# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEN

We Protect Hoosiers and Our Environment.

Michael R. Pence Governor

Thomas W. Easterly Commissioner

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

May 23, 2013

## VIA ELECTRONIC MAIL

Ms. Cheryl Carlson, Manager, Environmental Compliance Citizens Energy Group 2700 South Belmont Avenue Indianapolis, Indiana 46221

Dear Ms. Carlson:

Re:

Correction to NPDES Permit No. IN0023183 Belmont and Southport Advanced Wastewater

**Treatment Plants** Marion County

A final NPDES permit for the Belmont and Southport Advanced Wastewater Treatment Plants was sent to your attention on May 8, 2013. It was discovered that a correction to Page 60 of 61 of this permit is necessary to correct a reference error in the Attachment A to the NPDES permit. Enclosed is revised Page 60 of 61 that is to replace the corresponding page in the final permit. The effective date shall remain June 1, 2013. This Office regrets any inconvenience this may pose. If you have any questions concerning your NPDES permit, please contact Jason House at 317/233-0470.

Sincerely,

Nerry Dittmer, Chief

Municipal NPDES Permit Section

Office of Water Quality

#### Enclosures

cc:

Marion County Health Department

Peter Corsaro, Certified Operator

Ann McIver & James Dillard, Citizens Energy Group

Jodie Opie, Janet Pellegrini & Patrick Kuefler, U.S. EPA, Region 5

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 Data 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:
  - 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.
  - 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.





Michael R. Pence Governor

Thomas W. Easterly Commissioner

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

## VIA ELECTRONIC MAIL

May 8, 2013

Mr. Lindsay Lindgren, Vice President, Water Operations Citizens Energy Group 2020 N. Meridian Street Indianapolis, Indiana 46202

Dear Mr. Lindgren:

Re: Final NPDES Permit No. IN0023183 Belmont & Southport **Advanced Wastewater Treatment Plants** Marion County

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

One condition of your permit requires monthly reporting of several effluent parameters. 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/5104.htm

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.

Mr. Lindsay Lindgren, Vice President, Water Operations 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 501 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.

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.

Paul Higginbotham, Chief

Permits Branch

Office of Water Quality

#### Enclosures

cc:

Marion County Health Department Jim Pawlowski, Certified Operator

Ann McIver, James Dillard & Cheryl Carlson, Citizens Energy Group Jodie Opie, Janet Pellegrini & Patrick Kuefler, U.S. EPA, Region 5

#### STATE OF INDIANA

#### DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

#### AUTHORIZATION TO DISCHARGE UNDER THE

#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "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

#### CWA AUTHORITY, INC.

hereinafter referred to as "the permittee." The CWA Authority, Inc. (the "Authority") owns and operates the following advanced wastewater treatment plants and associated collection system:

Facility Name:

Belmont Advanced Wastewater
Treatment (AWT) Plant

Southport Advanced Wastewater
Treatment (AWT) Plant

2700 South Belmont Ave.
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. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

| Effective Date: _ | June 1, | 2013 | ·· |
|-------------------|---------|------|----|
| Expiration Date:  | May 31, | 2018 |    |

In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and application forms as are required by the Indiana Department of Environmental Management. The application shall be submitted to 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 on \_\_\_\_May 8, 2013 \_\_\_\_, for the Indiana Department of Environmental Management.

Paul Higginbotham, Chief

Permits Branch

Office of Water Quality

#### 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. The wastewater collection system is comprised of combined sanitary and storm sewers with 131 Combined Sewer Overflow (CSO) points. Sanitary sewer overflows (SSOs) are strictly prohibited.

#### Belmont Advanced Wastewater Treatment (AWT) Plant

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

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

As part of Indianapolis's CSO Long-Term Control Plan, as amended, the permittee has constructed the Belmont AWT Plant Wet Weather Secondary Treatment (WWST) Expansion Project, consisting of an Air Nitrification System (ANS), operated in series with the existing ONS, to expand the plant's design peak secondary treatment capacity to 300 MGD. As a result, the existing biological roughing system (BRS) towers have been taken out of service. In addition, improvements to the AWT facilities include a UV disinfection system to handle peak flows up to 150 MGD and modification of the existing ozone contact tank to be used in the wet weather chlorination/dechlorination disinfection process for flows above 150 MGD and up to 300 MGD. The mass limits for CBOD<sub>5</sub>, TSS, and ammonia-nitrogen at Outfall 006 are based on the peak design flow of 300 MGD.

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

1. <u>Primary Effluent Diversion Structures</u>: A primary effluent diversion structure exists at the 96 Structure/Junction Structure No. 1. This diversion allows primary effluent to be diverted to the EQ basin 2 or the ONS Wet Weather Pump Station. A second primary effluent diversion structure exists at Junction Structure No. 2 which allows primary effluent to be diverted around ANS and directly to the ONS Wet Weather Pump Station.

2. <u>Effluent Filters Diversion</u>: An oxygen nitrification system effluent diversion exists prior to the facility's effluent filters. All or a portion of the oxygen nitrification system effluent can be diverted around the effluent filters to the chlorine contact tanks.

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

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

## Southport Advanced Wastewater Treatment (AWT) Plant

The Southport Advanced Wastewater Treatment (Southport AWT) Plant is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing towers, air nitrification reactors, secondary clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination, effluent flow monitoring, and effluent pumping.

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. 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 CBOD<sub>5</sub>, TSS, and ammonia-nitrogen at Outfall 001 are based on the peak design flow of 150 MGD.

The Southport AWT Facility has the following flow diversions:

- 1. <u>Raw Wastewater Diversion</u>: 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. <u>Grit Chamber Diversion</u>: 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. <u>Preliminary Treatment Effluent Diversion/Bypass</u>: 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. <u>Primary Effluent Diversion/Bypasses</u>: 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. <u>Bio-Roughing Diversion</u>: 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. <u>Air Nitrification Diversion</u>: 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. <u>Effluent Filters Diversion</u>: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the 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 outfall listed below in accordance with the terms and conditions of this permit. The permittee shall take samples and measurements at a location representative of each discharge to determine whether the effluent limitations have been met. Refer to Part I.B of this permit for additional monitoring and reporting requirements.

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

TABLE 1

|                   |                     |         |                          | 111000  | <del>-</del> |                         |             |                  |
|-------------------|---------------------|---------|--------------------------|---------|--------------|-------------------------|-------------|------------------|
|                   | Quantity or Loading |         | Quality or Concentration |         |              | Monitoring Requirements |             |                  |
| Parameter         | Monthly             | Weekly  | Units                    | Monthly | Weekly       | <u>Units</u>            | Measurement | Sample Type      |
|                   | Average             | Average |                          | Average | Average      |                         | Frequency   |                  |
|                   |                     |         |                          |         |              |                         |             |                  |
| Flow [1]          | Report              | MGD     |                          |         |              |                         | Daily       | 24-Hr. Total     |
| CBOD <sub>5</sub> |                     |         |                          |         |              |                         |             |                  |
| Summer [3]        | 12,518              | 18,776  | lbs/day                  | 10      | 15           | mg/l                    | Daily       | 24-Hr. Composite |
| Winter [4]        | 31,294              | 50,070  | lbs/day                  | 25+     | 40           | mg/l                    | Daily       | 24-Hr. Composite |
| TSS               |                     |         |                          |         |              |                         |             |                  |
| Summer [3]        | 12,518              | 18,776  | lbs/day                  | 10      | 15           | mg/l                    | Daily       | 24-Hr. Composite |
| Winter [4]        | 37,553              | 50,070  | lbs/day                  | 30+     | 40           | mg/l                    | Daily       | 24-Hr. Composite |
| Ammonia-nitrogen  |                     |         |                          |         |              |                         |             |                  |
| Summer [3]        | 1,752               | 2,629   | lbs/day                  | 1.4     | 2.1          | mg/l                    | Daily       | 24-Hr. Composite |
| Winter [4]        | 3,129               | 4,757   | lbs/day                  | 2.5     | 3.8          | mg/l                    | Daily       | 24-Hr. Composite |
| Phosphorus        |                     |         |                          | Report  |              | mg/l                    | Monthly     | 24-Hr. Composite |

TABLE 2

|                           |             | Quality or     | Concentratio   | Monitoring   | Requirements |                  |
|---------------------------|-------------|----------------|----------------|--------------|--------------|------------------|
| <u>Parameter</u>          | Daily       | Monthly        | Daily          | <u>Units</u> | Measurement  | Sample Type      |
|                           | Minimum     | <u>Average</u> | <u>Maximum</u> |              | Frequency    |                  |
| pH [5]                    | 6.0         |                | 9.0            | s.u.         | Daily        | Grab             |
| Dissolved Oxygen [6]      |             |                |                |              |              |                  |
| Summer [3]                | 8.0         |                |                | mg/l         | Daily        | 12 Grabs/24-Hrs. |
| Winter [4]                | 6.0         |                |                | mg/l         | Daily        | 12 Grabs/24-Hrs. |
| Total Residual Chlorine [ | 7]          |                |                |              |              |                  |
| Final Effluent [8]        |             | 0.01           | 0.02           | mg/l         | Daily        | Grab             |
| E. coli [9]               |             | 125[10]        | 235[11]        | cfu/100 ml   | Daily        | Grab             |
| Copper [12]               |             |                |                |              |              |                  |
| Interim [2]               |             | Report         | Report         | mg/l         | Weekly       | 24 Hr. Comp.     |
| Final [2]                 |             | 0.03           | 0.06           | mg/l         | Weekly       | 24-Hr. Comp.     |
| Zinc [12]                 |             |                |                |              |              |                  |
| Interim [2]               |             | Report         | Report         | mg/l         | Weekly       | 24-Hr. Comp.     |
| Final [2]                 |             | 0.25           | 0.51           | mg/l         | Weekly       | 24-Hr. Comp.     |
| Fluoride [12]             |             |                |                |              |              |                  |
| Interim [2]               |             | Report         | Report         | mg/l         | Weekly       | 24-Hr. Comp.     |
| Final [2]                 |             | 1.8            | 3.5            | mg/l         | Weekly       | 24-Hr. Comp.     |
| Cyanide. Free [12] [13]   |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Sulfate [12]              | Re- len 7th | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Arsenic [12]              |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Cadmium [12]              |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Chromium [12]             |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Lead [12]                 |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Nickel [12]               |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Chloride [12]             |             | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |

2. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 006, **Belmont AWT Plant Outfall**, which is located at Latitude: 39°43′5″ N, Longitude: 86° 11′8″ W. The discharge is subject to the following requirements:

TABLE 3

|                   | Quantity or Loading |                |              | Quality or Concentration |                |              | Monitoring Requirements |                  |
|-------------------|---------------------|----------------|--------------|--------------------------|----------------|--------------|-------------------------|------------------|
| Parameter         | Monthly             | Weekly         | <u>Units</u> | Monthly                  | Weekly         | <u>Units</u> | Measurement             | Sample Type      |
|                   | Average             | <u>Average</u> |              | <u>Average</u>           | <u>Average</u> |              | <u>Frequency</u>        |                  |
|                   |                     |                | · ·          |                          |                |              |                         |                  |
| Flow [1]          | Report              | MGD            |              |                          |                |              | Daily                   | 24-Hr. Total     |
| CBOD <sub>5</sub> |                     |                |              |                          |                |              |                         |                  |
| Summer [3]        | 25,035              | 37,553         | lbs/day      | 10                       | 15             | mg/l         | Daily                   | 24-Hr. Composite |
| Winter [4]        | 50,070              | 75,105         | lbs/day      | 20+                      | 30             | mg/l         | Daily                   | 24-Hr. Composite |
| TSS               |                     |                |              |                          | ,              |              |                         |                  |
| Summer [3]        | 25,035              | 37,553         | lbs/day      | 10                       | 15             | mg/l         | Daily                   | 24-Hr. Composite |
| Winter [4]        | 50,070              | 75,105         | lbs/day      | 20+                      | 30             | mg/l         | Daily                   | 24-Hr. Composite |
| Ammonia-nitrogen  |                     |                |              |                          |                |              |                         |                  |
| Summer [3]        | 3,505               | 5,257          | lbs/day      | 1.4                      | 2.1            | mg/l         | Daily                   | 24-Hr. Composite |
| Winter [4]        | 6,259               | 9,513          | lbs/day      | 2.5                      | 3.8            | mg/l         | Daily                   | 24-Hr. Composite |
| Phosphorus        |                     | 90° 800 900    |              | Report                   |                | mg/l         | Monthly                 | 24-Hr. Composite |

TABLE 4

|                         |                | Quality or     | Concentration  | Monitoring   | Requirements |                  |
|-------------------------|----------------|----------------|----------------|--------------|--------------|------------------|
| <u>Parameter</u>        | <u>Daily</u>   | <b>Monthly</b> | <u>Daily</u>   | <u>Units</u> | Measurement  | Sample Type      |
|                         | <u>Minimum</u> | <u>Average</u> | <u>Maximum</u> |              | Frequency    |                  |
| pH [5]                  | 6.0            |                | 9.0            | s.u.         | Daily        | Grab             |
| Dissolved Oxygen [6]    |                |                |                |              |              |                  |
| Summer [3]              | 8.0            |                |                | mg/l         | Daily        | 12 Grabs/24-Hrs. |
| Winter [4]              | 6.0            |                |                | mg/l         | Daily        | 12 Grabs/24-Hrs. |
| Total Residual Chlorine | [7]            |                |                |              |              |                  |
| Final Effluent [8]      |                | 0.01           | 0.02           | mg/l         | Daily        | Grab             |
| E. coli [9]             |                | 125[10]        | 235[11]        | cfu/100 ml   | Daily        | Grab             |
| Copper [12]             |                |                |                |              |              |                  |
| Interim [2]             |                | Report         | Report         | mg/l         | Weekly       | 24 Hr. Comp.     |
| Final [2]               |                | 0.03           | 0.06           | mg/l         | Weekly       | 24-Hr. Comp.     |
| Zinc [12]               |                |                |                |              |              |                  |
| Interim [2]             |                | Report         | Report         | mg/l         | Weekly       | 24-Hr. Comp.     |
| Final [2]               |                | 0.25           | 0.51           | mg/l         | Weekly       | 24-Hr. Comp.     |
| Cyanide, Free [12] [13] |                | 0.0096         | 0.019          | mg/l         | Weekly       | 24-Hr. Comp.     |
| Fluoride [12]           |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Sulfate [12]            |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Arsenic [12]            |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Cadmium [12]            |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Chromium [12]           |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Lead [12]               |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Nickel [12]             |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |
| Chloride [12]           |                | Report         | Report         | mg/l         | 2 X Monthly  | 24-Hr. Comp.     |

- + Or 85% removal, whichever is more stringent.
- [1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [2] Refer to the Schedule of Compliance in Part I.D of this permit for copper, fluoride, and zinc.
- [3] Summer limitations apply from May 1 through November 30 of each year.
- [4] Winter limitations apply from December 1 through April 30 of each year.
- [5] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Discharge Monitoring Report forms.
- [6] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of the twelve (12) daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.

- [7] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations (*E. coli*) do not occur from April 1 through October 31, annually. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Tables 2 and 4 for Total Residual Chlorine (TRC) shall be in effect whenever chlorine is used.
- [8] In accordance with 327 IAC 5-2-11.1(f), compliance with this permit will be demonstrated if the measured effluent concentrations are less than the limit of quantitation (0.06 mg/l). If the measured effluent concentrations are above the water quality-based permit limitations and above the Limit of Detection (LOD) specified by the permit in any of three (3) consecutive analyses or any five (5) out of nine (9) analyses, the permittee is required to reevaluate its chlorination/dechlorination practices to make any necessary changes to assure compliance with the permit limitation for TRC. These records must be retained in accordance with the record retention requirements of Part I.B.8 of this permit.

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

| <u>Parameter</u> | LOD       | LOQ        |
|------------------|-----------|------------|
| Chlorine         | 0.02 mg/l | 0.06  mg/l |

# Case-Specific MDL

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

[9] The 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.

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

- 1. Coliscan MF<sup>®</sup> 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 20<sup>th</sup> Edition Method 9223 B using Colilert®
- [10] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.
- [11] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.
- The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide or Cyanide Amenable to Chlorination. Concentrations less than the Limit of Quantitation (LOQ) and greater than or equal to the Limit of Detection (LOD) shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.

The following EPA test methods and/or Standard Methods and associated LODs and LOQs are recommended for use in the analysis of the effluent samples. Alternative 40 CFR 136 approved methods may be used provided the 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>  | EPA Method          | LOD, mg/L | LOQ, mg/L |
|-------------------|---------------------|-----------|-----------|
| Arsenic           | 3113 B              | 0.001     | 0.0032    |
| Cadmium           | 3113 B              | 0.0001    | 0.0003    |
| Chloride          | *                   | 1.0       | 3.2       |
| Chromium          | 3lllC or 3ll3B      | 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     |

<sup>\*</sup> 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.

[13] The maximum holding time is 24 hours when sulfide is present. Therefore, initially the CN sample should be a grab sample that is tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12. The sample may then be analyzed within 14 days. Alternatively, if the permittee can demonstrate that the wastewater contains no sulfide, the permittee may collect a composite sample and analyze it within 14 days.

#### 3. Minimum Narrative Limitations

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

- a. including 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.

# 4. Additional Monitoring Requirements

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

# a. Influent Monitoring - Southport AWT Plant

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

TABLE 5

| *************************************** | Quali          | ty or Concen   | itration    | Monitoring  | Requirements  |
|---|----------------|----------------|-------------|-------------|---------------|
| <u>Pollutant</u>                        | Monthly        | <u>Daily</u>   | <u>Unit</u> | Measurement | Sample Type   |
|   | <u>Average</u> | <u>Maximum</u> |             | Frequency   |               |
| Cadmium [1]                             | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Chromium [1]                            | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Copper [1]                              | Report         | Report         | mg/l        | 1 X Weekly  | 24 Hr. Comp.  |
| Cyanide [1]                             | Report         | Report         | mg/l        | 2 X Monthly | See [2] Below |
| Lead [1]                                | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Fluoride [1]                            | Report         | Report         | mg/l        | 1 X Weekly  | 24 Hr. Comp.  |
| Nickel [1]                              | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Zinc [1]                                | Report         | Report         | mg/l        | 1 X Weekly  | 24 Hr. Comp.  |
| Sulfate [1]                             | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Chloride [1]                            | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Arsenic [1]                             | Report         | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |

# b. Influent Monitoring - Belmont AWT Plant

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

TABLE 6

|              | Quality or Concentration |                |             | Monitoring  | Requirements  |
|--------------|--------------------------|----------------|-------------|-------------|---------------|
| Pollutant    | <u>Monthly</u>           | <u>Daily</u>   | <u>Unit</u> | Measurement | Sample Type   |
|              | <u>Average</u>           | <u>Maximum</u> |             | Frequency   |               |
| Cadmium [1]  | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Chromium [1] | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Copper [1]   | Report                   | Report         | mg/l        | 1 X Weekly  | 24 Hr. Comp.  |
| Cyanide [1]  | Report                   | Report         | mg/l        | 1 X Weekly  | See [2] Below |
| Lead [1]     | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Fluoride [1] | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Nickel [1]   | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Zinc [1]     | Report                   | Report         | mg/l        | 1 X Weekly  | 24 Hr. Comp.  |
| Sulfate [1]  | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Chloride [1] | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |
| Arsenic [1]  | Report                   | Report         | mg/l        | 2 X Monthly | 24 Hr. Comp.  |

- The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide or Cyanide Amenable to Chlorination. Concentrations less than the Limit of Quantitation (LOQ) and greater than or equal to the Limit of Detection (LOD) shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.
- The maximum holding time is 24 hours when sulfide is present. Therefore, initially the CN sample should be a grab sample that is tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12. The sample may then be analyzed within 14 days. Alternatively, if the permittee can demonstrate that the wastewater contains no sulfide, the permittee may collect a composite sample and analyze it within 14 days.

# c. Organic Pollutant Monitoring

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

# 1) Sampling and Analysis of Influent and Effluent

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

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

# 2) Sampling and Analysis of Sludge

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

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

## 3) Additional Pollutant Identification

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

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

#### B. MONITORING AND REPORTING

## 1. Representative Sampling

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

# 2. Data on Plant Operation

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

## 3. Monthly Reporting

The permittee shall submit accurate monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous monitoring period 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 monitoring period in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (DMR) and the Monthly Report of Operation (MRO). Permittees with metals monitoring requirements shall also complete and submit the Indiana Monthly Monitoring Report Form (MMR-State Form 30530) to report their influent and/or effluent data for metals and other toxics. Permittees with combined sewer overflow discharges must also submit the CSO Discharge Monitoring Report to IDEM by the 28th day of the month following each completed monitoring period. All reports shall be mailed to IDEM, Office of Water Quality - Mail Code 65-42, Compliance Section, 100 North Senate Ave., Indianapolis, Indiana 46204-2251. In lieu of mailing paper reports the permittee may submit its reports to IDEM electronically by using the NetDMR application, upon registration and approval receipt. Electronically submitted reports (using NetDMR) have the same deadline as mailed reports. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

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

#### 4. Definitions

# a. Calculation of Averages

Pursuant to 327 IAC 5-2-11(a)(5), the calculation of the average of discharge data shall be determined as follows: For all parameters except fecal coliform and *E. coli*, calculations that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified in this permit. For fecal coliform, the monthly average discharge and weekly average discharge, as concentrations, shall be calculated as a geometric mean. For E. coli, the monthly average discharge, as a concentration, shall be calculated as a geometric mean.

#### b. Terms

- "Monthly Average" -The monthly average discharge means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month. The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.
- 2) "Weekly Average" The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.
- 3) "Daily Maximum" The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that represents the calendar day for purposes of sampling.
- 4) "24-hour Composite" A 24-hour composite sample consists of at least twelve (12) individual flow-proportioned samples of wastewater, taken by the grab sample method over equal time intervals during the period of operator attendance or by an automatic sampler,

which are taken at approximately equally spaced time intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. A flow proportioned composite sample shall be obtained by:

- (a) recording the discharge flow rate at the time each individual sample is taken,
- (b) adding together the discharge flow rates recorded from each individual sampling time to formulate the "total flow value,"
- (c) dividing the discharge flow rate of each individual sampling time by the total flow value to determine its percentage of the total flow value, and
- (d) multiplying the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.
- 5) CBOD5: Five-day Carbonaceous Biochemical Oxygen Demand
- 6) TSS: Total Suspended Solids
- 7) E. coli: Escherichia coli bacteria
- 8) The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
- 9) The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.
- 10) Limit of Detection or LOD is defined as a measurement of the concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the Method Detection Level or MDL.
- 11) Limit of Quantitation or LOQ is defined as a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration 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.

- 13) "Discharge of a pollutant" means any addition of any pollutant, or combination of pollutants, into any waters of the state from a point source in Indiana. The term includes, without limitation, additions of pollutants into waters of the state from the following:
  - (1) Surface run-off collected or channeled by man.
  - (2) Discharges through pipes, sewers, or other conveyances that do not lead to treatment works.

## 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, or 20th Editions, 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 on activities under this permit, including the following information:

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

f. The results of all required analyses and measurements.

## 7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report and on the Monthly Report of Operation form. Such increased frequency shall also be indicated on these forms. Any such additional monitoring data which indicates a violation of a permit limitation shall be followed up by the permittee, whenever feasible, with a monitoring sample obtained and analyzed pursuant to approved analytical methods. The results of the follow-up sample shall be reported to the Commissioner in the Monthly Discharge Monitoring Report.

## 8. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three-year period shall be extended:

- a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; or
- b. as requested by the 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 wasteload allocation if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.
- 2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
- 3. This permit may be modified, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:

- a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b. controls any pollutant not limited in the permit.
- 4. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate monitoring requirements and effluent limitations for arsenic, cadmium, chromium, copper, chloride, cyanide, lead, fluoride, mercury, nickel, phosphorus, sulfate, and/or zinc, if the Department of Environmental Management determines that such monitoring requirements and effluent limitations are needed to assure that State Water Quality standards are met in the receiving streams.
- 5. This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include Whole Effluent Toxicity (WET) limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the Toxicity Reduction Evaluation (TRE) study indicate that such limitations are necessary.
- 6. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
- 7. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific toxicants if the required additional analyses in Part I.A. indicate that such additional requirements and/or limitations are necessary to assure that State Water Quality Standards are met in the receiving stream.

#### D. SCHEDULE OF COMPLIANCE

- a. The permittee shall achieve compliance at the **Southport AWT Plant** with the final effluent limitations for **copper**, **fluoride**, and **zinc** in accordance with the following schedule:
  - 1. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality (OWQ) nine (9) months from the effective date of the permit. The progress report shall include, among other items, a description of the method(s) selected for meeting the final requirements for copper, fluoride, and zinc. The final effluent limitations for copper, fluoride, and zinc are deferred for the term of this compliance schedule, however the permittee must take steps to attempt to meet the final limitations as soon as reasonably possible. If the permittee determines prior to the conclusion of this compliance schedule that it can meet any of the final limitations, the permittee shall provide written notification to the Compliance Data Section of the Office of Water Quality. Monitoring and reporting of effluent copper, fluoride, and zinc is required during the interim period in accordance with Part I.A. of the permit.
  - 2. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality not later than the eighteen (18) months from the effective date of the permit.
  - 3. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality not later than the twenty-seven (27) months from the effective date of the permit.
  - 4. The permittee shall comply with all final requirements no later than the thirty-six (36) months from the effective date of the permit. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality at this time.
  - 5. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the Compliance Data Section of the 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.
- b. The permittee shall achieve compliance at the **Belmont AWT Plant** with the final effluent limitations for **copper** and **zinc** in accordance with the following schedule:
  - 1. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality (OWQ) nine (9) months from the effective date of the permit. The progress report shall include, among other items, a description of the method(s) selected for meeting the final requirements for copper and zinc. The final effluent limitations for copper and zinc are deferred for the term of this compliance schedule, however the permittee must take steps to attempt to meet the final limitations as soon as reasonably possible. If the permittee determines prior to the conclusion of this compliance schedule that it can meet any of the final limitations, the permittee shall provide written notification to the Compliance Data Section of the Office of Water Quality. Monitoring and

- reporting of effluent copper and zinc is required during the interim period in accordance with Part I.A. of the permit.
- 2. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality not later than the eighteen (18) months from the effective date of the permit.
- 3. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality not later than the twenty-seven (27) months from the effective date of the permit.
- 4. The permittee shall comply with all final requirements no later than the thirty-six (36) months from the effective date of the permit. The permittee shall submit a written progress report to the Compliance Data Section, Office of Water Quality at this time.
- 5. If the permittee fails to comply with any deadline contained in the foregoing schedule, the permittee shall, within fourteen (14) days following the missed deadline, submit a written notice of noncompliance to the Compliance Data Section of the 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. WHOLE EFFLUENT TOXICITY TESTING 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 Permits Branch Toxicologist.
- 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

1) 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.

2) 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. Especially the sample taken for the repeat or confirmation test as outlined in paragraph f.3. 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 <u>once every six months for the duration of the permit.</u> The results of the toxicity tests are due within each six month period as calculated from the effective date 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 Data 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 exceeded **1.0** TUa (acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, respectively.
- 2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded **1.1** TUc (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas*.
- 3) If 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. During the sampling for any confirmation tests the permittee shall also collect and preserve sufficient effluent samples for use in any Toxicity Identification Evaluation (TIE) and/or Toxicity Reduction Evaluation (TRE), if necessary. 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.

## g. Definitions

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

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

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.

<u>Milestone Dates</u>: see sections a through e following for additional information on the TRE milestone dates.

| Development and Submittal of TRE Plan | Within 90 days of two failed toxicity tests.              |
|---------------------------------------|---|
|                                       | William Amprini   |
| Initiate Effluent TRE                 | Within 30 days of TRE Plan submittal to IDEM.             |
| Progress Reports                      | Every 90 days from the initiation date of the TRE.        |
| Submit Final TRE Results              | Within 90 days of the completion of the TRE, not to       |
|                                       | exceed 3 years from the date of the initial determination |
|                                       | of toxicity (two failed toxicity tests).                  |
| Post-TRE Biomonitoring                | Immediately upon completion of the TRE, conduct 3         |
| Requirements                          | consecutive months of toxicity tests, if no toxicity is   |
|                                       | shown, reduce toxicity tests to once every 6 months for   |
|                                       | the duration of the permit term. If post –TRE             |
|                                       | biomonitoring demonstrates toxicity, revert to            |
|                                       | implementation of a TRE.                                  |

# a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee shall submit plans for an effluent TRE to the Compliance Data 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 600/R-92/080), September 1993.

Phase III Toxicity Confirmation Procedures (EPA/600/R-92/081), September 1993.

2) Methods for Chronic Toxicity Identification Evaluations

Phase I Characterization of Chronically Toxic Effluents EPA/600/6-91/005F, May 1992.

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

4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants (EPA/833-B-99-022), August 1999.

#### b. Conduct the TRE

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

## c. Reporting

Within 90 days of the TRE completion, the permittee shall submit to the Compliance Data Section 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. These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Tests Section. The results of these tests shall be submitted to the Compliance Data Section of the Office of Water Quality (OWQ).

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).

#### **PART II**

#### STANDARD CONDITIONS FOR NPDES PERMITS

#### A. GENERAL CONDITIONS

## 1. Duty to Comply

The permittee shall comply with all terms and conditions of this permit in accordance with 327 IAC 5-2-8(1) and all other requirements of 327 IAC 5-2-8. Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

# 2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3) and 40 CFR 122.41(d), the permittee shall take all reasonable steps to minimize or prevent any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

# 3. Duty to Provide Information

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

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

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

# 4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit a renewal of this permit in accordance with 327 IAC 5-3-2(a)(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the

operator's responsibility to apply for and obtain the permit. The application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

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

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

## 5. Transfers

In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except in accordance with 327 IAC 5-2-6(c). This permit may be transferred to another person by the permittee, without modification or revocation and reissuance being required under 327 IAC 5-2-16(c)(1) or 16(e)(4), if the following occurs:

- a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date.
- b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner.
- c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility.
- d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

The Commissioner may require modification or revocation and reissuance of the permit to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act or state law.

#### 6. Permit Actions

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

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

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

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

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

# 7. Property Rights

Pursuant to 327 IAC 5-2-8(6) and 327 IAC 5-2-5(b), the issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or private property or an invasion of rights, any infringement of federal, state, or local laws or regulations. The issuance of the permit also does not preempt any duty to obtain any other state, or local assent required by law for the discharge or for the construction or operation of the facility from which a discharge is made.

#### 8. Severability

In accordance with 327 IAC 1-1-3, the provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any person or circumstance is held invalid, the invalidity shall not affect any other provisions or applications of the permit which can be given effect without the invalid provision or application.

## 9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

## 10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act or state law.

## 11. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the 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 responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7. The permittee shall designate one (1) person as the certified operator with complete responsibility for the proper operations of the wastewater facility.

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

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

#### 15. Construction Permit

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

# 16. Inspection and Entry

In accordance with 327 IAC 5-2-8(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 pursuant to the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit; and
- d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

## 17. New or Increased Discharge of Pollutants

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

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

#### B. MANAGEMENT REQUIREMENTS

## 1. Facility 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. Taking redundant treatment units off line does not violate the bypass provisions of the permit, provided that the permittee is at all times: maintaining in good working order and efficiently operating all facilities and systems; providing best quality effluent; and achieving compliance with the terms and conditions of the permit.

b. The permittee shall operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants. The permittee shall properly remove and dispose of excessive solids and sludges.

- c. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- d. Maintenance of all waste collection, control, treatment, and disposal facilities shall be conducted in a manner that complies with the bypass provisions set forth below.
- e. 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 above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless:
  - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
  - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
  - 3) The permittee submitted notices as required under Part II.B.2.d; or
  - 4) The condition under Part II.B.2.f below is met.
- c. Bypasses that result in death or acute injury or illness to animals or humans must be reported in accordance with the "Spill Response and Reporting Requirements" in 327 IAC 2-6.1, including calling 888/233-7745 as soon as possible, but within two (2) hours of discovery. However, under

327 IAC 2-6.1-3(1), when the constituents of the bypass are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

- d. The permittee must provide the Commissioner with the following notice:
  - 1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
  - 2) The permittee shall orally report or fax a report of 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 (1) it also is for essential maintenance to assure efficient operation, (2) the bypassed flows are discharged from either the Southport AWT Plant Outfall (Outfall 001) or the Belmont AWT Plant Outfall (Outfall 006) and (3) the pollutants in the bypassed flows are monitored and accounted for in determining whether discharges from the outfall complied with all effluent limitations applicable to that outfall. These bypasses are not subject to the provisions of Part II.B.2.b.,d and e of this permit.
- g. The Belmont and Southport AWT facilities have the following bypass points (outfalls). Discharges are prohibited from these bypass points (outfalls).

| Outfall No. | Location (Latitude/Longitude)  | Receiving Stream      |
|-------------|--|-----------------------|
| 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         | Southport Primary Effluent Bypass 39° 40' 10.93" N; 86° 13' 28.35"   | Little Buck Creek     |

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

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.

<u>Southport Primary Effluent Bypass</u>: 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.

# 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;
  - 2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
  - 3) The permittee complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and
  - 4) The permittee submitted notice of the upset as required in the "Incident Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

d. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof pursuant to 40 CFR 122.41(n)(4).

# 4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal.

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

## 5. Power Failures

In accordance with 327 IAC 5-2-10 and 327 IAC 5-2-8(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 sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, or
- b. shall halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of this permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit.

# 6. <u>Unauthorized Discharge</u>

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

# C. REPORTING REQUIREMENTS

# 1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(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. Incident Reporting Requirements

Pursuant to 327 IAC 5-2-8(10) and 327 IAC 5-1-3, the permittee shall orally report to the Commissioner information on the following incidents within 24 hours from the time permittee becomes aware of such occurrence. If the incident meets the emergency criteria of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any emergency incident which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the incident by calling 317/233-7745 (888/233-7745 toll free in Indiana). This number should only be called when reporting these emergency events;
- c. Any upset (as defined in Part II.B.3 above) that exceeds any technology-based effluent limitations in the permit;
- d. Any release, including basement backups, from the sanitary sewer system (including satellite sewer systems operated or maintained by the permittee) not specifically authorized by this permit. Reporting of known releases from private laterals not caused by a problem in the sewer system owned or operated by the permittee is not required under Part II.C.3, however, documentation of such events must be maintained by the permittee and available for review by IDEM staff.

- e. Any unauthorized discharge from a combined sewer overflow outfall;
- f. Any discharge from any bypass point (outfall) identified in Part II.B.2.g of this permit; or
- g. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: copper, cyanide, fluoride, and/or zinc.

The permittee can make the oral reports by calling 317/232-8670 during regular business hours. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. For incidents involving effluent limit violations or discharges, the written submission shall contain: a description of the event and its cause; the period of occurrence, including exact dates and times, and, if the event has not concluded, the anticipated time it is expected to continue; and steps taken or planned to reduce, mitigate and eliminate the event and steps taken or planned to prevent its recurrence. For sewer releases which do not meet the definition of a discharge, the written submission shall contain: a description of the event and its believed cause; the period of occurrence; and any steps taken or planned to mitigate the event and steps taken or planned to prevent its recurrence. The permittee may submit a "Bypass Overflow/Incident Report" or a "Noncompliance Notification Report", whichever is applicable, to IDEM at 317/232-8637 or 317/232-8406 or to wwreports@idem.IN.gov. If a complete fax or email submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then that report will satisfy both the oral and written reporting requirements.

# 4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(10)(D), the permittee shall report any instance of noncompliance not reported under the "Incident Reporting Requirements" in Part II.C.3 at the time the pertinent Discharge Monitoring Report is submitted. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent the noncompliance.

# 5. Other Information

Pursuant to 327 IAC 5-2-8(10)(E), where the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner.

# 6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(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 of not more than \$10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

# 9. Progress Reports

In accordance with 327 IAC 5-2-8(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.
- e. POTWs must develop and submit to the Commissioner a POTW pretreatment program when required by 40 CFR 403 and 327 IAC 5-19-1, in order to assure compliance by industrial users of the POTW with applicable pretreatment standards established under Sections 307(b) and 307(c) of the Clean Water Act. The pretreatment program shall meet the criteria of 327 IAC 5-19-3 and, once approved, shall be incorporated into the POTW's NPDES permit.

# 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 NPDES Permits Section

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

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

- a. 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
- f. Combined Sewer Overflow (CSO) Operational Plans

- g. CSO Long Term Control Plans (LTCP)
- h. Stream Reach Characterization and Evaluation Reports (SRCER)

# 3. Compliance Data Section

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

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

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

# 4. Pretreatment Group

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

The following correspondence shall be sent to the Pretreatment Group:

- a. Organic Pollutant Monitoring Reports
- b. Significant Industrial User (SIU) Quarterly Noncompliance Reports

- c. Pretreatment Program Annual Reports
- d. Sewer Use Ordinances
- e. Enforcement Response Plans (ERP)
- f. Sludge analytical results

#### PART III

# REQUIREMENT TO OPERATE

#### A PRETREATMENT PROGRAM

#### A. CONDITIONS

The permittee, hereinafter referred to as the "Control Authority," is required to operate the approved industrial pretreatment program for the City of Indianapolis approved on March 3, 1994 and December 29, 2010, and any subsequent modifications approved up to the issuance of this permit. The permittee submitted an industrial pretreatment program application for EPA approval on December 1, 2012. The application is currently being reviewed by EPA. 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.

#### 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 CA must issue permits to new SIUs prior to the commencement of discharge. A SIU is defined in the SUO.

# 3. Industrial Compliance Monitoring

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

# 4. Enforcement

The CA is required to initiate the appropriate enforcement action against a SIU violating any provision of the SUO and/or discharge permit in accordance with the Enforcement Response 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 April 30, in the largest daily newspaper in the area, a list of SIUs that have been in Significant Noncompliance (SNC) with the SUO during the calendar year. The CA shall include in the ANNUAL REPORT a list of the SIUs published along with the newspaper clipping.

# 7. Industrial User Survey

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

#### 8. Annual Report

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

Pretreatment Program Manager U.S. EPA Region 5, WN-16J NPDES Programs Branch 77 W. Jackson Blvd. Chicago, IL 60604

Indiana Department of Environmental Management Office of Water Quality - Mail Code 65-42 Compliance Data Section – Pretreatment Group 100 North Senate Avenue Indianapolis, IN 46204-2251

# 9. Records Retention

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

# 10. Confidentiality

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

# 11. Program Resources

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

# 12. Interjurisdictional Agreements

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

# 13. POTW Pretreatment Program Revision Requirements

Any modifications to the permittee's SUO shall be consistent with U.S. EPA's EPA Model Pretreatment Ordinance, available at:

 $http://cfpub.epa.gov/npdes/docs.cfm?program\_id=3 \& view=allprog \& sort=name\#model\_ordinance.$ 

The permittee shall submit these re-evaluations to U.S. EPA Region 5 and IDEM Pretreatment Group for review.

## 14. Program Modification

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

financial/revenue system, a significant change in the local limitations contained in the SUO, and a change in the industrial user survey.

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

# ATTACHMENT A

Precipitation-Related Combined Sewer Overflow Discharge 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.

| Outfall Number | Location (Latitude/Longitude)   | Receiving Water   |
|----------------|---|-------------------|
| 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<br>Belmont AWT Plant's headworks<br>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<br>& Meridian Street<br>39° 43'55.33" N; 86° 9'29.00" W              | Pleasant Run      |
| 020            | Pleasant Run Parkway North Drive<br>& Pennsylvania Street<br>39° 43' 58.01" N; 86° 9'23.24" W         | Pleasant Run      |
| 021            | Pleasant Run Parkway North Drive<br>& Ransdell Street<br>39° 44'5.69" N; 86° 9'6.24" W                | Pleasant Run      |

| 022 | Pleasant Run Parkway North Drive<br>& Raymond Street<br>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<br>& Shelby Street<br>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<br>& State Street<br>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                       | Little 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<br>Street<br>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        |

|     |   | Perr        |
|-----|---|-------------|
| A38 | Davidson Street & Washington Street 39° 46'0.94" N; 86° 8'44.48" W                | Pogues Run  |
| 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<br>Boulevard<br>39° 47'8.98" N; 86° 11'15.18" W         | White River |
| 044 | Waterway Boulevard & Riverside<br>Drive<br>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<br>39 47'29.51" N; 86 12'3.85" W                     | White River |
| 049 | Stadium Drive & Fall Creek<br>39° 46'54.70" N; 86° 10'38.47" W                    | Fall Creek  |
| 050 | Fall Creek Boulevard & Burdsal<br>Parkway<br>39° 48'1.94" N; 86° 10'28.07" W      | Fall Creek  |
| 50A | Northwestern Avenue & 24th Street 39° 48'1.92" N; 86° 10'27.97" 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<br>& Meridian Street<br>39° 48'13.53" N; 86° 9'24.29" W      | Fall Creek   |
|-----|---|--------------|
| 055 | 28th Street & Talbot Street<br>39° 48'18.64" N; 86° 9'15.46" W                              | Fall Creek   |
| 057 | 28th Street & Washington<br>Boulevard<br>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   |
| 63A | Fall Creek Parkway North Drive & 32nd Street 39° 48'50.10" N; 86° 8'36.82" 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<br>Avenue<br>39° 49'15.68" N; 86° 8'9.66" W                   | Fall Creek   |
| 072 | Pleasant Run Parkway North Drive<br>& Saint Peter Street<br>39° 44'59.96" N; 86° 7'20.32" W | Pleasant Run |
| 073 | Pleasant Run Parkway North Drive<br>& Keystone Avenue<br>39° 45'1.82" N; 86° 7'15.28" W     | Pleasant Run |

| 074 | Pleasant Run Parkway North Drive<br>& Prospect Street<br>39° 45'8.80" N; 86° 7'3.93" W       | Pleasant Run |
|-----|--|--------------|
| 075 | Pleasant Run Parkway North Drive<br>& Southeastern Avenue<br>39° 45'28.70" N; 86° 6'30.88" W | Pleasant Run |
| 076 | Pleasant Run Parkway North Drive & English Avenue 39° 45'35.10" N; 86° 6'17.91" W            | Pleasant Run |
| 077 | Pleasant Run Parkway North Drive<br>& Sherman Drive<br>39° 45'47.03" N; 86° 6'7.45" W        | Pleasant Run |
| 078 | Pleasant Run Parkway North Drive<br>& Brookville Road<br>39° 45'50.23" N; 86° 5'43.15" W     | Pleasant Run |
| 080 | Pleasant Run Parkway North Drive<br>& Wallace Avenue<br>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<br>& Michigan Street<br>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<br>& Audubon Road<br>39° 46'35.27" N; 86° 4'11.41" W        | Pleasant Run |
| 088 | Pleasant Run Parkway North Drive<br>& Graham Avenue<br>39° 46'33.03" N; 86° 4'5.84" W        | Pleasant Run |

| 089 | Pleasant Run Parkway North Drive<br>& Arlington Avenue<br>39° 46'33.14" N; 86° 3'50.75" W | Pleasant Run |
|-----|---|--------------|
| 89A | North Arlington Avenue 39° 46'33.26" N; 86° 3'50.39" 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<br>& Kenmore Road<br>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<br>& Coyner Avenue<br>39° 47'11.67" N; 86° 7'27.22" W       | Pogues Run   |
| 096 | Brookside Parkway South Drive<br>& Nowland Avenue<br>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<br>& Temple Avenue<br>39° 47'8.35" N; 86° 7'5.27" W         | Pogues Run   |
| 100 | Brookside Parkway South Drive<br>& Rural Street<br>39° 47'8.71" N; 86° 7'2.34" W          | Pogues Run   |
| 101 | Sherman Drive & Brookside<br>Parkway North Drive<br>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<br>& Saint Paul Street<br>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<br>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<br>39° 44'5.25" N; 86° 9'6.69" W  | Pleasant Run |

| 131 | Fall Creek Boulevard & Capitol<br>Avenue<br>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    |

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| 151 | Pleasant Run Parkway North Drive<br>& Beecher Street                                | Permit No. INO Pleasant Run |
|-----|---|-----------------------------|
|     | 39° 44'30.20" N; 86° 8'33.52" W   |                             |
| 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                |
| 205 | Boulevard Place & Westfield<br>Boulevard<br>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<br>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<br>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                  |

#### White River

1. The permittee is authorized to discharge treated combined sewage from Outfall 155 into the White River, which is located at Pennsylvania Street & 54th Street, specifically at: Latitude: 39° 51' 14.55" N; Longitude: 86° 9' 46.84" W, when the applicable portion of the collection system is maximized. Any discharge from Outfall 155 is subject to the requirements and provisions of this permit including the following requirements:

#### TABLE 1

|                   | Quantity or Loading |                |              | Quality or Concentration |                |              | Monitoring Requirements |              |
|-------------------|---------------------|----------------|--------------|--------------------------|----------------|--------------|-------------------------|--------------|
| <u>Parameter</u>  | <u>Daily</u>        | <b>Monthly</b> | <u>Units</u> | <u>Daily</u>             | <b>Monthly</b> | <u>Units</u> | Measurement             | Sample Type  |
|                   | <u>Maximum</u>      | <u>Average</u> |              | <u>Maximum</u>           | <u>Average</u> |              | Frequency               |              |
|                   |                     |                |              |                          |                |              |                         |              |
| Flow [1]          | Report              |                | MGD          | Report                   |                | MGD          | Daily                   | 24-Hr. Total |
| CBOD <sub>5</sub> |                     |                |              | Report                   | Report         | mg/l         | Daily                   | Composite[6] |
| TSS               |                     |                |              | Report                   | Report         | mg/l         | Daily                   | Composite[6] |
| Ammonia-nitrogen  |                     |                |              | Report                   | Report         | mg/l         | Daily                   | Composite[6] |
| Phosphorus        | tion and time       |                |              | Report                   | Report         | mg/l         | Daily                   | Composite[6] |

#### TABLE 2

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

- [1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [2] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations do not occur from April 1 through October 31, annually. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Table 2 for Total Residual Chlorine (TRC) shall be in effect whenever chlorine is used.
- [3] In accordance with 327 IAC 5-2-11.1(f), compliance with this permit will be demonstrated if the measured effluent concentrations are less than the limit of quantitation (0.06 mg/l). If the measured effluent concentrations are above the water quality-based permit limitations and above the Limit of Detection (LOD) specified by the permit in any of three (3) consecutive analyses or any five (5) out of nine (9) analyses, the permittee is required to reevaluate its chlorination/dechlorination practices to make any necessary changes to assure compliance with the permit limitation for TRC. These records must be retained in accordance with the record retention requirements of Part I.B.8 of this permit.

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

ParameterLODLOQChlorine0.02 mg/l0.06 mg/l

# Case-Specific MDL

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

- [4] The *E. coli* limitations and monitoring requirements apply from April 1 through October 31 annually. The monthly average *E. coli* value shall be calculated as a geometric mean. 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 1603 Modified m-TEC agar
  - 3. mColi Blue-24®
  - 4. Colilert® MPN Method
- [5] For *E. coli*, the daily maximum shall be the geometric mean of all grab samples on any discharge day, provided that 3 or more grab samples are collected. If less than 3 grab samples are taken then the arithmetic mean shall be reported. The *E. coli* monthly average shall be the geometric mean of all grab samples collected during the month, provided that 5 or more grab samples are collected. The goal of the effluent monitoring program is to collect at least 3 grab samples during each discharge event, and the samples shall be collected at shorter intervals at the onset of the event, if the permittee estimates that the event duration may be less than 6 hours.

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

[6] Effluent composite sampling, either by automatic sampler collecting samples at set intervals or by grab samples collected during discharges from the wet weather treatment component, shall be representative of the discharge and of sufficient quantity to ensure that the parameters of Table 1 of Attachment A can be measured; shall be initiated within 30 minutes from the beginning of a discharge event; and shall continue at intervals determined by the permittee, but no less than every 2 hours during the duration of the event. If an event lasts for more than 24 hours a new sampling period shall be initiated. Analysis for the parameters identified in Table 1 of Attachment A shall be from the composite sample collected as described above.

- [7] For purposes of reporting on a discharge event which lasts less than 24 hours, but occurs during two calendar days, the pollutant concentrations for the event shall be reported as daily values on the day when the majority of the discharge occurred.
- [8] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the minimum or maximum pH value of any individual sample during the month on the Discharge Monitoring Report forms.
- a. The permittee shall monitor and report discharges from Outfall 155 in accordance with Discharge Monitoring Report (DMR) forms provided by IDEM.
- b. The CSO Treatment Facility, located at Westfield Blvd and 56<sup>th</sup> Street, also known as Lift Station 507, is designed to provide 95% capture at a flow rate of 35 MGD with approximately 34 minutes of detention time. Screening/skimming, disinfection and dechlorination is provided. Flow rates up to 53 MGD have approximately 23 minutes of detention time. Flow rates greater than 53 MGD will receive screening and partial disinfection. Flow rates greater than 160 MGD will bypass the station entirely and be discharged into the White River via outfall 155. In addition, if the level at structure B3 reaches 707.5 feet or greater, the flow will automatically by-pass the station; if the river level gets to 706 feet, the station will also automatically be by-passed.
- c. The permittee's approved CSOOP, LTCP and NPDES permit outline the wet weather operating procedures and design capabilities of the WWTP and CSO Treatment Facility. All CSO Treatment Facility wet weather discharges shall receive the specified treatment to the extent possible. In conditions where wet weather discharges from the CSO Treatment Facility result from a storm event, rainfall amount, or intensity which exceed the design capacity of the facility, the permittee shall provide documentation that all conditions and requirements expressed in their NPDES permit, including Attachment A, were achieved. All documentation regarding performance of the WWTP and the CSO Treatment Facility during storm events identified above, would be reviewable by IDEM with exercise of enforcement discretion for discharges from Outfall 155 accorded to it under IC 13 30 for these storm events.
- 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 Data 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 Data 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.
- 9. The permittee shall monitor to effectively characterize CSO impacts and the efficacy of CSO controls.
- B. The permittee's implementation of each of the minimum controls in Part III.A of this Attachment A shall be documented in its approved CSO Operational Plan (CSOOP). The permittee shall update the CSOOP, as necessary, to reflect changes in its operation or maintenance practices; measures taken to implement the above minimum requirements; and changes to the treatment plant or collection system, including changes in collection system flow characteristics, collection system or WWTP capacity or discharge characteristics (including volume, duration, frequency and pollutant concentration). All updates to the CSOOP must be submitted to IDEM, Office of Water Quality, Municipal NPDES Permits Section.

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. Reopening Clauses

- A. 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.
- B. The permit may be reopened, after public notice and opportunity for hearing, to incorporate applicable provisions of IC 13-18.

# **Fact Sheet**

January 2013

Facility Name:

Belmont Advanced Wastewater

Treatment (AWT) Plant

2700 South Belmont Ave.

Indianapolis, Indiana

**Receiving Water:** West Fork of the White River

Southport Advanced Wastewater

Treatment (AWT) Plant 3800 West Southport Rd.

Indianapolis, Indiana

West Fork of the White River

**Outfall 001 Location** 

Address:

Latitude:

39° 39' 51" N

Southport AWT Plant

Longitude:

86° 14' 8" W

**Outfall 006 Location** 

Latitude:

39° 43' 5" N

Belmont AWT Plant

Longitude:

86° 11' 8" W

NPDES Permit No. IN0023183

# **Background**

This is the proposed renewal of the NPDES permit for the Belmont and Southport AWT Plants which was issued on December 26, 2007, and has an expiration date of January 31, 2013. The permittee submitted an application for renewal which was received on August 3, 2012.

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. The wastewater collection system is comprised of combined sanitary and storm sewers with 131 Combined Sewer Overflow (CSO) points. Sanitary sewer overflows are strictly prohibited.

#### Belmont Advanced Wastewater Treatment (AWT) Plant

The Belmont Advanced Wastewater Treatment Plant (Belmont AWT Plant) is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, oxygen/air nitrification system (ONS/ANS), final clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination, ultraviolet (UV) radiation, and effluent flow monitoring. The Belmont AWT Plant has an average design flow of 120 MGD and a peak design flow of 300 MGD. The Belmont AWT Plant has two wet weather storage basins: a 30-million gallon basin (EQ basin 1) to store primary influent and/or primary effluent during wet weather and a 4-million

gallon basin (EQ basin 2) to store primary effluent during wet weather. Sludge treatment includes gravity belt thickening, gravity thickening, equalization, belt filter press dewatering, and incineration or landfilling. Centrifuges are being installed in phases to replace sludge dewatering via belt filter presses.

As part of the Indianapolis's CSO Long-Term Control Plan, as amended, the permittee has constructed the Belmont AWT Plant Wet Weather Secondary Treatment (WWST) Expansion Project, consisting of an Air Nitrification System (ANS), operated in series with the existing ONS, to expand the plant's design peak secondary treatment capacity to 300 MGD. As a result, the existing biological roughing system (BRS) towers have been taken out of service. In addition, improvements to the AWT facilities include a UV disinfection system to handle peak flows up to 150 MGD and modification of the existing ozone contact tank to be used in the wet weather chlorination/dechlorination disinfection process for flows above 150 MGD and up to 300 MGD.

The mass limits for CBOD<sub>5</sub>, TSS, and ammonia-nitrogen at Outfall 006 are based on the peak design flow of 300 MGD.

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

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

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

- 1. <u>Southwest (Southern Avenue) Diversion</u>: A raw wastewater flow diversion exists external to the Belmont AWT Plant at the Southwest Diversion Structure located near Southern Avenue. Raw wastewater may be diverted via a 60-inch diameter gravity sewer to the Southport AWT Plant depending on the system hydraulics and plant capacities. Actual flow rates during wet weather events have been 40 45 MGD.
- 2. <u>Belmont Wet Weather Pump Station (Raw Wastewater)</u>: A raw wastewater diversion exists prior to the facility's headworks. Raw wastewater from the Belmont Interceptor may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant

via a 42-inch force main to the Tibbs Interceptor. The Wet Weather Pump Station can also pump raw wastewater to Wet Weather Storage Basin No. 1. Depending on the system hydraulics, the pumping capacity is 28-30 MGD.

- 3. <u>Belmont Wet Weather Pump Station (Primary Effluent)</u>: A primary effluent flow diversion exists after the Belmont Primary Clarifiers. Primary effluent stored in Wet Weather Storage Basin No. 1 may be pumped by Belmont's Wet Weather Pump Station to the Southport AWT Plant via a 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is approximately 28-30 MGD.
- 4. <u>Gravity Diversion (Primary Influent)</u>: A preliminary treatment flow diversion exists prior to the facility's primary clarifiers. Preliminary treatment flow from the diversion may be conveyed by gravity via the 42-inch force main to the Southport AWT Plant via the Tibbs Interceptor. Depending on the system hydraulics, the diversion capacity is 16-18 MGD.
- 5. Belmont Primary Effluent Pump Station (Primary Effluent): A primary effluent diversion exists after the facility's primary clarifiers. Primary effluent from the primary effluent channel may be pumped by the Belmont Primary Effluent Pump Station (PEPS) to the Southport AWT Plant via the 42-inch force main to the Tibbs Interceptor. Depending on the system hydraulics, the pumping capacity is 30 to 35 MGD. This pump station can also pump primary effluent flow to EQ basin 1.

# Southport Advanced Wastewater Treatment (AWT) Plant

The Southport Advanced Wastewater Treatment (Southport AWT) Plant is a Class IV nitrification facility with screening, grit removal tanks, primary clarifiers, biological roughing towers, air nitrification reactors, secondary clarifiers, coarse sand mono-media tertiary filters, effluent disinfection by chlorination/dechlorination, effluent flow monitoring, and effluent pumping.

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. 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 CBOD<sub>5</sub>, TSS, and ammonianitrogen at Outfall 001 are based on the peak design flow of 150 MGD. The Southport AWT Facility has the following flow diversions:

1. <u>Raw Wastewater Diversion</u>: 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. <u>Grit Chamber Diversion</u>: 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 bioroughing 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. <u>Primary Effluent Diversion/Bypasses</u>: 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. <u>Bio-Roughing Diversion</u>: Primary effluent diversions exist prior to the facility's bioroughing 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. <u>Air Nitrification Diversion</u>: 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. <u>Effluent Filters Diversion</u>: An air and oxygen nitrification system effluent diversion exists prior to the facility's tertiary filters. All or a portion of the air and oxygen nitrification system effluent (up to 150 MGD) can be diverted around the effluent filters to the effluent disinfection system.

Several effluent monitoring tables included in the previous permit are not included in this permit renewal because they are no longer applicable. All effluent tables attributable to the Trickling Filter/Solids Contact (TF/SC) process have been removed because these processes are not utilized. Additionally, the effluent monitoring table concerning storm water associated with industrial activity at the Southport AWT Plant has been removed. Storm water associated with industrial activity at a WWTP is handled by a general permit by rule (327 IAC 15-6-7). The permittee must ensure that storm water discharges from Southport AWT Plant and Belmont AWT Plant are covered by the general permit by rule. This Office's Storm Water Section staff handles the permitting for such activities.

# **Collection System**

The collection system is comprised of combined sanitary and storm sewers with 131 Combined Sewer Overflow (CSO) locations. Requirements for and location of the CSO points are included in the Attachment A to the NPDES permit. According to the NPDES permit application approximately 35% of the collection system is combined sanitary and storm sewers.

The previous permit listed three (3) sanitary sewer overflow points, which the permittee cites as being closed. Therefore, these overflow points are not included in the NPDES permit.

# CSO Statutory or Regulatory Basis for Permit Provisions

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

# **Explanation of Effluent Limitations and Conditions**

The effluent limitations set forth in Part 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. 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).)

The Long Term Control Plan (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 storms per year to approximately two storms per year on Fall Creek and four storms 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:

- The Deep Rock Tunnel Connector system along eight miles of the White River connecting to the central tunnel system (White River and Fall Creek tunnels) with a pumping facility located at the Southport AWT Plant.
- A 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 wetweather flows into the central tunnel system.
- A collection interceptor along Eagle Creek to convey wet weather flows to the Belmont AWT plant.

- Local sewer separation projects to eliminate isolated overflows on State Ditch, Lick Creek, White River and the upstream ends of Fall Creek, Pogues Run and Bean Creek.
- Belmont and Southport AWT plant improvements.
- Watershed improvements.

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

#### **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.

# **Solids Disposal**

The permittee is required to dispose of its sludge in accordance with 329 IAC 10, 327 IAC 6.1, or 40 CFR Part 503. Solids are treated and are incinerated or landfilled.

# **Receiving Stream**

The facilities discharge the West Fork White River to via Outfalls 001 and 006. The receiving water has a seven day, ten year low flow  $(Q_{7,10})$  of 69 cubic feet per second (44.6 MGD) at the outfall location.

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. The West Fork White River at the Belmont AWT Plant outfall location is listed on the 2008 303d list as being impaired due to excessive mercury and PCBs in fish tissue. The West Fork White River at the Southport AWT Plant outfall location is listed on the 2008 303d list as being impaired due to excessive mercury and PCBs in fish tissue and for cyanide. A TMDL study has been written for the West Fork of White River for *E. coli* impairment. The TMDL is available for view at: http://in.gov/idem/nps/2839.htm.

## **Industrial Contributions**

The permittee accepts industrial flow from approximately 54 industries. Based on the industrial flow received by the treatment facility, the permittee is required to operate its approved industrial pretreatment program approved on March 3, 1994 and December 29, 2010, and any subsequent modifications approved up to the issuance of this permit. The permittee submitted an industrial pretreatment program application for EPA approval on December 1, 2012. The application is currently being reviewed by EPA.. Provisions for the industrial pretreatment program are included in Part III of this permit renewal. In addition, monitoring requirements and/or effluent limitations for copper, zinc, fluoride, cyanide, sulfate, arsenic, cadmium, chromium, lead, nickel, chloride, and Whole Effluent Toxicity are being included in the permit renewal.

#### **Organic Pollutant Monitoring**

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

# **Antidegradation**

327 IAC 2-1.3 outlines the state's Antidegradation Standards and Implementation Procedures. According to 327 IAC 2-1.3-1(b), the procedures apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act, including a change in process or operation, that will result in a significant lowering of water quality.

This permit includes new permit limitations for fluoride, zinc, and copper. In accordance with 327 IAC 2-1.3-1, the new permit limitations are not subject to the Antidegradation Standards and Implementation Procedures as the new permit limitations are not the result of a deliberate activity taken by the permittee.

The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a pollutant or pollutant parameter that is not a BCC unless information is submitted to the commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality, or an antidegradation demonstration submitted and approved in accordance 327 IAC 2-1.3.

# **Effluent Limitations and Rationale**

The effluent limitations proposed herein are based on Indiana Water Quality Standards, NPDES regulations, and Wasteload Allocation (WLA) analyses performed by this Office's Permits Branch staff on October 28, 1996, June 14, 2001, April 10, 2007, and November 26, 2012. These limits are in accordance with antibacksliding regulations specified in 327 IAC 5-2-10(11). The final effluent limitations to be limited and/or monitored include: Flow, Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>), Total Suspended Solids (TSS), Ammonia-nitrogen (NH<sub>3</sub>-N), Phosphorus, pH, Dissolved Oxygen (DO), Total Residual Chlorine (TRC), and *Escherichia coli (E. coli)*, copper, zinc, fluoride, cyanide, sulfate, arsenic, cadmium, chromium, lead, nickel, chloride, and Whole Effluent Toxicity.

Monitoring frequencies are based upon facility size and type.

# Final Effluent Limitations for Southport AWT Plant - Outfall 001

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

The mass limits for CBOD<sub>5</sub>, TSS and ammonia-nitrogen have been calculated utilizing the peak design flow of 150 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

#### Flow

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

## CBOD<sub>5</sub>

CBOD<sub>5</sub> 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. CBOD<sub>5</sub> 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 CBOD<sub>5</sub> 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 1.4 mg/l (1,752 lbs/day) as a monthly average and 2.1 mg/l (2,629 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 2.5 mg/l (3,129 lbs/day) as a monthly average and 3.8 mg/l (4,757 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentration limitations included in this permit are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Branch staff on November 26, 2012, and are more stringent than those contained in the previous permit. The new limitations are based upon current ambient conditions of the West Fork of the White River. Please refer to the November 26, 2012 WLA analysis for further explanation.

#### Phosphorus

Phosphorus monitoring is being required monthly. This monitoring is being required as nutrient pollution and low dissolved oxygen consistently rank among the top impairments to water quality. Excessive phosphorus and nitrogen can result in harmful algal blooms that affect fish

habitat, cause fish kills, lower dissolved oxygen, cause public health concerns related to impaired drinking water sources, and increase exposure to toxic microbes. Nutrient problems can exhibit in local waters as well as much further downstream, leading to degraded lakes and reservoirs. Nutrient pollution is of particular concern with regard to algal problems in some Great Lake waters, and hypoxic zones in the Gulf of Mexico where fish and aquatic life can no longer survive.

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

To ensure conditions necessary for the maintenance of a well-balanced aquatic community, the pH of the final effluent must be between 6.0 and 9.0 standard units in accordance with provisions in 327 IAC 2-1-6(b)(2). pH must be measured daily by grab sampling. These pH limitations are the same as the limitations found in the facility's previous permit.

# Dissolved Oxygen

Dissolved oxygen shall not fall below 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.

#### Total Residual Chlorine

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

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

#### E. coli

The *E. coli* limitations and monitoring requirements apply from April 1 through October 31, annually. *E. coli* is limited to 125 count/100 ml as a monthly average, and 235 count/100 ml as a daily maximum. The monthly average *E. coli* value shall be calculated as a geometric mean.

This monitoring is to be conducted daily by grab sampling. These *E. coli* limitations are set in accordance with regulations specified in 327 IAC 5-10-6.

# Metals/Non-conventional Pollutants

Reasonable Potential Evaluations (RPE) were performed in conjunction with the Wasteload Allocation Analysis performed by this Office's Permits Branch staff on November 26, 2012. In reviewing the RPE, the projected effluent quality (PEQ) for arsenic, cadmium, chromium, lead, mercury, nickel, chloride, cyanide, and sulfate is less than the projected effluent limitations (PELs). Therefore, effluent limitations have been removed and/or not included in the permit renewal. However, due to the industrial contributors to the collection system, monitoring requirements for these metals are being retained, at a reduced frequency. Arsenic, cadmium, chromium, lead, nickel, chloride, cyanide, and sulfate are to be monitored two (2) times monthly.

The RPE performed by this Office's Permits Branch staff on November 26, 2012, revealed that the projected effluent quality (PEQ) for copper, zinc, and fluoride was greater than the projected effluent limitations (PELs). Therefore, effluent limitations for copper, zinc, and fluoride are being included in this permit. Copper is limited to 0.03 mg/l as a monthly average and 0.06 mg/l as a daily maximum. Zinc is limited to 0.25 mg/l as a monthly average and 0.51 mg/l as a daily maximum. Fluoride is limited to 1.8 mg/l as a monthly average and 3.5 mg/l as a daily maximum. This monitoring is to be conducted weekly by 24-Hr. composite sampling. These limitations are a new requirement of the permit renewal.

As the final effluent limitations for copper, zinc, and fluoride are new requirements of the permit renewal, a 36-month schedule of compliance for copper, zinc, and fluoride is included in Part I.D. of the permit. The permittee will utilize the three year timeframe to implement the pollution control measures which the permittee expects will result in compliance with the new limitations.

The permittee is required to monitor for copper, zinc, and fluoride during the interim period as noted in Table 2 of the permit. In addition to effluent monitoring and limitations, the permittee is required to monitor the influent wastestream as specified in Table 5 of the permit.

# Whole Effluent Toxicity Testing

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

The permittee shall conduct the whole effluent toxicity tests described in Part I.E. of the permit to monitor the toxicity of the discharge from Outfall 001. This toxicity testing is to be performed biannually for the duration of this NPDES permit. Acute toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU<sub>a</sub> (acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, whichever is

more sensitive. Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.1 TU<sub>c</sub> (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas*. If acute or chronic toxicity is found in any of the tests specified above, another toxicity test using the specified methodology and same test species shall be conducted within two weeks. If any two tests indicate the presence of toxicity, the permittee must begin the implementation of a toxicity reduction evaluation (TRE) as is described in Part I.E.2. of the permit.

#### Final Effluent Limitations for Belmont AWT Plant - Outfall 006

The summer monitoring period runs from May 1 through November 30 of each year and the winter monitoring period runs from December 1 through April 30 of each year. The disinfection season runs from April 1 through October 31 of each year. Monitoring frequencies are based upon facility size and type.

The mass limits for CBOD<sub>5</sub>, TSS and ammonia-nitrogen have been calculated utilizing the peak design flow of 300 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

# Flow

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

#### CBOD<sub>5</sub>

CBOD<sub>5</sub> is limited to 10 mg/l (25,035 lbs/day) as a monthly average and 15 mg/l (37,553 lbs/day) as a weekly average during the summer monitoring period. CBOD<sub>5</sub> is limited to 20 mg/l (50,070 lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 30 mg/l (75,105 lbs/day) as a weekly average during the winter monitoring period. Monitoring is to be conducted daily by 24-hour composite sampling.

The CBOD<sub>5</sub> 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 (25,035 lbs/day) as a monthly average and 15 mg/l (37,553 lbs/day) as a weekly average during the summer monitoring period. TSS is limited to 20 mg/l (50,070 lbs/day) as a monthly average, or 85% removal, whichever is more stringent and 30 mg/l (75,105 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 1.4 mg/l (3,505 lbs/day) as a monthly average and 2.1 mg/l (5,257 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 2.5 mg/l (6,259 lbs/day) as a monthly average and 3.8 mg/l (9,513 lbs/day) as a weekly average.

Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentration limitations included in this permit are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Branch staff on November 26, 2012, and are more stringent than those contained in the previous permit. The new limitations are based upon current ambient conditions of the West Fork of the White River. Please refer to the November 26, 2012 WLA analysis for further explanation.

# **Phosphorus**

Phosphorus monitoring is being required monthly. This monitoring is being required as nutrient pollution and low dissolved oxygen consistently rank among the top impairments to water quality. Excessive phosphorus and nitrogen can result in harmful algal blooms that affect fish habitat, cause fish kills, lower dissolved oxygen, cause public health concerns related to impaired drinking water sources, and increase exposure to toxic microbes. Nutrient problems can exhibit in local waters as well as much further downstream, leading to degraded lakes and reservoirs.

Nutrient pollution is of particular concern with regard to algal problems in some Great Lake waters, and hypoxic zones in the Gulf of Mexico where fish and aquatic life can no longer survive.

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

To ensure conditions necessary for the maintenance of a well-balanced aquatic community, the pH of the final effluent must be between 6.0 and 9.0 standard units in accordance with provisions in 327 IAC 2-1-6(b)(2). pH must be measured daily by grab sampling. These pH limitations are the same as the limitations found in the facility's previous permit.

# Dissolved Oxygen

Dissolved oxygen shall not fall below 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.

## Total Residual Chlorine

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

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

# E. coli

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

#### Metals/Non-conventional Pollutants

Reasonable Potential Evaluations (RPE) were performed in conjunction with the Wasteload Allocation Analysis performed by this Office's Permits Branch staff on November 26, 2012. In reviewing the RPE, the projected effluent quality (PEQ) for arsenic, cadmium, chromium, lead, mercury, nickel, chloride, fluoride, and sulfate is less than the projected effluent limitations (PELs). Therefore, effluent limitations have been removed and/or not included in the permit renewal. However, due to the industrial contributors to the collection system, monitoring requirements for these metals are being retained, at a reduced frequency. Arsenic, cadmium, chromium, lead, nickel, chloride, fluoride, and sulfate are to be monitored two (2) times monthly.

The RPE performed by this Office's Permits Branch staff on November 26, 2012, revealed that the projected effluent quality (PEQ) for copper, zinc, and cyanide was greater than the projected effluent limitations (PELs). Therefore, effluent limitations for copper, zinc, and cyanide are being

included in this permit. Copper is limited to 0.03 mg/l as a monthly average and 0.06 mg/l as a daily maximum. Zinc is limited to 0.25 mg/l as a monthly average and 0.51 mg/l as a daily maximum. Cyanide is limited to 0.0096 mg/l as a monthly average and 0.019 mg/l as a daily maximum. This monitoring is to be conducted weekly by 24-Hr. composite sampling. These limitations are a new requirement of the permit renewal.

As the final effluent limitations for copper and zinc are new requirements of the permit renewal, a 36-month schedule of compliance for copper and zinc is included in Part I.D. of the permit. The permittee will utilize the three year timeframe to implement the pollution control measures which the permittee expects will result in compliance with the new limitations.

The permittee is required to monitor for copper and zinc during the interim period as noted in Table 4 of the permit.

In addition to effluent monitoring and limitations, the permittee is required to monitor the influent wastestream as specified in Table 6 of the permit.

## Whole Effluent Toxicity Testing

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

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

## **Backsliding**

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

# Reopening Clauses

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

# **Compliance Status**

The permittee is subject to Consent Decree 1:06-cv-1456-DFH-VSS for the control of CSO.

# **Expiration Date**

A five-year NPDES permit is proposed.

Drafted by:

Jason House

January 2012

# STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC NOTICE NO: 2013 – 5E – F

DATE OF NOTICE: MAY 8, 2013

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

#### MAJOR - RENEWAL

BELMONT & SOUTHPORT ADVANCED WWTP - CITIZENS ENERGY GROUP, Permit No IN0023183, MARION COUNTY, Indianapolis, IN. This municipal facility discharges 120 – 125 million gallons daily of treated sanitary, industrial & combined sewer wastewater into West Fork White River. Permit Manager: Jason House, 317/233-0470, jahouse@idem.in.gov.

# APPEAL PROCEDURES FOR FINAL PERMITS

The Final Permits are 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). Each Final Permit is available at the respective, local County Health Department. Please tell others you think would be interested in this matter. Regarding your rights and responsibilities pertaining to the Public Notice process and timeframes, please refer to IDEM websites: <a href="http://www.in.gov/idem/5474.htm">http://www.in.gov/idem/5474.htm</a> and IDEM Permit Guide (Public Participation): <a href="http://www.in.gov/idem/4172.htm">http://www.in.gov/idem/5474.htm</a> and IDEM Permit Guide (Public Participation): <a href="http://www.in.gov/idem/4172.htm">http://www.in.gov/idem/4172.htm</a>.

To view the Citizen Guide go to: <a href="http://www.in.gov/idem/5803.htm">http://www.in.gov/idem/4172.htm</a>.

**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 <u>within</u> 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 501 100 N. Senate Avenue Indianapolis IN 46204

Stay Time frame: If the Petition (s) is filed <u>within</u> 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.