# Appendix A



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr. 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

E

<u>MAIL</u>

January 7, 2010

The Honorable Harold Campbell, Mayor City of North Vernon 275 North Main Street North Vernon, Indiana

Dear Mayor Campbell:

Re: Final NPDÉS Permit No. IN0020451
City of North Vernon Wastewater Treatment Plant
Jennings 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 Vernon Fork of the Muscatatuck 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.

The Honorable Harold Campbell, Mayor 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.

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

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

If you have any questions concerning your NPDES permit, please contact Bill Stenner at 317/233-1449. Questions concerning appeal procedures should be directed to the Office of Environmental Adjudication, at 317/232-8591.

Sincerely,

Bruno Pigott

Assistant Commissioner

Office of Water Quality

#### Enclosures

cc: Jer

Jennings County Health Department Mr. Russell Vaught, Certified Operator U.S. EPA, Region 5

**SERO** 

#### STATE OF INDIANA

#### DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

#### AUTHORIZATION TO DISCHARGE UNDER THE

#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Act"), Title 13 of the Indiana Code, and regulations adopted by the Water Pollution Control Board, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

#### CITY OF NORTH VERNON

hereinafter referred to as "the permittee." The permittee owns and/or operates the City of North Vernon Wastewater Treatment Plant, a major municipal wastewater treatment plant located at 725 North Greensburg Road, North Vernon, Indiana, Jennings County. The permittee is hereby authorized to discharge from the outfalls identified in Part I of this permit to receiving waters named the Vernon Fork of the Muscatatuck River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in the permit. The permittee is also authorized to discharge from combined sewer overflow outfalls listed in Attachment A of this permit, to receiving waters named the Vernon Fork of the Muscatatuck River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in this permit. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date: _	February 1,	2010	
Expiration Date:	Hanuary 31,	2015	

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 January 7, 2010, for the Indiana Department of Environmental Management.

Bruno Pigott

Assistant Commissioner Office of Water Quality

#### TREATMENT FACILITY DESCRIPTION

The permittee currently operates a Class III, 2.2 MGD single stage nitrification activated sludge treatment facility consisting of grit removal, influent screening, secondary clarification, rapid sand filtration, chlorination/dechlorination facilities, and influent and effluent flow metering. Solids are treated with aeration and aerobic digestion, prior to being dewatered and land applied under land application permit No. INLA000458.

The collection system is comprised of combined sanitary and storm sewers with one Combined Sewer Overflow (CSO) location. The CSO location has been identified and permitted with provisions in Attachment A of the permit.

The mass limits for CBOD<sub>5</sub>, TSS and Ammonia-nitrogen have been calculated utilizing the peak design flow of 4.76 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

#### 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, which is located at Latitude: 39° 00' 16", Longitude: 85° 36' 00". The discharge is subject to the following requirements:

TABLE 1

	Quantity or Loading		Quality or Concentration		Monitoring Requirements			
<u>Parameter</u>	Monthly Average	Weekly Average	Units	Monthly Average	Weekly <u>Average</u>	<u>Units</u>	Measurement Frequency	Sample <u>Type</u>
Flow[1]	Report		MGD				5 X Weekly	24-Hr. Total
$CBOD_5$	993	1,589	lbs/day	25	40	mg/l	5 X Weekly	24-Hr. Composite
TSS	1,192	1,788	lbs/day	30	45	mg/l	5 X Weekly	24-Hr. Composite
Ammonia-nitrogen						-	•	-
Summer [2]	60	87	lbs/day	1.5	2.2	mg/l	5 X Weekly	24-Hr. Composite
Winter [3]	87	131	lbs/day	2.2	3.3	mg/l	5 X Weekly	24-Hr. Composite

#### TABLE 2

	Quality of	r Concentr	ation		Monitoring Requirements	
<u>Parameter</u>	Daily <u>Minimum</u>	Monthly Average	Daily <u>Maximun</u>	n <u>Units</u>	Measurement Frequency	Sample <u>Type</u>
pH [4] Dissolved Oxygen [5]	6.0		9.0	s.u.	5 X Weekly	Grab
Summer [2]	6.0			mg/l	5 X Weekly	3 Grabs/24-Hrs.
Winter [3]	5.0			mg/l	5 X Weekly	3 Grabs/24-Hrs.
Total Residual Chlorine	[6]					
Final Effluent [7]		0.01	0.02	mg/l	5 X Weekly	Grab
E. coli [8]		125 [9]	235 [10]	colonies/100 ml	5 X Weekly	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] Summer limitations apply from May 1 through November 30 of each year.
- [3] Winter limitations apply from December 1 through April 30 of each year.
- [4] 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.
- [5] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of the three (3) daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.
- [6] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations (fecal coliform or *E. coli*) do not occur from April 1 through October 31, annually. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Table 2 for total residual chlorine shall be in effect whenever chlorine is used.
- [7] 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.

 $\begin{array}{ccc} \underline{Parameter} & \underline{LOD} & \underline{LOQ} \\ Chlorine & 0.02 \text{ mg/l} & 0.06 \text{ mg/l} \end{array}$ 

## 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.

- [8] The *Escherichia coli (E. coli)* limitations apply 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® Method
  - 2. EPA Method 1103.1 using original m-TEC agar.
  - 3. EPA revised Method 1103.1 using modified m-TEC agar.
  - 4. Standard Methods 20th Edition Method 9223 B using Colilert®
- [9] 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.
- [10]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.

## 2. 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.

## 3. Additional Discharge Limitations and Monitoring Requirements

a. Beginning on the effective date of the permit, the effluent from Outfall 001 shall be limited and monitored by the permittee as follows:

TABLE 3

	Quality or Concentration			Monitoring Requirements	
Pollutant	Monthly <u>Average</u>	Daily <u>Maximum</u>	<u>Unit</u>	Measurement Frequency	Sample <u>Type</u>
Copper [1]	0.019	0.031	mg/l	1 X Weekly	24 Hr. Comp.
Lead [1]		Report	mg/l	Quarterly	24 Hr. Comp.
Zinc [1]		Report	mg/l	Quarterly	24 Hr. Comp.

Note: For measurement frequencies less than once per month, the permittee shall report the result from the monitoring period on the Discharge Monitoring Report (DMR) for the final month of the reporting timeframe, beginning with January of each year. For example, for quarterly monitoring, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

[1] The permittee shall measure and report this parameter as Total Recoverable Metal. Concentrations less than the limit of quantitation 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".

Parameter	EPA Method	<u>LOD</u>	<u>LOQ</u>
Copper Lead Zinc	3113 B 3113 B 200.7, Revision 4.4 or 3120 B	1.0 ug/l 1.0 ug/l 2.0 ug/l	3.2 ug/l 3.2 ug/l 6.4 ug/l

## 4. Additional Monitoring Requirements

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

## a. Influent Monitoring

The permittee shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent in accordance with 327 IAC 5-2-13(b).

## TABLE 4

	Quality or Concentration			Monitoring Re	equirements
<u>Parameter</u>	Monthly Average	Daily <u>Maximum</u>	<u>Unit</u>	Measurement Frequency	Sample <u>Type</u>
Copper [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Lead [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Zinc [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.

Note: For measurement frequencies less than once per month, the permittee shall report the result from the monitoring period on the Discharge Monitoring Report (DMR) for the final month of the reporting timeframe, beginning with January of each year. For example, for quarterly monitoring, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

[1] The permittee shall measure and report this parameter as Total Recoverable Metal. Concentrations less than the limit of quantitation shall be reported by the permittee on the discharge monitoring report forms as the actual measured value. Concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected and the LOD is 0.1 mg/l, report the value as < 0.1 mg/l.

## b. 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 624, 625 and 608 in 40 CFR 136. 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 monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (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. All reports shall be mailed to IDEM, Office of Water Quality - Mail Code 65-42, Data & Information Services Section, 100 North Senate Ave., Indianapolis, Indiana 46204-2251. 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. CSO DMRs shall be mailed to IDEM, Office of Water Quality – Mail Code 65-42, Compliance Evaluation Section, 100 North Senate Ave., Indianapolis, Indiana 46204-2251. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

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

## 4. Definitions

# a. Calculation of Averages

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

#### b. Terms

- (1) "Monthly Average" -The monthly average discharge means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month. The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.
- (2) "Weekly Average" The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.
- (3) "Daily Maximum" The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that represents the calendar day for purposes of sampling.
- (4) "24-hour Composite" A 24-hour composite sample consists of at least four (4) 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) CBOD<sub>5</sub>: 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.

#### 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 18<sup>th</sup>, 19<sup>th</sup>, or 20<sup>th</sup> Editions, 1992, 1995 or 1998 American Public Health Association, Washington, D.C. 20005.
- b. <u>A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis</u> 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 alternately, revoked and reissued after public notice and opportunity for hearing to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary.
- 5. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
- 6. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific 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.
- 7. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to increase the monitoring frequency for whole effluent toxicity testing to twice annually in the event that information submitted under Part II.A.3. of the permit during the permit's term (i.e., additional industrial flow) warrants such an increase.

## D. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the <u>national policy</u> 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 Outfall 001.

If toxicity is demonstrated as defined under paragraph f below, the permittee is required to conduct a toxicity reduction evaluation (TRE).

## a. Bioassay Test Procedures and Data Analysis

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

## b. Types of Bioassay Tests

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

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

## c. Effluent Sample Collection and Chemical Analysis

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

# d. Frequency and Duration

The toxicity tests specified in paragraph b. shall be conducted <u>once **annually** for the duration of the permit</u>. The results of the toxicity tests are due once within each twelve month period as calculated from twelve months after 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 Evaluation Section of the IDEM no later than sixty days after completion of the test.
- (2) For quality control, the report shall include the results of appropriate standard reference toxic pollutant tests for chronic endpoints and historical reference toxic pollutant data with mean values and appropriate ranges for the respective test species *Ceriodaphnia dubia* and *Pimephales promelas*. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.

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

## f. Demonstration of Toxicity

- (1) Acute toxicity will be demonstrated if the effluent is observed to have 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*, respectively.
- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.02 TU<sub>c</sub> (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. 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<sub>c</sub> 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. Toxicity Reduction Evaluation (TRE)

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.

D 1 CODE D1	TTT//1: 00 1 C. C.1 1
Development of TRE Plan	Within 90 days of two failed toxicity tests.
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,
Requirements	conduct 3 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 toxicity reduction evaluation (TRE) to the Compliance Evaluation Section of the IDEM. The TRE plan shall include appropriate measures to characterize the causative toxicant and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

# (1) Methods for Aquatic Toxicity Identification Evaluations:

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

Phase II Toxicity Identification Procedures (EPA 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 submission of the TRE plan to the IDEM, the permittee must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Compliance Evaluation 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 Evaluation 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 <u>no later than three years after the date of determination of toxicity</u>.

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 Evaluation 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), the permittee shall take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

## 3. Duty to Provide Information

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

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

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

# 4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit a renewal of this permit in accordance with 327 IAC 5-3-2(a)(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. The application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

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

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

#### 5. Transfers

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

- a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date.
- b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner.

- c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility.
- d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

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

#### 6. Permit Actions

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

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

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

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

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

## 7. Property Rights

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

## 8. Severability

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

# 9. Oil and Hazardous Substance Liability

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

## 10. State Laws

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

## 11. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the 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(b) provides that a certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant, if it can be shown that he will give adequate supervision to all units involved. Adequate supervision means that sufficient time is spent at the plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operations conditions. In accordance with 327 IAC 5-22-3(10), "responsible charge" means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

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

#### 15. Construction 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 Evaluation Section of the Office of Water Quality in writing.

# 16. <u>Inspection and Entry</u>

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.

## B. MANAGEMENT REQUIREMENTS

# 1. Facility Operation, Maintenance and Quality Control

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

Neither 327 IAC 5-2-8(8), nor this provision, shall be construed to require the operation of installed treatment facilities that are unnecessary for achieving compliance with the terms and conditions of the permit.

- b. The permittee shall operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants. The permittee shall properly remove and dispose of excessive solids and sludges.
- c. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- d. Maintenance of all waste collection, control, treatment, and disposal facilities shall be conducted in a manner that complies with the bypass provisions set forth below.
- e. Any extensions to the sewer system must continue to be constructed on a separated basis. Plans and specifications, when required, for extension of the sanitary system must be submitted to the Facility Construction Section, Office of Water Quality in accordance with 327 IAC 3-2-1. There shall also be an ongoing preventative maintenance program for the sanitary sewer system.

# 2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(11):

- a. Terms as defined in 327 IAC 5-2-8(11)(A):
  - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.

- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses, as defined 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.
- 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 it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.b.,d and e of this permit.

# 3. Upset Conditions

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

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this subsection, are met.
- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
  - (1) An upset occurred and the permittee has identified the specific cause(s) of the upset, if possible;
  - (2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
  - (3) The permittee complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and
  - (4) The permittee submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable.

#### 4. Removed Substances

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

- a. Collected screenings, slurries, sludges, and other such pollutants shall be disposed of in accordance with 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.

## C. REPORTING REQUIREMENTS

## 1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(10)(F) and 5-2-16(d), the permittee shall give notice to the Commissioner as soon as possible of any planned alterations or additions to the facility (which includes any point source) that could significantly change the nature of, or increase the quantity of, pollutants discharged. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited. Material and substantial alterations or additions to the permittee's operation that were not covered in the permit (e.g., production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) are also cause for modification of the permit. However those alterations which constitute total replacement of the process or the production equipment causing the discharge converts it into a new source, which requires the submittal of a new NPDES application.

## 2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(9), 327 IAC 5-2-13, and 327 IAC 5-2-15, monitoring results shall be reported at the intervals and in the form specified in "Data On Plant Operation", Part I.B.2.

# 3. Twenty-Four Hour Reporting Requirements

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

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

f. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: copper

The permittee can make the oral reports by calling 317/232-8670 during regular business hours or by calling 317/233-7745 (888/233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a "Bypass Overflow/Incident Report" or a "Noncompliance Notification Report", whichever is applicable, to IDEM at 317/232-8637 or 317/232-8406. If a complete fax submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

## 4. Other Noncompliance

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

## 5. Other Information

Pursuant to 327 IAC 5-2-8(10)(E), where the permittee becomes aware 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. <u>Certification</u>. Any person signing a document identified under paragraphs a and b of this section, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# 7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12.1, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

## 8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(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. <u>Additional Requirements for POTWs and/or Treatment Works Treating Domestic Sewage</u>

- 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 Permits Section

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

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

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

## 3. Data & Information Services Section

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

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

- a. Discharge Monitoring Reports (DMRs)
- b. Monthly Reports of Operation (MROs)
- c. Monthly Monitoring Reports (MMRs)

# 4. Compliance Evaluation Section

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

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

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

## 5. Wet Weather Section

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

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

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

# 6. Pretreatment Group

Indiana Department of Environmental Management Office of Water Quality – Mail Code 65-42 Compliance Evaluation Section – Pretreatment Group 100 N. Senate Avenue Indianapolis, Indiana 46204-2251 The following correspondence shall be sent to the Pretreatment Group:

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

#### **PART III**

# REQUIREMENT TO OPERATE A PRETREATMENT PROGRAM

#### A. CONDITIONS

The permittee, hereinafter referred to as the "Control Authority," is required to operate its approved industrial pretreatment program approved on September 28, 1984, and any subsequent modifications approved up to the issuance of this permit. 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: April, July, October, and January of each year. The report shall include a description of corrective actions that have or will be taken by the CA and SIU to resolve the noncompliance situations. This report is to be sent to the Compliance Branch of the Office of Water Quality.

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

The CA is required to comply with the public participation requirements under 40 CFR 25 and 327 IAC 5-19-3(2)(L). The CA must publish annually, by January 28, in the largest daily newspaper in the area, a list of SIUs that have been in significant noncompliance (SNC) with the SUO during the calendar year. The CA shall include in the ANNUAL REPORT a list of the SIUs published along with the newspaper clipping.

## 7. Annual Report

The CA is required to submit an annual report to the Pretreatment Group by April 1, of each year. The annual report will be submitted in accordance with the State supplied "POTW PRETREATMENT PROGRAM ANNUAL REPORT GUIDANCE."

#### 8. Records Retention

Pursuant to 327 IAC 5-16-5(d), 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.

## 9. Confidentiality

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

## 10. Program Resources

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

# 11. Interjurisdictional Agreements

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

# 12. POTW Pretreatment Program Revision Requirements

Unless already completed, the CA is required to update its pretreatment program and SUO in accordance with the Pretreatment Implementation Review Task Force (PIRT) revisions and the Domestic Sewage Study (DSS) rule. The updating shall be completed according to the following schedule:

a. The CA shall re-evaluate its pretreatment program for consistency with 40 CFR 403, particularly the PIRT and DSS revisions, then submit a draft of any program modification, with a request for approval of the modification under 40 CFR 403.18, to the Pretreatment Group and the U.S. EPA, Region 5, within nine months of the effective date of this permit. The pretreatment program modification shall include a technical evaluation of the need to revise local pretreatment limitations in accordance with 40 CFR 122.44(j)(2)(ii). The CA is to conduct the local limitations technical evaluation consistent with U.S. EPA's Local Limits Development Guidance (July 2004) document.

The request must identify or highlight the new provisions in the modification (or preexisting provisions in the original program) that fulfill the requirements of the PIRT and DSS revisions. A guidance document is available from the Pretreatment Group that outlines the procedures for modifying POTW pretreatment programs and the PIRT and DSS provisions that must be in the programs.

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

d. No later than 6 months after the effective date of this permit, the permittee shall submit to EPA Region 5 and IDEM pretreatment group, a program modification request to incorporate the pretreatment streamlining revisions in 327 IAC 5-16 through 327 IAC 5-21 of Indiana Administrative Code, which became effective on May 3, 2009. The modification request shall highlight all changes to the approved program, the sewer use ordinance (SUO) and the enforcement response plan (ERP) necessary to incorporate the revisions of 327 IAC 5-16 through 327 IAC 5-21 of Indiana Administrative Code required to be implemented by all delegated pretreatment programs. Any of the optional changes must be included with this submission. The required changes are described in USEPA's Pretreatment Streamlining Rule Fact Sheet 2.0: Required Changes, available at: http://cfpub.epa.gov/npdes/home.cfm?program\_id=3.

# 13. Program Modification

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

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

#### ATTACHMENT A

Precipitation Related Combined Sewer Overflow Discharge Authorization Requirements

# I. <u>Discharge Authorization</u>

A.	<u>Outfall</u>	<u>Location</u>	Receiving Water		
	002	Control structure is located prior to the headworks of the WWTP; Outfall 002 is 3 feet east of the WWTP outfall (001). N 39° 00' 16" W 85° 36' 00"	Vernon Fork of the Muscatatuck River		

- 1. During the period beginning on the effective date of this permit and lasting 30 days following completion of construction of the wet weather disinfection facilities (phase II), or by April 1, 2012, whichever occurs first, Outfall 002 is authorized to have wet weather discharges in accordance with the requirements and provisions of this permit, including provisions in Attachment A.
- 2. Beginning 30 days following completion of construction of the wet weather disinfection facilities, or by April 1, 2012, whichever occurs first, the permittee is authorized to discharge treated combined sewage from Outfall 002 when influent flows exceed the wastewater treatment plant peak hydraulic capacity, and the storage capacity of the wet weather EQ tank. Any discharge from 002 is subject to the requirements and provisions of this permit including the following requirements:

T	N D	TT	1
-1 $F$	٦ĸ	1,5	, .

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter [6]	Daily <u>Maximum</u>	Monthly Average	<u>Units</u>	Monthly Average	Daily <u>Maximum</u>	<u>Unit</u>	Measurement Frequency	Sample <u>Type</u>
Flow[1]	Report	Report	MGD				Daily	24-Hr. Total
$CBOD_5$	30 10 20 20			Report	Report	mg/l	Daily	Composite [5]
TSS				Report	Report	mg/l	Daily	Composite [5]
Ammonia-				Report	Report	mg/l	Daily	Composite [5]
Nitrogen				-	_	_		-

## TABLE 2

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

NOTE- The permittee shall submit a written notice to the Data & Information Services Section of the Office of Water Quality at 100 N. Senate Avenue, Indianapolis, IN 46204-2251 which specifies the expected completion date of disinfection facilities on discharges from the CSO Treatment Facility. This notice shall be submitted a minimum of thirty (30) days **prior** to completion of construction. Any deviation from the completion date specified in this notice will require a revised notice to be submitted to the same office. Notification of the construction completion date is necessary to ensure that the effluent limitations and monitoring requirements for 002 become effective at the correct time.

- [1] Effluent flow measurement is required per 327 IAC 5-2-13. If a flow meter is utilized for flow measurement, the flow meter(s) shall be calibrated at least once annually.
- [2] The effluent shall be disinfected on a continuous basis during any discharge such that violations of the applicable bacteriological limitations do not occur from April 1 through October 31, annually.
- [3] 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 1103.1 using original m-TEC agar.
  - 3. EPA revised Method 1103.1 using modified m-TEC agar.
  - 4. Standard Methods 20th Edition Method 9223 B using Colilert®

[4] 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. 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 less than five (5) discharges in a calendar month, then the monthly average does not need to be reported on the Discharge Monitoring Report (DMR). If Outfall 002 discharges five (5) times or more during a calendar month, then the monthly average *E. coli* value shall be calculated as a geometric mean and reported on the DMR.

- [5] 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.
- [6] 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.
- [7] 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.
- [8] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.

- B. Combined Sewer Overflows are point sources subject to both technology-based and water quality-based requirements of the Clean Water Act and state law.
- C. At all times the discharge from any and all 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;
    - 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.
- D. Dry weather discharges from any portion of the sewer collection system, including the outfall listed in Part I.A of this Attachment A, are prohibited. If a dry weather discharge occurs, the permittee shall notify the Office of Water Quality, Compliance Evaluation Section, by phone within 24 hours and in writing within five days of the occurrence. The correspondence shall include the duration and cause of the discharge as well as the remedial action taken to end the discharge.

# II. Monitoring Report Requirements

- A. The permittee is required to monitor the flow from CSO outfall No. 002. This monitoring shall include:
  - 1. measurement of the flow volume,
  - 2. the time that the CSO discharge began,
  - 3. the flow duration, and
  - 4. rainfall amount and duration.

The requirement for the measurement of flow volume may be accomplished by installing a flow measurement device or by utilizing a reliable method of estimating the flow volume. Within 120 days from the effective date of this permit, the permittee shall submit to IDEM their monitoring plan which describes the permittee's method of accomplishing this permit requirement. The permittee shall also update its CSO Operational Plan to incorporate the flow monitoring plan.

The permittee shall also report the amount of precipitation for each day of the month. A rain gauge must be used that measures amount (depth) and duration. If multiple rain gauges are used, the information from each rain gauge shall be reported.

All of the information described in this subsection shall be reported on the CSO Discharge Monitoring Report (CSO DMR) form provided by IDEM and submitted to IDEM prior to the 28<sup>th</sup> day of the following month. 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"), C.7 ("Availability of Reports"), and C.8 ("Penalties for Falsification of Reports") of this permit.

B. Beginning 30 days from the completion of construction of the disinfection system at the CSO Treatment Facility, the permittee shall monitor and report discharges from Outfall 002 in accordance with Part I.A.2., of Attachment A of this permit.

# III. CSO Operational Plan

- A. The permittee shall comply with the following minimum technology-based controls, in accordance with the federal CSO Control Policy:
  - 1. The permittee shall implement proper operation and regular maintenance programs for the sewer system and the CSOs. The purpose of the operation and maintenance programs is to reduce the magnitude, frequency and duration of CSOs. The 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 POTW at the maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.

- 5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to IDEM as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, it shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
- 6. The permittee shall implement measures to control solid and floatable materials in CSO discharges.
- 7. The permittee shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
- 8. The permittee shall implement a public notification process to inform citizens of when and where CSO discharges occur and their impacts. This notification must also be done in accordance with 327 IAC 5-2.1.
- 9. The permittee shall monitor to effectively characterize CSO impacts and the efficacy of CSO controls.
- B. The permittee's implementation of each of the minimum controls in Part III.A of this Attachment A shall be documented in its CSO Operational Plan (CSOOP), which was approved on April 22, 2000. The permittee shall update the CSOOP 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). Beginning twelve (12) months from the effective date of this permit renewal, the permittee shall annually evaluate its CSOOP and update it, as necessary. The permittee shall submit the CSOOP updates to IDEM, Office of Water Quality, Wet Weather Section.

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

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

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

# IV. CSO Long-Term Control Plan

The Indiana Department of Environmental Management (IDEM) has conducted a substantive review of the City of North Vernon's Long-Term Control Plan (LTCP).

The North Vernon LTCP will be implemented in two phases, over a 5-year period. Phase I involves a collection system evaluation (via TV equipment) and repair program to reduce wet weather flows to the WWTP. Flow monitoring will be conducted to evaluate reductions of wet weather flow to the WWTP, and to size the wet weather disinfection facility at the WWTP. Phase I will be completed within four years from IDEM's approval of the LTCP. Phase II involves sizing and constructing the wet weather disinfection facilities (UV system) for all remaining CSO events from outfall 002. Phase II will be completed within five years from IDEM's approval of the LTCP.

By utilizing existing wet weather screening units, settling within the wet weather EQ tank, combined with the new wet weather disinfection facilities, all wet weather flow will receive at a minimum, solids and floatables removal, primary treatment, and disinfection. Construction of the wet weather disinfection facilities will be completed within the five-year term of this NPDES permit.

Based on this information, IDEM has determined that the North Vernon LTCP is expected to result in compliance with Indiana's bacteriological water quality criteria, and therefore formally approved the City of North Vernon's LTCP in February 2007. The LTCP is incorporated herein. A detailed scope of projects may be found in the North Vernon LTCP. The LTCP shall be implemented in accordance with the approved schedule outlined below:

Project	Date			
Phase I	March 1, 2007 through February 2011			
Phase II	March 1, 2011 to March 1, 2012			

In accordance with IC 13-18-3-2.6, this NPDES permit recognizes that the schedule of compliance outlined above exceeds the term of this permit. IC 13-18-3-2.6 establishes that when a schedule of compliance exceeds the term of a permit, implementation of the schedule of compliance shall continue before and during successive permit terms, and in accordance with the community's approved LTCP.

#### V. Sewer Use Ordinance Review/Revision and Enforcement

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

# VI. Reopening Clauses

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

# **Fact Sheet**

July 10, 2009 Revised December 4, 2009

City of North Vernon Wastewater Treatment Plant located at 725 North Greensburg Road North Vernon, Indiana Jennings County

Outfall Location

Latitude:

30° 00' 16"

Longitude:

85° 36' 00"

NPDES Permit No. IN0020451

# **Background**

This is the proposed renewal of the NPDES permit for the City of North Vernon Wastewater Treatment Plant which was issued on August 19, 2004 and has an expiration date of August 31, 2009. The permittee submitted an application for renewal which was received on March 3, 2009. The permittee currently operates a Class III, 2.2 MGD single stage nitrification activated sludge treatment facility consisting of grit removal, influent screening, secondary clarification, rapid sand filtration, chlorination/dechlorination facilities, and influent and effluent flow metering. Solids are treated with aeration and aerobic digestion, prior to being dewatered and land applied under land application permit No. INLA000458.

#### **Collection System**

The collection system is comprised of combined sanitary and storm sewers with one Combined Sewer Overflow (CSO) location at a point prior to the headworks of the WWTP. The CSO outfall has been identified and permitted with provisions in Attachment A of the permit.

## CSO Statutory or Regulatory Basis for Permit Provisions

CSOs are point sources subject to NPDES permit requirements, including both technology-based and water quality-based requirements of the CWA and state law. Thus the permit contains provisions IDEM deems necessary to meet water quality standards, as well as technology-based treatment requirements, operation and maintenance requirements, and best management practices. This permit is based on various provisions of state and federal law, including (1) Title 13 of the Indiana Code; (2) the water quality standards set forth in 327 IAC 2-1.5; (3) the NPDES rules set forth in 327 IAC 2 and 327 IAC 5, including 327 IAC 5-2-8 and 327 IAC 5-2-10; and (4) section 402(q) of the CWA (33 USC § 1342), which requires all permits or orders issued for discharges from municipal CSOs to conform with the provisions of EPA's National CSO Control Policy (58 Fed. Reg. 18688, April 19, 1994).

EPA's CSO Policy contains provisions that, among other things, require permittees to develop and implement minimum technological and operational controls and long term control plans to meet state water quality standards. The permit's penalty provisions are based in large part on IC 13-30. In addition to the regulatory provisions previously cited, the data collection and reporting requirements are based in part on 327 IAC 5-1-3, 327 IAC 5-2-13 and section 402(q) of the CWA.

IDEM has conducted a substantive review of the City of North Vernon's Long-Term Control Plan (LTCP). IDEM has determined that the plan is expected to result in compliance with Indiana's bacteriological water quality criteria, and therefore approved the plan in February 2007. Since the LTCP will be implemented within a five-year timeframe, enforcement of the LTCP will be through this NPDES permit.

The North Vernon LTCP will be implemented in two phases, over a 5-year period. Phase I involves a collection system repair and monitoring program to reduce and then evaluate wet weather flows to the WWTP. Phase I will be completed within four years from IDEM's approval of the LTCP. Phase II involves sizing and constructing wet weather disinfection facilities for all remaining CSO events from outfall 002. Phase II will be completed within five years from IDEM's approval of the LTCP.

# **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. The permittee maintains a land application permit INLA000458 for the disposal of solids.

## **Receiving Stream**

The facility discharges to the Vernon Fork of the Muscatatuck River via Outfall 001. The Vernon Fork of the Muscatatuck River has a seven day, ten year low flow  $(Q_{7,10})$  of 0.2 cubic feet per second (0.13 MGD) at the outfall location. This provides a dilution ratio of receiving stream flow to treated effluent of 0.06:1. 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.

## **Industrial Contributions**

The permittee accepts industrial flow from Hilex Poly Co., LLC Plant 2, Martinrea Industries, Inc., Kromat America, and Webster West Packaging, Inc. Based on the industrial flow received by the treatment facility, the permittee is required to operate its approved industrial pretreatment program approved on September 28, 1984. Provisions for the industrial pretreatment program are included in Part III of this permit renewal. In addition, effluent limitations for copper, and monitoring requirements for lead and zinc, are being included in the permit renewal.

## **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 Technical Support Section staff on October 23, 1995, March 11, 2004 and June 18, 2009. These limits are in accordance with antibacksliding regulations specified in 327 IAC 5-2-10(11)(A). Monitoring frequencies are based upon facility size and type. The number of grab samples required to make up a composite sample has been reduced from 10 grab samples per day to 4 grab samples per day in Part I.B.4.b.(4) of the renewal permit. Four grab samples per composite sample is consistent with the number of grab samples required by IDEM for a facility with a design flow of 2.2 MGD.

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), pH, Dissolved Oxygen (DO), Total Residual Chlorine (TRC), *Escherichia coli* (*E. coli*), copper, lead and zinc.

## **Final Effluent Limitations**

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 4.76 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

## <u>Flow</u>

Flow is to be measured five times weekly 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 25 mg/l (993 lbs/day) as a monthly average and 40 mg/l (1,589 lbs/day) as a weekly average. Monitoring is to be conducted five times weekly by 24-hour composite sampling. The CBOD<sub>5</sub> concentration limitations included in this permit are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Technical Support Section staff on March 11, 2004 and are the same as the concentration limitations found in the facility's previous permit.

#### TSS

TSS is limited to 30 mg/l (1,192 lbs/day) as a monthly average and 45 mg/l (1,788 lbs/day) as a weekly average. Monitoring is to be conducted five times weekly by 24-hour composite sampling. The TSS concentration limitations included in this permit are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Technical Support Section staff on March 11, 2004 and are the same as the concentration limitations found in the facility's previous permit.

## Ammonia-nitrogen

Ammonia-nitrogen is limited to 1.5 mg/l (60 lbs/day) as a monthly average and 2.2 mg/l (87 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 2.2 mg/l (87 lbs/day) as a monthly average and 3.3 mg/l (131 lbs/day) as a weekly average. Monitoring is to be conducted five times weekly 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 Technical Support Section staff on October 23, 1995 and are the same as the concentration limitations found in the facility's previous permit. The antibacksliding regulations specified in 327 IAC 5-2-10(11)(A) prevent these limits from being increased to the concentrations specified in the WLA performed by this Office's Permits Technical Support Section staff on March 11, 2004.

# <u>pH</u>

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 five times weekly 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 6.0 mg/l as a daily minimum average during the summer monitoring period. During the winter monitoring period, dissolved oxygen shall not fall below 5.0 mg/l as a daily minimum average. These dissolved oxygen limitations are based on the Wasteload Allocation (WLA) analysis performed by this Office's Permits Technical Support Section staff on March 11, 2004 and are the same as the concentration limitations found in the facility's previous permit. Dissolved oxygen measurements must be based on the average of three (3) grab samples taken within a 24-hr. period. This reduced number of required grab samples used to determine the dissolved oxygen reporting value has been retained from the previous permit based on the facility's compliance history for this parameter. Monitoring for dissolved oxygen is to be conducted five times weekly.

# 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 five times weekly 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 five times weekly by grab sampling. These *E. coli* limitations are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Technical Support Section staff on March 11, 2004.

## Metals/Non-conventional Pollutants

The RPE performed by this Office's Permits Technical Support Section staff on June 18, 2009 revealed that the projected effluent quality (PEQ) for copper was greater than the projected effluent limitations (PELs). Therefore, effluent limitations for copper are being retained in this permit. Copper is limited to 0.019 mg/l as a monthly average and 0.031 mg/l as a daily maximum. The copper concentration limitations included in this permit are set in accordance with the Wasteload Allocation (WLA) analysis performed by this Office's Permits Technical Support Section staff on June 18, 2009 and are more stringent than the concentration limitations found in the facility's previous permit. As a review of effluent data indicates that the permittee will be able to comply with the more stringent copper limits with permit reissuance, no schedule of compliance has been included with the renewal permit. Monitoring for copper is to be conducted one time weekly by 24-Hr. composite sampling.

Additionally, monitoring requirements for lead and zinc are being retained from the previous permit. Monitoring for lead and zinc is to be conducted on a quarterly basis by 24-Hr. composite sampling. Monitoring requirements for these metals has been retained in the renewal permit because they have been detected in the effluent in quantities sufficient to warrant continued assessment.

## Mercury

The previous permit included a monitoring requirement for mercury. A Reasonable Potential Evaluation (RPE) was performed by NPDES Permits Branch staff as part of the June 18, 2009 WLA on the accumulated mercury data. In reviewing the RPE, the projected effluent quality (PEQ) for mercury was less than the corresponding projected effluent limitations (PEL). Therefore, monitoring requirements for mercury have been removed from the permit.

# Whole Effluent Toxicity Testing

The permittee shall conduct the whole effluent toxicity tests described in Part I.D. of the permit to monitor the toxicity of the discharge from Outfall 001. This toxicity testing is to be performed once annually 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*, which ever is more sensitive. Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.02 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.D.2. of the permit.

## **Backsliding**

None of the concentration limits included in this permit conflict with antibacksliding regulations found in 327 IAC 5-2-10(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 Clean Water Act, a fourth clause is to include such conditions and requirements as will ensure that the pretreatment program is implemented and operated as approved, 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 is to increase the monitoring frequency for whole effluent toxicity to twice annually.

#### **Compliance Status**

The permittee has no enforcement actions at the time of this permit preparation.

## **Expiration Date**

A five-year NPDES permit is proposed.

Drafted by: Bill Stenner

July 10, 2009

## POST PUBLIC NOTICE ADDENDUM: December 9, 2009

The draft NPDES permit renewal for the City of North Vernon Wastewater Treatment Plant was made available for public comment from August 6, 2009 through September 7, 2009, with a two week extension for the City of North Vernon through September 21, 2009, as part of Public Notice No. 2009-8B-RD. During this comment period, a comment letter from Mayor Harold Campbell was received by IDEM on September 23, 2009. Subsequent to the public comment period, the permittee provided additional information pertaining to industrial waste contributions. The comments and this Office's corresponding responses are summarized below: Any changes to the permit and/or Fact Sheet are noted below.

- Comment 1: The City of North Vernon requests that the effluent monitoring frequency for copper be reduced from one time weekly to one time monthly and that the influent monitoring frequency for copper be reduced from two times monthly to one time monthly. The permittee bases their request on the following: (1) the monitoring frequency for copper in the current permit is one time monthly and the treatment plant's size and type has not changed since the current permit was issued in 2004; (2) the average concentration value for copper from January 2007 to present is less than the proposed monthly average limitation; and (3) the Fact Sheet for the draft permit indicates that no schedule of compliance was included for copper because a review of the effluent data indicates that the City of North Vernon will be able to comply with the more stringent copper limits with permit reissuance. The permittee also requests that IDEM provide further explanation including new policy documents which would justify the increased monitoring frequencies for copper.
- Response 1: The request for a reduction in the monitoring frequency for copper has not been granted. The one time weekly effluent monitoring frequency requirement for copper is consistent with the monitoring frequency currently applied by IDEM to similarly sized POTWs discharging a metal that has demonstrated the reasonable potential to exceed, with one or more of the data points for that metal at or above the proposed effluent limitation(s). IDEM does not believe that a monthly monitoring frequency (that accounts for only 3% of the days that a discharge occurs each year) is sufficient to adequately evaluate compliance with the metal limitations under such scenarios. IDEM does not have a policy document addressing this issue available for public view.

The two times monthly influent monitoring frequency for copper is also consistent with the monitoring frequency currently applied by IDEM to similarly sized POTWs discharging a metal that has demonstrated the reasonable potential to exceed, with one or more of the data points for that metal at or above the proposed effluent limitation(s).

IDEM believes that this monitoring frequency is beneficial in providing useful long term information on WWTP processes with regards to variations in residential, commercial and industrial contributions, treatment removal rates, and other factors essential to the efficient operation and maintenance of the WWTP.

A schedule of compliance for the newly imposed copper limitation was not included in the draft permit as it appears, based on a review of effluent data, that indicates that the City of North Vernon can achieve compliance with the limitations without significant treatment system modifications or extensive pollution control measures that would require an extended time period to implement.

- Comment 2: The City of North Vernon requests that IDEM clarify or correct the discrepancies between the permit and the Fact Sheet regarding the monitoring frequency for Whole Effluent Toxicity Testing.
- Response 2: (The Whole Effluent Toxicity Testing Requirements were incorrectly identified as Part I.E. in the draft permit. The permit has been amended to identify the Whole Effluent Toxicity Testing Requirements as Part I.D.)

Part I.D.1.d of the permit has been amended to include a monitoring frequency for Whole Effluent Toxicity Testing of once annually (see Response 6), which is consistent with the monitoring frequency included in the Whole Effluent Toxicity Testing Section on Page 7 of the Fact Sheet.

- Comment 3: The City of North Vernon requests that IDEM clarify or correct the contradictory Whole Effluent Toxicity Testing submittal requirements between Part I.D.1 and Part I.D.1.e of the permit.
- Response 3: Part I.D.1 of the permit has been amended to remove the requirement to conduct Whole Effluent Toxicity Testing within four months of the effective date of the permit and to submit the results within six months of the effective date of the permit. Part I.D.1.d has been amended to require that the tests be submitted once within each twelve month period as calculated from twelve months after the effective date of the permit. The intent of the amended language is to allow the tests to be conducted at any time during each six month period as long as the results of the tests are submitted by the end of the six month period, but no later than sixty days after the completion of the tests (Part I.D.1.e).
- Comment 4: The City of North Vernon requests that language from its current NPDES be included in the final NPDES allowing the City to continue on the current monitoring schedule for Whole Effluent Toxicity Testing.

- Response 4: As stated in Response 3, the language in Part I.D.1 and Part I.D.1.d has been amended to allow the permittee more flexibility as to when the required tests are conducted.
- Comment 5: The City of North Vernon requests that only the species most sensitive to toxicity under Whole Effluent Toxicity Testing requirements be tested for the duration of the permit (unless toxicity is demonstrated) as is the case in the current permit.
- Response 5: The require testing of only the species most sensitive to toxicity under Whole Effluent Toxicity Testing requirements has not been granted. IDEM expects the sensitivity of both species (*Ceriodaphnia dubia* and *Pimephales promelas*) to toxicity testing to vary in conjunction with the normal variability expected in the admixture of pollutants discharged from the permitted facility. The determination to require testing of both species for the term of the permit is consistent with the current Whole Effluent Toxicity Testing requirements established by IDEM for similarly sized POTWs with industrial contributions.
- Comment 6: The City of North Vernon requests that IDEM return the Whole Effluent Toxicity Testing schedule to once annually or give a reasonable justification for the increase. The City bases this request on a daily industrial contribution (as reported in the NPDES application) to the North Vernon Wastewater Treatment Plant of 2.8% of the dry weather design flow (even less with the economic downturn experienced by local industries).
- Response 6: Subsequent to the receipt of the comment letter, the permittee provided additional information indicating that process wastewater received from major industrial facilities is considerably less than that identified in the initial NPDES application, accounting for approximately 1% of the average flow from the City of North Vernon WWTP. Based on this information, the monitoring frequency for Whole Effluent Toxicity Testing in Part I.D.1.d. of the permit has been reduced from twice yearly to once yearly. A reopening clause has been added to Part I.C. of the permit authorizing IDEM to increase the monitoring frequency for Whole Effluent Toxicity Testing to twice annually in the event that information submitted under Part II.A.3. of the permit during the permit's term (i.e., additional industrial flow) warrants such an increase. Additionally, the Whole Effluent Toxicity Testing, Reopening Clause and Industrial Contribution sections of the Fact Sheet have been revised to reflect the referenced changes.
- Comment 7: Under the heading of Whole Effluent Toxicity Testing on Page 7 of the Fact Sheet, it states TRE implementation procedures are found in Part I.D. of the permit. As there is no Part I.D. of the permit, the City requests correction to the Fact Sheet.

Response 7: The Whole Effluent Toxicity Testing Requirements were incorrectly identified as Part I.E. in the draft permit. The permit has been amended to identify the Whole Effluent Toxicity Testing Requirements as Part I.D.

Comment 8: As the City of North Vernon has chosen ultra violet light as the mode of effluent disinfection for the discharge from Outfall 002 in accordance with the approved LTCP, the City requests that the total residual chlorine (TRC) requirements be removed from Attachment A of the permit.

Response 8: Attachment A has been amended to eliminate the monitoring requirements, effluent limitations and associated footnotes for TRC.

Comment 9: The City of North Vernon requests that Footnote [1] on Page 43 be revised to reflect the requirements of Section II.A., which state that the City may employ a reliable method of estimating flow volume.

Response 9: Footnote [1] in Attachment A has been amended to require calibration of a flow meter only in situations where a flow meter is utilized for flow measurement.

Revisions to draft NPDES Permit No. IN0020451 as a result of the comments received include a decrease in the monitoring frequency for whole effluent toxicity testing (Part I.D.1.d.), the addition of a reopening clause authorizing IDEM to increase the monitoring frequency for whole effluent toxicity testing (Part I.C.7.), and the removal of TRC monitoring requirements and effluent limits, and a revision to footnote [1] in Attachment A. Revisions to the accompanying Fact Sheet include amendments to the "Whole Effluent Toxicity Testing", "Reopening Clause" and "Industrial Contribution" sections that reflect the referenced permit revisions.

IDEM has determined that a re-public notice of NPDES Permit No. IN0020451 will not be required as a result of the referenced amendments to the permit.

Drafted by: Bill Stenner

December 4, 2009

# STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

## PUBLIC NOTICE NO. 2010 - 1B - F

DATE OF NOTICE: JANUARY 7, 2010

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

## **MAJOR - RENEWAL**

CITY OF NORTH VERNON WWTP, Permit No. IN0020451, JENNINGS COUNTY, 725 N Greensburg Rd, North Vernon, IN. This municipal facility discharges 2.2 million gallons per day of sanitary, industrial, and combined sewer wastewater into Vernon Fork of the Muscatatuck River. Permit Writer: Bill Stenner at 317/233-1449, <a href="mailto:bstenner@idem.in.gov">bstenner@idem.in.gov</a>.

## 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/5803.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 **within** eighteen (18) days of the date of this Public Notice. Any appeal request must be filed in accordance with IC 4-21.5-3-7 and must include facts demonstrating that the party requesting appeal is the applicant; a person aggrieved or adversely affected or is otherwise entitled to review by law.

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

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

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

Environmental Law Judge
Office of Environmental Adjudication
IGC – North Building- Rm 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.