ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

March 28, 2006

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City of Monmouth-North STP		
Petitioner,		
v.		
ILLINOIS ENVIRONMENTAL PROCTECTION AGENCY,		
Respondent.		

CLERK'S OFFICE

RECEIVED

STATE OF ILLINOIS Pollution Control Board

IEPA- 06-1**Ø** (Provisional Variance-Water)

Re: Provisional Variance From Limits on Daily Maximum For Ammonia Nitrogen, CBOD, TSS and pH Of NPDES Permit Il0036218

Dear Mayor Davies:

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-1.

The Illinois Environmental Protection Agency (Agency) has completed review of the attached provisional variance request submitted by the City of Monmouth (City) on March 14, 2006 for their North Wastewater Treatment Plant. The City is in the process of installing new urethane membranes in their aeration basins and needs to take each aeration basin out of service to make these improvements.

Background

The City of Monmouth owns a wastewater treatment facility, commonly known as the North Plant, located approximately 1.5 miles north of the City of Monmouth on US Route 67 in Warren County. Environmental Management Corporation (EMC) located at 1033 East Jackson Street in Monmouth, Illinois operates this treatment facility. This treatment facility provides anaerobic biological treatment and flow equalization (covered anaerobic lagoon), aerobic biological treatment (activated sludge – two aeration basins and two secondary clarifiers), and tertiary filtration (sand filters). Several existing lagoons are utilized for additional storage. Sludge is stored in an earthen lagoon. This facility is designed to treat 1.334 millions gallons per day (MGD) design average flow (DAF) and 1.51 MGD design maximum flow (DMF). Discharge is to an unnamed tributary of Markham Creek.

The City is requesting a provisional variance to be allowed to install new urethane membranes in both of their aeration basins. These basins are currently showing signs of coarse bubble activity which results in decreased oxygen transfer rates and treatment efficiency mainly impacting ammonia levels. Only one basin at a time will be taken out of service. To help reduce the ammonia levels, the secondary effluent will pumped into several lagoons. These lagoons currently contain algae that could result in elevated CBOD, TSS and pH.

Relief Requested

The City requests a variance from the ammonia nitrogen, CBOD, TSS and pH limitations contained in NPDES permit Il0036218 (Attachment B). This permit requires the City to meet the following limitations:

Parameter	Concentration Limits mg/l Monthly Avg Daily Max	
CBOD	10	20
TSS	12	24
Ammonia Apr-Oct Nov-Mar	1.5 3.0	3.0 6.0
pH	Shall be in the range of	

6 to 9 standard units

During the period of the requested provisional variance the City requests daily maximum limits of 15 mg/l for ammonia, 40 mg/l for CBOD, and 70 mg/l for TSS. In addition a variance is requested for pH at a maximum of 10.0.

Agency Determinations

The Agency has reviewed the requested provisional variance and has concluded the following:

- 1. The environmental impact from the requested relief is predicted to be minimal;
- 2. No other reasonable alternative appears available;
- 3. No public water supplies will be affected;
- 4. No federal regulations will preclude the granting of this request; and
- 5. The City will face an arbitrary and unreasonable hardship if the request is not granted.

The Agency hereby GRANTS the City of Monmouth a provisional variance from the ammonia nitrogen, CBOD, TSS and pH limits of NPDES IL 0036218, subject to the following conditions:

- A. The provisional variance shall begin on March 29, 2006 and shall continue for a period of 45 days.
- B. The City shall operate its wastewater treatment system to produce the best effluent possible, and at no time shall the City exceed a daily maximum of 15 mg/l for ammonia nitrogen, 40 mg/l CBOD, 70 mg/l TSS and at no time shall pH exceed 10.0.
- C. Immediate notification to the Agency shall be required if any of the limits imposed under this provisional variance are exceeded and, in the event any of the limits are exceeded, measures will be immediately taken to provide supplemental treatment.
- D. The City shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when the first aeration basin is taken out of service for repairs and again when the second aeration basin is returned back to service. Written confirmation of each notice shall be sent within five days to the following address:

Illinois Environmental Protection Agency Bureau of Water – Compliance Assurance Section Attention: Roger Callaway 1021 North Grand Avenue East, MC #19 Springfield, Illinois 62794-9276

E. The City shall sign a Certificate of Acceptance of this provisional variance and forward that certificate to Roger Callaway at the address indicated above within one day of the date of this order. The certificate should take the following form:

I (We) _____, hereby accept and agree to be bound by all terms and condition of the provisional variance granted by the Agency in ______dated _____.

Petitioner

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Authorized Agent

Title

Date

The City shall continue to monitor and maintain compliance with all other parameters and conditions specified in its NPDES Permit No. IL0036218.

Conclusion

The Agency grants this provisional variance in accordance with its authority contained in Sections 35(b), 36(c), and 37(b) of the Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

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Robert A. Messina Chief Legal Counsel

cc: Marcia Willhite Roger Callaway Tom Andryk Connie Tonsor



Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276, 217-782-3397 James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/782-0610

August 31, 2004

MAJOR

City of Monmouth 112 North Main Street Monmouth, Illinois 61462

Re: City of Monmouth Monmouth - North STP NPDES Permit No. IL0036218 Final Permit

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. Failure to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

As discussed in our letter to Mayor Reitman of August 3, 2004, the Agency has made some minor modifications to the milestones contained in Special Condition 15 of the permit. However, because the Agency can not at this time guarantee approval of any permit application, we are unable to revise the dates to be dependent upon the receipt of the Agency approvals or permits. Additionally, pursuant to our agreement with Region 5, USEPA, the schedule can not extend beyond 36 months from the effective date of the permit.

The Permit as issued is effective as of the date indicated on the first page of the Permit. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

To assist you in meeting the self-monitoring and reporting requirements of your reissued NPDES permit, a supply of preprinted Discharge Monitoring Report (DMR) forms for your facility is being prepared. These forms will be sent to you prior to the initiation of DMR reporting under the reissued permit. Additional information and instructions will accompany the preprinted DMRs upon their arrival.

Illinois EPA Exhibit No.

ROCKFORD -- 4302 North Main Street, Rockford, IL 61103 -- (815) 987-7760 • Des Plaines -- 9511 W. Harrison St., Des Plaines, IL 60016 -- (847) 294-4000 ELGIN -- 595 South State, Eigin, IL 60123 -- (847) 608-3131. • PEORIA -- 5415 N. University St., Peoria, IL 61614 -- (309) 693-5463 BUREAU OF LAND - PEORIA -- 7620 N. University St., Peoria, IL 61614 -- (309) 693-5462 • CHAMPAICN -- 2125 South First Street, Champaign, IL 61820 -- (217) 278-5800 SPRINGFIELD -- 4500 S. Sixth Street Rd., Springfield, IL 62706 -- (217) 786-6892 • Collinsville -- 2009 Mall Street, Collinsville, IL 62234 -- (618) 346-5120 MARION -- 2309 W. Main St., Suite 116, Marion, IL 62959 -- (618) 993-7200 Page 2 NPDES Permit No. IL0036218--Final Permit City of Monmouth--North STP

Should you have questions concerning the Permit, please contact Surinder Tandon at the telephone number indicated above.

Sincerely,

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

SAK:DJS:SKT:04042601.dlk

Attachment: Final Permit

cc: Joe Pisula, Donohue & Associates, Champaign USEPA Records Compliance Assurance Section Peoria Region

SCAN

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: September 30, 2009

Issue Date: August 31, 2004 Effective Date: October 1, 2004

Name and Address of Permittee:

City of Monmouth 110 East Broadway Monmouth, Illinois 61462 Facility Name and Address:

Monmouth - North STP R.R. #2, Monmouth 1.5 miles north of City on East side of U.S. Highway 67 (Warren County)

Receiving Waters: Unnamed tributary of Markham Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

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SAK:SKT:04042601.dlk

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 1.344 MGD (design maximum flow (DMF) of 1.51 MGD).

From the effective date of this permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIM	ITS lbs/day DAF (DMF)*	CONC	ENTRATION LIMITS MG/L		
Parameter	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)					Continuous	RIT***
CBOD5**	112 (126)	2 24 (252)	10	20	3 Days/Week	Composite
Suspended Solids	135 (151)	269 (302)	12	24	3 Days/Week	Composite
Fats, Oil and Grease	168 (189)	336 (378)	15	30	1 Day/Month	Mathematica Composite**
Dissolved Oxygen*****	See below				3 Days/Week	Grab
рH	Shall be in the rang	ge of 6 to 9 Standard	Units		3 Days/Week	Grab
Ammonia Nitrogen as (N) April - Oct. Nov Mar.	17(19)34(3 8)	34(38)68(7 6)	1.5 3.0	3.0 6.0	3 Days/Week 3 Days/Week	Composite Composite
Chloride*****				Report	3 Days/Week	Composite
Total Dissolved Solids*****				Report	3 Days/Week	Composite
Zinc****			Report	Report	3 Days/Week	Composite

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136:

***Recording Indicating Totalizing

****Mathematical composites for oil, fats, and greases shall consist of a series of grab samples collected over any 24-hour consecutive period. Each sample shall be analyzed separately and the arithmetic mean of all grab samples collected during a 24-hour period shall constitute a mathematical composite. No single grab sample shall exceed a concentration of 75 mg/L.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

pH shall be reported on the DMR as a minimum and a maximum.

Dissolved oxygen shall be reported on the DMR as a minimum.

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NPDES Permit No. IL0036218

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	RIT*
BOD₅	3 Days/Week	Composite
Suspended Solids	3 Days/Week	Composite

The influent to the Activated Sludge aeration basins shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
BODs	3 Days/Week	Composite
Suspended Solids	3 Days/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

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BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

*Recording Indicating Totalizing

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Special Conditions

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

<u>SPECIAL CONDITION 3</u>. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and <u>Without Public Notice</u> in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 6</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 7</u>. For Discharge No. 001, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/L (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the (DMR's) on a monthly basis.

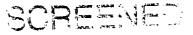
<u>SPECIAL CONDITION 8</u>. The Permittee shall monitor the effluent and report concentrations (in mg/L) of the following listed parameters eighteen (18) months prior to the expiration date and again at twelve (12) months prior to the expiration date. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum detection limits to be attained are as follows:

STORET <u>CODE</u> 01002 01007 01027 01032 01034 01042 00718 00720	PARAMETER Arsenic Barium Cadmium Chromium (hexavalent) (grab) Chromium (total) Copper Cyanide (grab) (weak acid dissociable) Cyanide (grab not to exceed 24 hours) (total)	Minimum <u>detection limit</u> 0.05 mg/L 0.05 mg/L 0.001 mg/L 0.05 mg/L 0.005 mg/L 5.0 ug/L 5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (Using USEPA Method 1631 or equivalent)	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenois (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

<u>SPECIAL CONDITION 9</u>. The Permittee shall monitor the effluent for the following parameters monthly for a period of six (6) consecutive months, beginning three (3) months from the effective date of this Permit. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum detection limits to be attained are as follows:



NPDES Permit No. (L0036218)

Special Conditions

STORET		Minimum
CODE	PARAMETER	Detection Limit
01077	Silver (total)	0.003 mg/L
00945	Sulfate	None

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

<u>SPECIAL CONDITION 10</u>. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD₅, CBOD₅, Suspended Solids, Fats, Oil and Grease, pH and Ammonia Nitrogen due to sustained compliance. The IEPA will require that the influent and effluent sample frequency for these parameters be increased to the monitoring frequency of 5 days/week for BOD₅, CBOD₅, Suspended Solids, pH, Ammonia Nitrogen and Fats, Oil and Grease if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required <u>Without Public Notice</u> when a permit modification is received by the Permittee from the Agency.

<u>SPECIAL CONDITION 11</u>. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Discharge Number 001.

Biomonitoring

- Acute Toxicity Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with <u>Methods for Measuring the Acute</u> <u>Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012.</u> Unless substitute tests are pre-approved; the following tests are required:
 - a. Fish 96 hour static LC₅₀ Bioassay using fathead minnows (Pimephales promelas).
 - b. Invertebrate 48-hour static LC₅₀ Bioassay using Ceriodaphnia.
- 2. Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
- 3. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
- 4. Toxicity Reduction Evaluation Should the results of the biomonitoring program identify toxicity, the IEPA may require that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with <u>Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants</u>, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.
- The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

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Special Conditions

SPECIAL CONDITION 13. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semiannual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 23 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Mail Code #19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

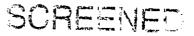
SPECIAL CONDITION 14. The Permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR form shall be submitted with no discharge indicated.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 Attention: Compliance Assurance Section



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NPDES Permit No. IL0036218

Special Conditions

SPECIAL CONDITION 15.

Project Description: Compliance with Dissolved Oxygen, Chloride, Total Dissolved Solids & Zinc Water Quality Standards

Thirty-six (36) months from the effective date of this Permit the following limits shall become effective:

	Load Limits Ibs/day DAF_(DMF)*		Concer Limit:	tration s mg/L
Parameter	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.
Dissolved Oxygen	Shall not be less than 6 r	ng/L		
Chloride	•	5604 (6297)		500
Total Dissolved Solids		11,209 (12,593)		1000
Zinc *Load limits based on des	0.48 (0.54) ign maximum flow shall app	2.7 (3.0) bly only when flow exceeds th	0.043 he design average flow.	0.24

The Permittee shall achieve compliance with above water quality standards in accordance with the following schedule:

(1)	Complete Facility Plan Update and transmit to IEPA	3 months from the effective date of this Permit
(2)	Submit plans and specification for plant improvements to IEPA	9 months from the effective date of this Permit
(3)	Submit construction permit to IEPA for plant improvements	12 months from the effective date of this Permit
(4)	Advertise for Bids	18 months from the effective date of this Permit
(5)	Award Construction Contracts	24 months from the effective date of this Permit
(6)	Progress Report	30 months from the effective date of this Permit
(7)	Achieve Compliance with Water Quality Standards	36 months from the effective date of this Permit

This Permit may be modified, with Public Notice, to include revised compliance dates set out in this Permit that are superseded or supplemented by compliance dates in judicial orders, Pollution Control Board orders or other legally binding agreements. Prior to such permit modification, the revised dates in the appropriate orders or agreements shall govern the Permittee's compliance.

In addition, the IEPA may initiate a modification of the construction schedule set forth in this Permit at any time, to include other dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Federal Clean Water Act or regulations promulgated under those Acts or compliance dates which have been submitted in writing by the Permittee and approved by the IEPA. Public Notice of such modifications and opportunity for public hearing shall be provided consistent with 40 CFR § 122.63.

REPORTING

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated for each numbered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed. All reports shall be submitted to <u>IEPA</u> at the following address:

SCREENE

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office box 19276 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

Page 8.

Attachment H

Standard Conditions

Oefinitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Datly Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomlyselected time over a period not exceeding 15 minutes.

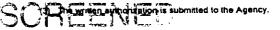
24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 millilitiers, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 millilliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic polutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) 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 apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) Need to halt or reduce activity not a defense. 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 this permit.
- (4) Outy to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

- (5) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.
- (9) inspection and entry. The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kep under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permicompliance, or as otherwise authorized by the Act, any substances or parameterat any location.
- (10) Monitoring and records.
 - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (b) The permittee shall retain records of all monitoring information, including a calibration and maintenance records, and all original strip chart recordings (c continuous monitoring instrumentation, copies of all reports required by thi permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report c application. This period may be extended by request of the Agency at any time.
 - (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses:
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
 - (d) Monitoring must be conducted according to test procedures approved under 4 CFR Part 136, unless other test procedures have been specified in this permit Where no test procedure under 40 CFR Part 136 has been approved, th permittee must submit to the Agency a test method for approval. The permitte shall calibrate and perform maintenance procedures on all monitoring an analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) Signatory requirement. All applications, reports or information submitted to th Agency shaft be signed and certified.
 - (a) Application. All permit applications shall be signed as follows:
 - For a corporation: by a principal executive officer of at least the level i vice president or a person or position having overall responsibility for environmental matters for the corporation;
 - (2) For a partnership or sole proprietorship: by a general partner or th proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either principal executive officer or ranking elected official.
 - (b) Reports. All reports required by permits, or other information requested by th Agency shall be signed by a person described in paragraph (a) or by a duauthorized representative of that person. A person is a duty authorize representative only if:
 - The authorization is made in writing by a person described in paragraph (a and
 - (2) The authorization specifies either an individual or a position responsible fin the overall operation of the facility, from which the discharge originates, suc as a plant manager, superintendent or person of equivalent responsibilit and



- Page 9.
- (c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (12) Reporting requirements.
 - (a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
 - (b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
 - (c) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, Interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
 - (d) Monitoring reports. Monitoring results shall be reported at the intervals specified eisewhere in this permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
 - (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
 - (e) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; 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 reoccurrance of the noncompliance. The following shall be included as information which must be reported within 24 hours:
 - Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours.

The Agency may walve the written report on a case-by-case basis if the oral report has been received within 24 hours.

- (f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).
- (g) Other Information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) * Transfer of permits. A permit may be automatically transferred to a new permittee if:
 - (a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date:
 - (b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and
 - (c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the data specified in the agreement.
- (14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or

- (4) The level established by the Agency in this permit.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

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- (15) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
 - (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (16) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
 - (a) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
 - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
 - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (17) If an applicable standard or limitation is promutgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (18) Any authorization to construct issued to the permittee pursuant to 35 III. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (19) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- (20) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act. is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.
- (21) The Clean Water Act provides that any person who faisifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (22) The Clean Water Act 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 shall, including monitoring reports or reports of compliance or non-compliance shalt, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (23) Collected screening, sluries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (24) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
- (25) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 III. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board.
- (25) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held lavalid, the remaining provisions of this permit shall continue in full force and effect.

(Rev. 3-13-96)

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ity of Monmouth CITY HALL 100 East Broadway Monmouth. Illinois 61462 309-734-4943

March 13, 2006

Illinois Environmental Protection Agency BOW CAS 19 1021 N Grand Ave East PO Box 19276 Springfield, IL 62794-9276

Attention: Roger Callaway

Re: City of Monmouth North WWTP provisional variance application NPDES IL 0036218

Dear Mr. Callaway,

Attached is our application for a 45 day provisional variance for our North WWTP to allow for maintenance on the aeration diffuser system. If you have any questions please contact William Hart, Certified Operator of Record, at 309-734-7188.

Thank you for your consideration in this matter.

Sincerely,

hria dney Davies, Mayo

Cc: Administrator Thompson Andy Jackson, Director of Public Works William Hart, Superintendent WWTP

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APPLICATION FOR PROVISIONAL VARIANCE

- We are requesting a variance for the discharge limitations for the City of Monmouth's North Wastewater Treatment Plant covered by NPDS Permit No IL0036218.
- 2. The North Wastewater Treatment Plant serves Farmland Foods. Farmland Foods is a hog processing facility.
- 3. The City of Monmouth's North Wastewater Treatment Plant averages .97 MGD through the treatment process. The treatment consists of the following:

Anaerobic Treatment Aeration Basins Secondary Clarification Tertiary Filtration

4. The following variance is requested for the effluent limitations:

Amm	onia Nitrogen	Permit mg/l	Variance mg/l
	Daily Maximum	3.0	15
	Monthly Average	1.5	15
CBO)		
	Daily Maximum	20	40
	Monthly Average	10	40
Total	Suspended Solids		
	Daily Maximum	24	70
	Monthly Average	12	70
PH	, u		
	Daily Maximum	9.0	10.0

The secondary effluent will be pumped into the old polishing lagoons to dilute the ammonia nitrogen down to a reasonable limit. We are asking for high TSS, CBOD, and PH limits because the lagoons have algae that will cause high TSS, CBOD, and PH numbers. The longer the lagoons discharge the PH should come down to around 9.0 on PH. Every effort will be made during this process to produce the best effluent possible.

- 5. The project should have no effect on the drinking water supply.
- 6. The variance to the discharge limitations should not have a major environmental impact or major physical effect on the tributary of Markham Creek. This work is being done in cooler temperatures to prevent negative impact on the stream.
- 7. The variance is requested to permit the installation of new urethane membranes for the East and West Aeration Basin fine bubble diffusers at the City of

Monmouth's North Wastewater Treatment Plant. One basin will be taken out of service at a time. This system is showing signs of coarse bubble activity and decreased oxygen transfer rate. This is having a negative impact on the treatment process.

8. The following steps will have to be taken to install the new membranes:

Drain the aeration basin.

Remove excess solids from the diffusers.

Remove existing membrane sleeves.

Install new membranes sleeves.

Once the new membranes are installed the aeration basins will be brought back on-line and the plant will again be capable of meeting NPEDS permit limitations.

- 9. There is no alternative method available to repair the aeration system at the North Plant. The basins must be drained to perform this work. The North Plant has two aeration basins that operate in a series. They have to be operated this way to meet NPDES limitations on BOD and ammonia nitrogen removal. We are not able to achieve this with one basin. If this work is not done the North Plant Effluent quality will continue to deteriorate.
- 10. We are requesting a variance of forty-five days for the repair of the Aeration Basins effective March 29, 2006.
- 11. There has been no provisional variance granted to the City of Monmouth's North Wastewater Treatment Plant in the last calendar year.
- 12. The City of Monmouth's North Wastewater Treatment Plant has had TSS and BOD violations during the month of February and March that this project could help to improve.
- 13. There are no matters before the Board and no Board orders that affect the City of Monmouth's North Wastewater Treatment Plant.