge which is then incinerated. Trading a water pollutant for an air pollutant which ends up back in the water is not an acceptable resolution. The evaluation of previous potential significant sources from industry, educational facilities, hospitals, etc needs to be completed and required in the permit. Also, as has been accomplished in other municipalities, the City needs to enact requirements for dental facilities to recover mercury and eliminate this easily controllable mercury source. This would represent "Best Available Treatment."

Response 3: This permit regulates the discharge from the treatment facilities, not air pollution sources. This Office conducted an RPE analysis on mercury being discharged from the facilities and found that the discharge did not have the potential to exceed the water quality criteria in the receiving waters. Therefore, no additional requirements, other than continued monitoring of mercury will be required in this permit. No changes are being made to the NPDES permit in regard to this comment.

Comment 4: The largest omission in the draft permit is the essential requirement to address the raw sewage discharged from failing septic systems in a number of City neighborhoods. This situation is far more significant of a human health hazard to children in the City than the discharges of combined sewer overflows. In recent years, the bacterial levels from human sources in Pogue's Run, Bean Creek, Buck Creek and other neighborhood waters where children regularly play were an order of magnitude higher than the values found in Fall Creek and the White River. These highly enriched effluents also serve as an ideal breeding ground for mosquitoes which are the source of West Nile Virus. The City did not carry out its fiduciary responsibility when it allowed these systems to be installed without required state soil suitability testing. Also, in establishing their Septic Tank Elimination Program (STEP) the City has further placed itself as the controlling agent in eliminating this significant human health problem. After significant public pressure, the City has started to implement a significant sewer construction program to address the issue. However, there is presently no enforceable requirement to assure that the needed work is completed and that it is expedited. We presently only have a statement that the City will complete the work within twenty years. The completion of this critical work to address the present human health situation can easily be completed within four to five years since bonding is available and the fees the City now requires for all new connections is more than adequate to cover anticipated costs. Therefore, a requirement for elimination of this significant human source in four to five years needs to be included in this proposed permit. In the alternative, IDEM must issue, in parallel, a separate NPDES permit that establishes the needed septic tank elimination control program.

Response 4: This NPDES permit is meant to regulate the discharge quality, operation, and maintenance of the Belmont and Southport AWT Plants. As stated, the City of Indianapolis is taking steps to eliminate septic systems within its jurisdiction. The elimination of septic systems is not within the framework of this NPDES permit action. Therefore, no changes will be made to the NPDES permit due to this comment.

Comments provided by the City of Indianapolis on November 15, 2007:

PART I – A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Comment 1: The Draft NPDES Permit contains new, more stringent effluent limitations for *E. coli*, cyanide and chloride. (See Part I.A.1 Table 2; Part I.A.2 Table 4; Part I.A.3 Table 6.) With respect to *E. coli*, the City supports the pending Water Pollution Control Board rulemaking relating to the compliance methodology. As IDEM is aware, occasional exceedences of the single sample maximum do not indicate inadequate wastewater disinfection as part of the treatment processes. Consistent with the NPDES permit, the City is installing equipment to switch to ozonation rather than chemical disinfection for the current design capacity at the Belmont and Southport facilities. However, even ozonation will not prevent all exceedences of the single sample maximum because such exceedences are inherent in the process of sampling and analysis of individual bacteriological samples.

For the purpose of determining compliance with NPDES permits, the City supports IDEM's draft rule language basing compliance with wastewater effluent limitations upon no more than 10 percent of the discharge samples during a 30-day period exceeding the 235 cfu/100 mL. It is the City's understanding that if the rule is adopted and becomes effective as currently drafted, the rule will apply to the city's NPDES Permit without the need for a permit modification. The city suggests that this be reflected in the Fact Sheet.

Response 1: The referenced rulemaking has not been finalized and adopted, as of the preparation of this Post Public Notice Addendum. Since it has not been adopted this Office cannot make reference to the proposed rule in the NPDES permit or the associated fact sheet. No changes have been made to the NPDES permit or fact sheet due to this comment.

Comment 2: For cyanide and chloride, the city has determined that compliance with the new limitations will cause an undue burden or hardship upon the City. Therefore, the city hereby submits its applications for variances pursuant to IC 13-14-8-9, 327 IAC 2-1-8.8 and in accordance with 327 IAC 5-3-4.1. (See enclosures.) The city requests that these variance applications be appropriately referenced in the NPDES Permit, including adding chloride to the paragraph numbered 9 on page 31 (see Part I.C. – REOPENING CLAUSES). The city requests that paragraph 9 be modified as follows:

This permit may be modified or, alternatively, revoked and reissued, after public notice and opportunity for hearing to incorporate revised effluent limits relating to the permittee's submission of a complete application for and subsequent IDEM and U.S. EPA approval of a variance from the water quality criteria for cyanide and/or chloride.

The city also has specific comments related to the cyanide and chloride effluent limitations, as well as a minor comment regarding mercury effluent monitoring.

Response 2: As noted, this Office received two variance applications from the permittee (free cyanide and chloride). These applications are currently being processed by this Office.

The requested change to paragraph 9 (Part I.C. – REOPENING CLAUSES) has been made to the NPDES permit and is noted in the fact sheet. Additionally, the appropriate references to the variance applications have been included in footnote [18] of the permit.

Comment 3: Cyanide

With respect to cyanide, the city requests clarification and correction to the “name” of the “cyanide” to be monitored and limited and the analytical method to be used for monitoring. As presented on pages 14 and 18 of the draft Fact Sheet, the final treated discharges from Southport and Belmont are currently subject to discharge limits for “amenable cyanide.” These discharge limits are the ones in effect for Southport and Belmont. Compliance monitoring with the amenable cyanide daily maximum limit of 27 µg/L is conducted weekly using the USEPA-approved test method that measures the quantity of cyanide amenable to chlorination (or CATC). The USEPA-approved amenable cyanide test method is Standard Methods 4500-CN⁻G (Cyanides Amenable to Chlorination after Distillation). Within this CATC method is recognition of the difficulties in application of the CATC method to treated wastewaters due to various matrix interferences. Specifically:

For samples containing significant quantities of iron cyanides, it is possible that the second distillation will give a higher value for CN⁻ than the test for total cyanide, leading to a negative result. When the difference is within the precision limits of the method, report “no determinable quantities of cyanide amenable to chlorination.” If the difference is greater than the precision limit, ascertain the cause such as interferences, manipulation of procedure, etc., or use Method I.

Standard Methods; Method 4500-CN⁻G.

Method 4500-CN^I measures the weak acid dissociable cyanide of WAD cyanide.

The current amenable cyanide limit that is applicable to Southport and Belmont is based on historical performance (i.e., statistical analysis of the CATC discharge monitoring data from the 1980s) and has been carried over since the 1985 NPDES Permit for Belmont and Southport.

Response 3: The clarifications requested have been made in the NPDES permit and fact sheet. The interim limits for cyanide are now clearly represented as amenable cyanide. The final limits for cyanide have been listed as free cyanide. Please refer to Part I.A of the permit.

Comment 4: Cyanide, Amenable – Interim

a. IDEM is proposing to continue the daily maximum amenable cyanide limit until compliance can be achieved with the free cyanide water quality-based effluent limit or until three years from the effective date of the permit, whichever comes first. During this compliance schedule time period the city suggests that IDEM needs to clarify the draft Permit interim limits and interim conditions (or footnotes) as follows:

Parameter to be Monitored:	Cyanide, Amenable
Parameter Limit:	0.027 mg/L Daily Maximum
Frequency of Monitoring:	Composite, Once per Week
USEPA-Approved Test Method:	4500-CN ⁻ G

b. The Draft NPDES Permit footnote [10] should only apply to the interim limit.

c. The Draft NPDES Permit footnote [11] is not needed. The city has been monitoring amenable cyanide since the mid-1980s and has more than adequately demonstrated that sulfide levels are not present to the level of needing to grab sample and preserve to remove sulfide. A composite effluent sample can be collected, preserved to pH 12, and analyzed within 48 hrs. As these interim limits and conditions are continued from the current permits, then the current LOD of 0.005 mg/L (5.0 µg/L) and LOQ of 0.016 (16.0 µg/L) is appropriate.

Response 4: a. The interim cyanide limit is based upon amenable cyanide. The requested changes have been made to the permit.

b. This change has been made to the permit.

c. The City has adequately demonstrated that sulfide levels are not present in amounts which require grab sampling and preserving to remove sulfide. Therefore, the requested deletion has been made to the permit.

Comment 5: Cyanide, Free - Final

IDEM has determined that the effluents from Belmont and Southport have a reasonable potential to cause or contribute to an exceedence (RPE) of the in-stream free cyanide site-specific chronic criterion. The in-stream free cyanide site-specific criteria were adopted by the Indiana WPCB February 15, 2005 and approved by USEPA March 2006 as follows:

327 IAC 2-1-8.9 Site-specific modifications to criteria

(g) The following site-specific modifications to water quality criteria have been granted:
...(table edited for formatting)...

Table 8.9-1
Site-Specific Surface Water Quality Criteria (in µg/L)

Waterbody	Starting Location	Ending Location	Substances	AAC	CAC
West Fork, White River	Outfall of the Belmont POTW (River Mile 227)	Marion-Johnson County Line (River Mile 220)	Cyanide (Free)	45.8	10.7

The specific 'name' of cyanide as "Cyanide (Free)" is intentionally a different 'name' than cyanide, amenable or amenable cyanide. Indiana (and USEPA) ambient water quality criteria for the protection of aquatic life is as Cyanide (Free) as presented in 327 IAC 2-1-6(a)(3) Table 6-1.

In addition, Indiana has, for the specific name of Cyanide (Free) or free cyanide, established the test method for measuring compliance with water quality-based effluent limits based on free cyanide as presented in 327 IAC 5-2-11.1:

(e) WQBELs for cyanide, calculated from a criterion for free cyanide contained in 327 IAC 2-1, shall be limited in the permit as free cyanide and monitored in the effluent using the "Cyanides Amenable to Chlorination" (CATC) method (40 CFR 136, Method 4500-CN⁻ G) or another method approved by the commissioner. The commissioner may include additional monitoring, limitations, or other requirements in a permit, on a case-by-case basis, if the additional requirements are necessary to ensure that water quality standards will be attained.

a. IDEM is, due to the RPE result, proposing water quality-based effluent limits for free cyanide to be in effect 3 years after the permit effect date. However, IDEM needs to clarify the draft Permit final limits and final conditions (or footnotes) as follows:

Parameter to be Monitored: Cyanide, Free or Free Cyanide (IDEM choice)
 Parameter Limits: 0.019 mg/L Daily Maximum; 0.010 mg/L
 Monthly Average
 Frequency of Monitoring: Composite, Once per Week
 USEPA-Approved Test Method: 4500-CN⁻G

b. The Draft NPDES Permit footnote [10] should only apply to the interim limit and should not apply to the final limit for Cyanide, Free. A new footnote for the final limit should be: "The final Cyanide, Free limits are based on free cyanide".

c. The Draft NPDES Permit footnote [11] is not needed. The city has been monitoring amenable cyanide since the mid-1980's and has more than adequately demonstrated that sulfide levels are not present to the level of needing to grab sample and preserve to remove sulfide. A composite effluent sample can be collected, preserved to pH 12, and analyzed within 48 hrs.

d. The draft Permit footnote [12] should be corrected as follows:

The water quality-based monthly average effluent limitation for Cyanide, Free is less than the limit of quantitation (LOQ) as defined below. Compliance with this permit limit will be demonstrated if the observed effluent concentrations in each sample used in calculation the monthly average is less than the limit of quantitation and the observed daily maximum effluent limitation is equal to or less than the daily maximum limitation in the table.

Parameter	Test Method	LOD	LOQ
Cyanide, Free	4500-CN ⁻ G	0.005 mg/L	0.016 mg/L

e. The Draft NPDES Permit footnote [18] should also be corrected to reflect the distinct difference between the interim and final limits for cyanide. The suggested corrections are:

When reporting results in support of the interim limits for cyanide, results shall be reported as Cyanide, Amenable. When reporting results in support of the final limits for cyanide, results shall be reported as Cyanide, Free.

Parameter	Test Method	LOD	LOQ
Cyanide, Amenable	4500-CN ⁻ G	0.005 mg/L	0.016 mg/L
Cyanide, Free	4500-CN ⁻ G	0.005 mg/L	0.016 mg/L

f. The EPA Method 1677 is for Available Cyanide by Flow Injection with Ligand Exchange and is not equivalent to Method 4500- CN⁻G either in technique or form of cyanide measured. Method 1677 is not appropriate or applicable for monitoring for the interim amenable cyanide limits or for the final free cyanide limits.

Response 5: a. The final cyanide limits have been clearly noted as free cyanide. Either test method 1677 or 4500 CN-G may be used to analyze for the final free cyanide limitations as long as the associated detection and quantification levels are adequately sensitive.

b. A footnote has been added to the permit which clearly lists that the final limits for cyanide as “free”.

c. This change has been made to the permit.

d. Footnote [12] has been modified as follows:

The following test methods shall be utilized and are allowed as specified below:

<u>Parameter</u>	<u>Test Method</u>	<u>LOD</u>	<u>LOQ</u>
Cyanide, Free	1677 or 4500 CN-G	0.003 mg/l	0.0095 mg/l
Cyanide, Amenable	4500 CN-G	0.003 mg/l	0.0095 mg/l

e. Footnotes [10] and [11] now clearly define the interim (amenable cyanide) and final (free cyanide) parameters. Footnote [12] (above) defines the applicable methods.

f. Please refer to Footnote [12] (above) for clarification on the applicable and approved methods for free and amenable cyanide.

Comment 6: The Draft NPDES Permit Part I.D. Schedules of Compliance needs to be corrected to indicate the application of a compliance schedule to Free Cyanide. The corrections would include:

1. Free Cyanide

- a. ... The new effluent limits for free cyanide are deferred until ...
- b. If the permittee determines that construction and/or changes in the local limits are not required to meet the final limits for free cyanide within...
- c. Until the final limits for free cyanide become effective, the permittee...

Response 6: The schedule of compliance for free cyanide has been amended to include the designation of ‘free’ cyanide and to include language pertaining to the submittal of a variance for free cyanide.

Comment 7: Finally, pages 14 and 18 of the draft Fact Sheet also need to be corrected to mirror the corrections and clarifications to the “name” of cyanide subject to limits. Specifically:

The water quality criteria for cyanide is currently represented as free cyanide, this includes the West Fork of the White River site-specific criteria for cyanide applicable to Belmont and Southport. ... the permittee is eligible for a schedule of compliance to meet the new water quality-based effluent limit for free cyanide.

Response 7: The clarifications and corrections required to specify the 'name' of cyanide have been made to the fact sheet.

Comment 8: Cyanide, Free – Analytical Method

The effluent for Belmont and Southport has been monitored since the mid-1980s using the USEPA Method 4500-CN G (or its predecessor method). During this time period, rarely is the analytical laboratory able to achieve results for CATC that are not a negative result (i.e., CATC exceeds Total Cyanide). In addition, the differences are greater than the precision limit for the CATC method, and even after attempting to modify sample for interferences, negative results continued. Therefore, Method 4500-CN I is used to generate data to compare to the current daily maximum result of 0.027 mg/L amenable cyanide.

In addition, the Water Environment Research Foundation (WERF) has done extensive research on the problem with cyanide at municipal wastewater treatment plants [1]. The WERF project reviewed seven (7) analytical methods currently being used for analyzing for cyanide. The WERF research concluded that all seven of the analytical methods were capable of analyzing the wastewater with reasonably good accuracy and precision with some exceptions noted. The recommendation of the research project was that the most appropriate alternative to the CATC method was to measure WAD cyanide in wastewater samples.

Therefore, the city requests that IDEM, particularly for Cyanide, Free compliance monitoring, acknowledge this inconsistent performance of the CATC method and simply state draft Permit footnotes [12] and [18]:

Final limits for cyanide shall be measured and reported as
Free Cyanide, Weak Acid Dissociable (WAD) as Method
4500-CN I.

Another WERF research study [2] reviewed and updated the current scientific knowledge on the aquatic chemistry and toxicity of cyanide and new aquatic toxicity studies were conducted to fill critical data gaps. As part of that study a review of the current analytical methods was conducted. The results of that study concluded that since free cyanide is the most toxicologically relevant form of cyanide, the toxicity studies should use a reliable analytical method for free cyanide to quantify the exposure concentrations in any test solutions. The research concluded that the most representative measure of the free cyanide is by either SM 4500-C F or ASTM 4282.

[1] *Cyanide Formation and Fate in Complex Effluents and its Relation to Water Quality Criteria*; Report No. 98-HHE-5; 2003; WERF.

[2] *Scientific Review of Cyanide Ecotoxicology and Evaluation of Ambient Water Quality*; Report No. 01-ECO-1; 2007; WERF.

Since 327 IAC 5-2-11.1 provides the commissioner the ability to approve an alternative method for the analysis of "free" cyanide, IDEM can approve the use of the free cyanide method as referenced above in lieu of the CATC or WAD methods. The city respectfully requests that IDEM consider this alternative.

Response 8: This Office has determined that cyanide may be analyzed by method 4500-CN G or method 1677 provided that each method is adequately sensitive to detect and quantify free cyanide below the actual limitations. Part I.A of the permit has been amended accordingly.

Comment 9: Chloride -The City is in the process of reviewing existing data to determine site specific water quality criteria to allow for a revised wasteload allocation to derive a site-specific chloride limits for Belmont and Southport. The City will work with IDEM to ensure that any evaluations conducted are consistent with state and federal approved methodology.

With respect to chloride effluent monitoring, 40 CFR 136 lists all of the approved method for the NPDES program. Those approved methods include the following methods.

Standard Methods 4500 – Cl⁻ B; 4500-Cl⁻ C; 4500-Cl⁻ E; and 4500-Cl⁻ D.

In addition, 40 CFR Part 136, also lists EPA Methods 300.0 and 300.1 as approved methods. Unless IDEM has a reason for not allowing any of the approved methods other than 4500-Cl⁻ E to be used, the city would like to use any of the methods identified in 40 CFR Part 136.

Response 9: This Office has reviewed the applicable chloride analytical methods and agrees that any of the methods listed in 40 CFR 136 may be used to analyze for chloride, since the associated level of detection and quantification are sensitive enough for permit reporting purposes. Pages 18 and 21 of the permit have been changed to reflect this allowance.

Comment 10: Mercury - With respect to mercury effluent monitoring, the city requests that in footnote 3 on page 23 of the Draft NPDES Permit (see Part I.A.8.a) , the word "immediately" in the 3rd sentence be changed to "as soon as practicable." The city is concerned that it may take some time for laboratories to be able to use a revised test method.

Reponses 10: The requested change has been made to the NPDES permit.

PART I – E. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

Comment 11: Part I.E.1.d. (Page 33 of 77) The previous NPDES permit gave the city the ability to reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. Since the effluent from the Belmont and Southport AWT facilities have not shown any toxicity, the city requests that it be allowed to reduce the number of species after one year. This request is based on its past performance of the AWT toxicity testing and current permit requirements.

Response 11: This Office has determined that facilities with significant industrial users and delegated pretreatment programs will be required to conduct twice yearly WET testing utilizing two species. This Office has determined that the use of two species in every test is necessary in order to accurately assess the overall toxicity of the effluent because the two species have different sensitivities to particular pollutants. The requested change will not be made in the NPDES permit.

Comment 12: Part I.E.2.a. (Page 37 of 77) The Phase II and Phase III references are out of date. The updated versions are as follows:

Phase II Toxicity Identification Procedures (EPA 600R92-080), September 1993

Phase III Toxicity Confirmation Procedures (EPA 600R92-081), September 1993

Response 12: The requested updates have been made to the NPDES permit.

PART II – A. GENERAL CONDITIONS

Comment 13: Paragraphs numbered 11 (Penalties for Violation of Permit Conditions) and 12 (Penalties for Tampering or Falsification) on pages 42 and 43 of the Draft NPDES Permit refer to IC 13-30-6. This provision was repealed in 2007 (see P.L.137-2007, SEC.37). In addition, IC 35-50-3-3, also referred to in paragraph 12, seems to be incorrectly cited.

Response 13: The appropriate citations have been included, which required minor revisions to those paragraphs, in Part II.A.11. and 12.

PART II – D. ADDRESSES

Comment 14: Part I.B.3 (Reporting) requires the city to submit CSO Discharge Monitoring Reports to the Data & Information Services Section along with the Discharge Monitoring Reports and the Monthly Reports of Operation. This is consistent with the city's current practice.

Part II.D.4 requires that the CSO Discharge Monitoring Reports be sent to the Compliance Evaluation Section. The city requests clarification so that the CSO Discharge Monitoring Reports are properly submitted.

Response 14: The correct Section to submit the CSO Discharge Monitoring Reports to is the Compliance Evaluation Section. This change has been made to Part I.B.3 of the NPDES Permit.

PART III – REQUIREMENT TO OPERATE A PRETREATMENT PROGRAM

Comment 15: SIU QUARTERLY NONCOMPLIANCE REPORT (Part III.A.5)

As the "Controlling Authority" of the industrial pretreatment program, the city is required to report the compliance status of each Significant Industrial User (SIU) quarterly. This requirement is intended to capture all noncompliance events during a particular quarter. However, the reporting periods need to be modified in order to ensure that all noncompliance is reported for the appropriate quarter. For example, SIUs have until April 28th to submit the results of self-monitoring conducted during the month of March. Since March falls within the first quarter, the city would not be able to characterize all compliance events during the first quarter if the Quarterly Noncompliance Report is due to IDEM by April 28th. Therefore, the city requests that the due dates for the Quarterly Noncompliance Reports be changed from the 28th of April, July, September and January of each year to the 28th of May, August, November and February.

Response 15: The requested change has been made to the NPDES permit.

ATTACHMENT A – PRECIPITATION-RELATED COMBINED SEWER OVERFLOW AUTHORIZATION REQUIREMENTS

Comment 16: II. Monitoring and Reporting Requirements - In the 1990s, the city decided to develop a sophisticated hydraulic model of its sewer collection system to use for several purposes, including satisfying the monitoring and reporting requirements for CSO wet-weather discharges. At that time, because the city had over 130 CSO outfalls, IDEM agreed that the model was an acceptable and appropriate method to comply with CSO discharge monitoring and reporting requirements. In order to calibrate and verify the hydraulic model, the city continuously monitors permanent flow meters on at least 19 CSO outfalls for volume and duration. The city also monitors a number of other flow meters at various locations as needed and appropriate.

Consistent with IDEM's previous determination and the city's original intent, the city believes that the CSO monitoring requirements in paragraph C on page 73 of the Draft NPDES Permit are unnecessary and should not be required in light of the hydraulic model reporting requirements in paragraph A. Accordingly, the city requests that Attachment A, Part II.B and C be revised as follows:

- B. The permittee has calibrated and verified the model according to the Hydraulics Model Calibration and Verification Plan (HMCVP) submitted to IDEM August 20, 2003 and incorporated herein by reference. The permittee shall continue to implement the HMCVP to assure that the model is calibrated and verified to assure representative reporting of CSO frequency, duration, and volumes on the Model Report.
- C. The permittee shall monitor and report all CSO outfalls listed in Part I.A of this Attachment A consistent with the requirements in Part II.A of this Attachment A. All submittals under this provision shall be subject to the reporting requirements of this permit, including, but not limited to, Part II, Section C.6 ("Signatory Requirements"), Section C.7 ("Availability of Reports"), and Section C.8 ("Penalties for Falsification of Reports") of this Permit.

Response 16: The requested changes have been made to Attachment A of the NPDES permit.

Comment 17: Other Suggested Revisions

The city suggests various minor revisions to the Draft NPDES Permit to correct clerical errors and for purposes of clarification or consistency. These suggested revisions are included in the table below.

Page	Permit Provision	Reason	Draft Permit Language	Recommended Change
1	Cover Page	typo/ clarification	CITY OF INDIANAPOLIS, DEPARTMENT OF PUBLIC WORKS AND IT'S CONTRACT OPERATOR, UNITED WATER	CITY OF INDIANAPOLIS, DEPARTMENT OF PUBLIC WORKS AND ITS CONTRACT OPERATOR, UNITED WATER SERVICES INDIANA
1	Fact Sheet	clarification		Change "United Water" to "United Water Services Indiana" consistent with the above change
7	Southport AWT Plant, ¶ 1, line 1	typo		Delete "," after "Class IV"
8	Southport flow diversions, #4, line 5	typo		Insert ")" after "Outfall 002A"

8	Southport flow diversions, #8, line 4	consistency	... chlorination/dechlorination disinfection contact tanks.	Change "chlorination/dechlorination" to "effluent disinfection" to be consistent with flow diversion #7
46	Part II.B.2.b.(4)	typo		Insert "s" to "condition"
52	Part II.C.4, line 3	typo		Insert "," after "Part II.C.3"
52	Part II.C.4, line 5	typo		Insert "," after "compliance schedules"
74	Attachment A, III.A.4	consistency	The permittee shall operate the Publicly Owned Treatment Works (POTW) treatment plant ...	Change "Publicly Owned Treatment Works (POTW) treatment plant" to "AWT facilities"

Response 17: All of the listed suggested revisions have been made to the NPDES permit and this fact sheet.

Follow-Up Comments provided by the City of Indianapolis on December 7, 2007:

Comment 1: Free Cyanide and Chloride compliance schedules and final limits and pending action on pending City variance applications.

Footnotes in Part I.A

The city recommends that rather than include reference to the variance applications in footnote 18, there be a separate footnote for each (e.g., create footnote 19 and footnote 20). The city requests the following language for those new footnotes:

The City of Indianapolis has submitted an application for a variance from the water quality standard for [free cyanide] [chloride]. Accordingly, pursuant to 327 IAC 5-3-4.1, the effluent limitation for [free cyanide] [chloride] will not be issued until such time that the commissioner makes the variance determination for that substance.

If the reference stays in footnote 18, the city suggests making it a separate paragraph and the city requests the following language:

The City of Indianapolis has submitted applications for variances from the water quality standards for free cyanide and chloride. Accordingly, pursuant to 327 IAC 5-3-4.1, the effluent limitation for each of those substances will not be issued until such time that the commissioner makes the variance determination for the particular substance.

The city also requests that the following language regarding the compliance schedules for free cyanide and chloride be included as part of the footnote labeled [*] on p. 15 of the draft permit rather than be included in the compliance schedules themselves:

Because the City of Indianapolis has submitted applications for variances from the water quality standards for free cyanide and chloride, the Schedules of Compliance for free cyanide and chloride in Parts I.D. 1 and 3 will not commence unless and until the variance request for the

particular substance is denied. Until the determinations on the variance applications are made and the effluent limitations for free cyanide and chloride are issued, the permittee shall continue to evaluate whether additional control technologies or pollution prevention measures exist to comply with the applicable water quality standards or to reduce the level of those pollutants currently being discharged to the sewer system or by the AWT plants.

It is also suggested that the Fact Sheet be revised to provide the rationale for the above footnotes, explaining that the rule specifies that the permit limits aren't issued until the pending variance applications are denied or withdrawn and that issuance in this context means that the compliance schedules do not begin until final action is taken on the variance applications.

Response 1: This Office has the duty to ensure that all applicable regulations are implemented. In this case there are two regulations which must be met. First, 327 IAC 5-2-11.1 requires that pollutants which have the reasonable potential to exceed the water quality criteria in the receiving stream have water quality based effluent limitations (WQBEL) developed and placed in the discharger's NPDES permit. Second, 327 IAC 5-3-4.1 contains a provision for permit limitations for a substance that is under a variance request review. This provision provides that current limitations from the previous permit will remain in effect during the consideration of the variance request. To ensure that both regulations are implemented, this Office proposes the inclusion of the WQBEL for both free cyanide and chloride (327 IAC 5-2-11.1) and proposes that the schedules of compliance for these two parameters not commence until this Office makes a final determination on the variance applications (327 IAC 5-3-4.1). This Office has amended the language in the schedules of compliance in Part I.D of the permit to clarify.

Comment 2: Chlorides test methods – the following is suggested language such that any EPA approved test method may be used.

This Table would replace the Table in Footnote [19] and Footnote [2] for Table 10 in Part I.A of the permit.

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD,</u> <u>mg/L</u>	<u>LOQ,</u> <u>mg/L</u>
Arsenic	3113 B	0.001	0.0032
Cadmium	3113 B	0.0001	0.0003
Chloride	*	1.0	3.2
Chromium	3111C or 3113B	0.002	0.006
Copper	3113 B	0.001	0.003
Cyanide, Free	1677 or 4500 CN-G	0.003	0.0095
Cyanide, Amenable	4500 CN-G	0.003	0.0095
Fluoride	4500 F-E	0.016	0.050
Lead	3113 B	0.001	0.003

Nickel	3113 B	0.001	0.003
Sulfate	375.2, Revision 2.0	3.0	9.54
TDS	160.1 or 2540C	10.0	31.8
Zinc	200.7, Revision 4.4	0.002	0.006

* The permittee may use any method listed in the latest version of 40 CFR Part 136 provided that the method has a LOD less than or equal to the LOD listed above.

Response 2: The requested changes to Footnote [19] have been made to the permit. Footnote [2] for Table 10 in Part I.A of the permit has been changed, with the exception of listing amenable cyanide. Table 10 requires cyanide to be monitored and reported as free cyanide.

Comment 3: Cyanide test method

The City's position remains that Method 4500 CN-G/I is the appropriate test for free cyanide for compliance purposes with the free cyanide water quality-based effluent limit. The City understands that IDEM is concerned with assuring analytical reliability in determining compliance with the 10 µg/L free cyanide monthly average limit, hence the analytical LOQ needs to be 10 µg/L or less.

Therefore, the City of Indianapolis commits to contracting with an analytical laboratory capable of demonstrating, as per 40 CFR 136 Appendix B, that their performance of Method 4500-CN-G and 4500-CN-I will consistently result in an LOD of 3 µg/L or less or a LOQ of less than 9.9 µg/L. The City believes this is achievable and recognizes that IDEM has approved Method 4500-CN-I for free cyanide with a LOD of 1.0 µg/L and a LOQ of 3.2 µg/L for NPDES IN0000281 (page 66d). Therefore, the City requests that for compliance monitoring for the final free cyanide limits Method 4500-CN-G with a LOD of 3 µg/L and LOQ of 9.5 µg/L be cited in the Permit (will change Footnote [12], Footnote [18] in Part I.A, and Footnote [2] of Part I.A, Table 10).

The Fact Sheet should be revised accordingly. The City recommends that language indicating that IDEM is making a determination to approve Method 1677 be removed as unnecessary. Instead, IDEM may add language in the permit to ensure that the City provides certification of the above LOD and LOQ in its use of 4500-CN-G.

Response 3: The permittee may use either method 4500 CN-G or method 1677 provided that the level of detection and quantification is below the applicable permit limitation. Changes to Part I.A of the permit allow for the use the both methods and list the LOD as 0.003 mg/l and LOQ as 0.0095 mg/l. The Fact Sheet has been modified to reflect this change.

Comment 4: Clarify, in Part II.B.3 on p.24, the reference to Attachment A such that it's clear we're relying upon the DMRs from the modeling:

3. Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report and the Monthly Report of Operation. **The Permittee must submit the CSO Hydraulic Model Report as described in Attachment A.II.A to the Compliance Evaluation Section.** The Permittee shall also complete and submit the Indiana Monthly Monitoring Report Form (MMR-State Form 30530) or an equivalent form to report their influent and/or effluent data for metals and other toxics. All reports, with the exception of the CSO Discharge Monitoring Reports, shall be mailed to IDEM, Office of Water Quality, Data & Information Services Section, 100 N. Senate Ave. Mail Code 65-42, Indianapolis, Indiana 46204. 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.

Response 4: The requested language (highlighted) has been added to Part I.B of the permit.

Additional Changes/Revisions - An additional requirement was added to in Part II.A (No. 17) of the permit. The addition specifies that each facility is liable for the payment of annual fees in accordance with Indiana Code. Additionally, Part I.A of the permit was modified to correct units of measurements listed in the analytical method tables to be consistent with the reporting requirements. A minor change was made to footnote [18] and a footnote [19] in Part I.A of the permit. Footnote [18] now solely pertains to chloride and cyanide to explain that the variance submittals were received for these parameters. Other various typographical errors were corrected throughout the permit.

The changes made to the permit are not considered to be substantial, and will not require additional public notice.

Drafted by: Jason House
December 2007

**STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

PUBLIC NOTICE NO. 2007 – 12H- F

DATE OF NOTICE: DECEMBER 26, 2007

The Office of Water Quality issues the following NPDES FINAL PERMIT.

MAJOR –RENEWAL

CITY OF INDIANAPOLIS – BELMONT & SOUTHPORT AWT PLANTS, proposed to combine under Permit No. IN0023183, MARION COUNTY, 2700 S Belmont Av and 3800 W Southport Rd, respectively, Indianapolis, IN. These municipal facilities discharge 125 & 120 million gallons per day, respectively, of sanitary, industrial and combined sewer wastewater into the West Fork of the White River. Permit Writer: Jason House at 317/233-0470.

APPEAL PROCEDURES FOR FINAL PERMITS

Regarding your rights and responsibilities pertaining to the Public Notice process and timeframes, please refer to IDEM websites: http://www.in.gov/idem/permits/water/wastewater/public_notice/appeal.html and http://www.in.gov/idem/your_environment/community_involvement/publicparticipation/index.html.

The Final Permit is available for review & copies at IDEM, Indiana Government Center, North Bldg, 100 N Senate Ave, Indianapolis, IN, Rm 1203, Office of Water Quality/NPDES Permit Section, from 9 – 4, M - F (copies 10¢ per page). The Final Permit is also available at the local County Health Department. Please tell others you think would be interested in this matter.

Appeal Procedure: Any person affected by the issuance of the Final Permit may appeal by filing a Petition for Administrative Review with the Office of Environmental Adjudication within eighteen (18) days of the date of this Public Notice. Any appeal request must be filed in accordance with IC 4-21.5-3-7 and must include facts demonstrating that the party requesting appeal is the applicant; a person aggrieved or adversely affected or is otherwise entitled to review by law.

Timely filing: The Petition for Administrative Review must be received by the Office of Environmental Adjudication (OEA) within 18 days of the date of this Public Notice; either by U.S. Mail postmark or by private carrier with dated receipt. This Petition for Administrative Review represents a request for an Adjudicatory Hearing, therefore must:

- state the name and address of the person making the request;
- identify the interest of the person making the request;
- identify any persons represented by the person making the request;
- state specifically the reasons for the request;
- state specifically the issues proposed for consideration at the hearing;
- identify the Final Permit Rule terms and conditions which, in the judgment of the person making the request, would be appropriate to satisfy the requirements of the law governing this NPDES Permit rule.

If the person filing the Petition for Administrative Review desires any part of the NPDES Final Permit Rule to be stayed pending the outcome of the appeal, a Petition for Stay must be included in the appeal request, identifying those parts to be stayed. Both Petitions shall be mailed or delivered to the address here:
Phone: 317/232-8591.

Environmental Law Judge
Office of Environmental Adjudication
IGC – North Building- Rm 1049
100 N. Senate Avenue
Indianapolis IN 46204

Stay Time frame: If the Petition (s) is filed within eighteen (18) days of the mailing of this Public Notice, the effective date of any part of the permit, within the scope of the Petition for Stay is suspended for fifteen (15) days. The Permit will become effective again upon expiration of the fifteen (15) days, unless or until an Environmental Law Judge stays the permit action in whole or in part.

Hearing Notification: Pursuant to Indiana Code, when a written request is submitted, the OEA will provide the petitioner or any person wanting notification, with the Notice of pre-hearing conferences, preliminary hearings, hearing stays or orders disposing of the Petition for Administrative Review. Petition for Administrative Review must be filed in compliance with the procedures and time frames outlined above. Procedural or scheduling questions should be directed to the OEA at the phone listed above.