ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

April 13, 2007

City of Salem)
)
)
)
Petitioner,)
)
v.)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

IEPA – 07-16
(Provisional Variance-Water)

Re: Provisional Variance From Limits for Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspended Solids (TSS), and Ammonia Nitrogen Of NPDES Permit IL0023264

Dear Mr. Besalke:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request (Attachment A) submitted by the City of Salem on April 12, 2007. The City is undergoing improvements to its wastewater treatment plant. The City is requesting this provisional variance so that it can take the North Oxidation Ditch No. 1 out of service while the oxidation ditch walls are being raised and new equipment is installed in the oxidation ditch. Based on its review, the Agency GRANTS a provisional variance subject to the specific conditions set forth below.

Background

The City of Salem owns and operates a wastewater treatment facility located at 801 East Lake Street in Salem, Illinois. This treatment facility consists of an oxidation ditch mode activated sludge plant designed to treat 1.672 million gallons per day (MGD) design average flow and 3.762 MGD design maximum flow. The treatment system consists of screening, dual oxidation ditches, clarification, and sand filtration. The facility's main outfall, Outfall 001, discharges to Town Creek.

In order to complete the improvements to the wastewater treatment plant, the City will need to take the North Oxidation Ditch No. 1 out of service while the oxidation ditch walls are raised and new equipment is installed in the oxidation ditch. During this construction period the City will have one oxidation ditch in service, instead of two, resulting in twice as much wastewater being treated by the remaining oxidation ditch.

On March 7, 2007, the Agency granted a provisional variance to the City so that it could take the South Oxidation Ditch No. 2 out of service to have the walls raised and new equipment installed in that oxidation ditch. This earlier provisional variance started on March 12, and will end on April 25, 2007 or when the South Oxidation Ditch No. 2 is returned to service, whichever occurs earlier.

Relief Requested

The City requests a provisional variance from the permit limits contained in NPDES Permit IL0023264 for CBOD, TSS and ammonia nitrogen (Attachment B). This permit requires the City to meet a monthly average limit of 10 mg/l for CBOD and 12 mg/l for TSS, a daily maximum limit of 20 mg/l for CBOD and 24 mg/l for TSS, and the following limits for ammonia nitrogen:

Month	Monthly Avg. (mg/l)	Daily Max. (mg/l)
April-Oct.	1.5	3.0
Nov.-March	3.9	7.0

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 reasonable alternatives appear available;

3. No public water supplies should 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.

Conditions

The Agency hereby GRANTS the City of Salem a provisional variance from the CBOD, TSS and ammonia nitrogen limits of NPDES Permit IL0023264, subject to the following conditions:

A. The provisional variance shall begin in April 2007, on the date that the City contacts Barb Conner of the Agency by telephone, and shall continue for no more than 45 days after that date, during which time the City does not have to meet the

CBOD, TSS, and ammonia nitrogen effluent limits specified in NPDES permit IL0023264.

B. The City shall operate its system to produce the best effluent possible, and at no time shall the effluent exceed the limits of 45 mg/l for CBOD, 45 mg/l for TSS, and 15 mg/l for ammonia nitrogen. All other requirements of NPDES permit IL0023264 will be maintained during the variance period.

C. The City shall notify Barb Conner of the Agency by telephone at 217/782-9720 when the improvements on the North Oxidation Ditch No. 1 begin and it is taken out of service and again when repairs are complete and the North Oxidation Ditch No. 1 is returned to service. Written confirmation of each notice shall be sent within five days to the following address:

Illinois Environmental Protection Agency
Bureau of Water - Water Pollution Control
Attention: Barb Conner
1021 North Grand Avenue East, MC #19
Springfield, Illinois 62794-9276

G. The City shall sign a certificate of acceptance of this provisional variance and forward that certificate to Barb Conner at the address indicated above within one day of the date of this order. The certification should take the following form:

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

_____
Petitioner

_____
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. IL0023264.

Conclusion

The Agency grants this provisional variance in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois 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,

Robert A. Messina
Chief Legal Counsel

c: Marcia Willhite
Barb Conner
Vera Herst
Leonard Ferguson, Mayor of the City of Salem

April 12, 2007

Roger Calloway
Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Re: City of Salem
North Oxidation Ditch No. 1
Wastewater Treatment Plant Improvements
Request for Provisional Variance from NPDES Permit Limits
& Pollution Control Board Regulations

Dear Mr. Calloway:

We have previously been corresponding with Barb Conner, who is apparently on vacation. She has requested that we direct this request to your attention in her absence. A Provisional Variance was previously granted for the South Oxidation Ditch No. 2. This request for a Provisional Variance is due to the work being conducted on the other oxidation ditch, North Oxidation Ditch No. 1.

Pursuant to our meeting of April 8, 2005 and correspondence of May 12, 2006 we are requesting that the City of Salem be granted a provisional variance from their NPDES Permit limits (Permit No. IL0023264) while improvements are made to their wastewater treatment plant.

Per the Agency's request we are responding to the following 13 items:

1) *A statement identifying the regulations, Board Order, or permit requirements from which the variance is requested;*

A variance is requested from the City of Salem's NPDES Permit limits. Specifically, we request that the requirements for CBOD, TSS and ammonia are increased as follows:

CBOD	45 mg/L
TSS	45 mg/L
Ammonia	15 mg/L

2) *A description of the business or activity for which the variance is requested, including pertinent data on location, size, and the population and geographic area affected by the applicant's operations;*

The City is undergoing improvements to their wastewater treatment plant that involve many different facets of their treatment process including upgrading their existing oxidation ditches and constructing new secondary clarifiers. The construction will require taking North Oxidation Ditch No. 1 out of service and raising the oxidation ditch walls, which will increase the volume. In addition, new oxidation ditch equipment will be installed. While these improvements are being constructed the City will have only one oxidation ditch in service instead of two, resulting in twice as much wastewater being treated by one oxidation ditch.

3) *The quantity and types of materials used in the process or activity for which the variance is requested, as appropriate;*

This involves oxidation ditches and secondary clarifiers used in the City's wastewater treatment process.

4) *The quantity, types and nature of materials or emissions to be discharged, deposited or emitted under this variance, and the identification of the receiving waterway or land, or the closest receiving Class A and Class B land use, as appropriate;*

The materials to be discharged in excess of NPDES permit limits are CBOD, TSS and ammonia from secondary effluent at the City's wastewater treatment plant.

5) *The quantity and types of materials in drinking water exceeding the allowable content, or other pertinent facts concerning variances from the Board's public water supply regulations;*

Not applicable.

6) *An assessment of any adverse environmental impacts which the variance may produce;*

Minimal adverse environmental impacts are anticipated during the variance period. If the requested work cannot be done and a mechanical breakdown occurs, severe environmental impacts could occur.

7) *A statement explaining why compliance with the Act, regulations or Board Order imposes arbitrary and unreasonable hardship;*

The City must make these improvements to ensure compliance is maintained in the future. Without this variance these improvements cannot be made, which could result in non-compliance and a hardship on the City.

8) *A description of the proposed methods to achieve compliance with the Act, regulations or Board Order, and a timetable for achieving such compliance;*

During the interim, while the City is operating its wastewater treatment plant with one oxidation ditch the City will make every attempt to maximize performance of the equipment in operation and construct the proposed improvements as quickly as the City's contractor can construct the improvements. The City will complete all of the necessary improvements within 45 days.

9) *A discussion of alternate methods of compliance and of the factors influencing the choice of applying for a provisional variance;*

The upgrades that are being constructed that require the oxidation ditches to be taken out of service are necessary due to the increased flows to the existing plant. The City is in a position where it has to expand the capacity of its existing wastewater treatment plant and it is rehabilitating and increasing the capacity of its existing oxidation ditches. In order to reuse and rehabilitate the existing oxidation ditches there are no other alternatives available.

10) *A statement of the period, not to exceed 45 days, for which the variance is requested;*

As previously discussed, the date for the proposed modifications to the Oxidation Ditch No. 1 is April 2007. Because the exact date that each of the Oxidation Ditches will be taken out of service cannot be determined in advance, we recommend that the variance be granted with the official date of the beginning of the variance be coordinated with IEPA personnel, The variance would begin when the City of Salem contacts the IEPA and would end when the improvements to the oxidation ditch are completed and the City of Salem contacts the IEPA. In no case will this provisional variance exceed 45 days.

11) *A statement of whether the applicant has been granted any provisional variances within the calendar year, and the terms and duration of such variances;*

A Provisional Variance for 45 days was previously issued to the City of Salem for taking the South Oxidation Ditch No. 2 out of service. The request for the Provisional Variance for the South Oxidation Ditch No. 2 was requested by Crawford, Murphy & Tilly, Inc. on behalf of the City of Salem in a letter to the IEPA dated February 15, 2007. The Provisional Variance was granted by the IEPA. The date of the Provisional Variance is March 7, 2007. The date that the 45 day period began is March 12 2007.

12) *A statement regarding the applicant's current permit status as related to the subject matter of the variance request;*

As previously discussed with the IEPA during a November 30, 2006 phone conversation, the City of Salem has an excellent history of meeting its NPDES permit requirements.

13) *Any Board orders in effect regarding the applicant's activities and any matters currently before the Board in which the applicant is a party.*

None.

We appreciate your assistance with this matter. Should you have any questions regarding this matter, please don't hesitate to contact the undersigned at 572-1050.

Sincerely,
CRAWFORD, MURPHY & TILLY, INC.

Ty Besalke

c: City of Salem

Attachment B

original - B

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 DOUGLAS P. SCOTT, DIRECTOR

217/782-0610

August 24, 2005

MASON

City of Salem
101 South Broadway
Salem, Illinois 62881-1699

Re: City of Salem
Sewage Treatment Plant
NPDES IL0023264
Modification of NPDES Permit (Without Public Notice)

Dear Sir or Madam:

The Illinois Environmental Protection Agency has reviewed your NPDES permit and discovered an error in the daily maximum concentration limit for $CBOD_5$ on Page 2 of the permit. We have modified the permit as follows:

The daily maximum concentration limit for $CBOD_5$ on Page 2 of the permit was revised from 12 mg/L to 20 mg/L.

Enclosed is a copy of the modified Permit. Because the change made in the permit was minor, no formal Public Notice of the modification will be issued.

Should you have questions or comments, please contact Landon Niedringhaus of my staff.

Sincerely,

Alan Keller DFP

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

SAK:ELN J:\niedring\files\Salem NPDES Modification

Enclosure: Modified Permit

cc: CMT
Records Unit
CAS
Collinsville Regional Office
USEPA

NPDES Permit No. IL0023264

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

Modified (NPDES) Permit

Expiration Date: September 30, 2010

Issue Date: March 10, 2005
Effective Date: October 1, 2005
Modification Date: August 24, 2005

Name and Address of Permittee:

City of Salem
101 South Broadway
Salem, Illinois 62881

Facility Name and Address:

Salem STP
801 East Lake Street
Salem, Illinois
(Marion County)

Receiving Waters: Town 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

SAK:ELN:04122101.dlk

NPDES Permit No. IL0023264

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 1.672 MGD (design maximum flow (DMF) of 3.762 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From the effective date of this Permit until the attainment of operational level of the expanded facility, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS MG/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**	139 (314)		279 (628)	10		20	1 Day/Week	Composite
Suspended Solids	167 (377)		335 (753)	12		24	1 Day/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						1 Day/Week	Grab
Chlorine Residual***						0.05	1 Day/Week	Grab
Ammonia Nitrogen as (N)								
April-October	21 (47)		42 (94)	1.5		3.0	1 Day/Week	Composite
November-March	54 (122)		98 (220)	3.9		7.0	1 Day/Week	Composite

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 7.

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.

For flow up to and including 3.762 MGD discharges from Discharge Number 001shall be monitored at a point representative of the discharges from Discharge Number 001. $CBOD_5$, Suspended Solids, and Ammonia Nitrogen shall be monitored at a point representative of the discharge but prior to admixture with the excess flow discharge (A01).

NPDES Permit No. IL0023264

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 2.508 MGD (design maximum flow (DMF) of 7.023 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From the attainment of operational level of the expanded facility until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS MG/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**	209 (586)		418 (1171)	10		20	3 Days/Week	Composite
Suspended Solids	251 (703)		502 (1406)	12		24	3 Days/Week	Composite
Dissolved Oxygen	Shall not be less than 6 mg/L						3 Days/Week	Grab
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform	See Special Condition 8.							
Chlorine Residual						0.05	3 Days/Week	Grab
Ammonia Nitrogen as (N)								
April-October	31 (88)		63 (176)	1.5		3.0	3 Days/Week	Composite
November-February	82 (228)		146 (410)	3.9		7.0	3 Days/Week	Composite
March	73 (205)		146 (410)	3.5		7.0	3 Days/Week	Composite
Phosphorus	21 (59)		42 (117)	1.0		2.0	3 Days/Week	Composite

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 7.

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 DMR as minimum.

For flow up to and including 7.023 MGD discharges from Discharge Number 001shall be monitored at a point representative of the discharges from Discharge Number 001. $CBOD_5$, Suspended Solids, and Ammonia Nitrogen shall be monitored at a point representative of the discharge but prior to admixture with the excess flow discharge (A01).

NPDES Permit No. IL0023264

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): A01

These flow facilities shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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:

		CONCENTRATION LIMITS mg/L		
Parameter		Monthly Average	Sample Frequency	Sample Type
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD_5		30	Daily When Discharging	Grab
Suspended Solids		30	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Chlorine Residual		0.75	Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as a monthly average concentration.

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

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

NPDES Permit No. IL0023264

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)		
BOD_5*	1 Day/Week	Composite
Suspended Solids*	1 Day/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.

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

*Influent sampling shall be 3 days/week upon attainment of operational level of the expanded facility

NPDES Permit No. IL0023264

Special Conditions

SPECIAL CONDITION 1. 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.

SPECIAL CONDITION 3. 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.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice 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 Ill. Adm. Code 302.

SPECIAL CONDITION 6. Samples taken in compliance with the effluent monitoring requirements shall be taken:

A. For Discharge Number 001 - During dry weather flows (no excess flow discharge), samples shall be taken at a point representative of the flows but prior to entry into the receiving stream. During periods of excess flow discharge, $CBOD_5$, Suspended Solids, and Ammonia Nitrogen, if Ammonia Nitrogen monitoring and sampling is required on the Effluent Limitations, Monitoring, and Reporting Page of this Permit, shall be monitored at a point representative of the discharge but prior to admixture with the excess flow. If Fecal Coliform limits are different for Discharge Numbers 001 and A01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. Other parameters may be sampled after admixture but prior to entry into the receiving stream.

B. For Discharge Number A01 - Samples for all parameters shall be taken at a point representative of the discharge but prior to entry into the receiving stream. If Fecal Coliform limits are different for Discharge Numbers 001 and A01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. The sampling point for other parameters may be at a point after admixture with the dry weather flows.

SPECIAL CONDITION 7. 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.

SPECIAL CONDITION 8. For Discharge No. 001, the Permittee shall initiate sampling for fecal coliform after the revised facility has reached stable operation, but not later than six (6) months after start up. Sampling shall be a minimum of four (4) grab samples, at a minimum of seven (7) day intervals in order to verify the original assumptions made in the modeling used to grant the disinfection exemption. The four (4) results, expressed in terms of fecal coliform per 100 mL of sample ("too numerous to count" results cannot be accepted), shall be reported to the IEPA within seven (7) days of the final sample being analyzed and submitted to the following address:

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

SPECIAL CONDITION 9. 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 CODE	PARAMETER	Minimum detection limit
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L

NPDES Permit No. IL0023264

Special Conditions

STORET CODE	PARAMETER	Minimum detection limit
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	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 (grab) (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	Phenols (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.

SPECIAL CONDITION 10. 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 date that stable operation of the expanded plant is achieved. 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:

STORET CODE	PARAMETER	Minimum detection limit
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.

SPECIAL CONDITION 11. The Permittee may collect data in support of developing a site-specific metals translator for zinc. Total and dissolved metals for a minimum of twelve weekly samples need to be collected from the effluent and at a downstream location indicative of complete mixing between the effluent and the receiving water to determine a metal translator for these parameters. The IEPA will review submitted sample data and may reopen and modify this Permit to eliminate or include revised effluent limitations for these parameters based on the metal translator determined from the collected data.

SPECIAL CONDITION 12. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD, CBOD, Suspended Solids, Ammonia & pH due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 3 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

SPECIAL CONDITION 13. 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 14. The Permittee shall prepare a preliminary plan for biomonitoring and submit the plan to IEPA for review and

approval within ninety (90) days of the start of operation of the expanded plant. The Permittee shall begin biomonitoring of the effluent discharge within ninety (90) days after approval of the biomonitoring plan or other such date as contained in the IEPA's notification letter.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two (2) trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA-821-R-02-012. Results shall be reported in accordance with Section 12. Unless substitute tests are pre-approved; the following tests are required

   a. Fish - 96 hour static or static renewal LC_{50} Bioassay using 1- to 14-day old fathead minnows (Pimephales promelas).

   b. Invertebrate 48-hour static LC_{50} Bioassay using Ceriodaphnia.

2. Testing Frequency - The above tests shall be conducted on a monthly basis for six (6) months within ninety (90) days following approval of the biomonitoring plan or other such date as contained in the IEPA's notification (approval) letter. Tests shall be performed using 24-hour composite effluent samples unless otherwise authorized by the IEPA. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee.

   Should the results of two (2) months of sampling indicate toxicity for each month, the Permittee may wish to contact the IEPA to request the discontinuance of further sampling at which time the IEPA may require the Permittee to begin the toxicity reduction evaluation and identification as outlined below.

3. Toxicity Assessment - Should the review of 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 Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, 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.

SPECIAL CONDITION 15. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

1. 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 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

   a. Fish - 96 hour static LC_{50} Bioassay using fathead minnows (Pimephales promelas).

   b. Invertebrate 48-hour static LC_{50} 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.

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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 Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, 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.

SPECIAL CONDITION 16. 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 semi-annual 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 17. The Permittee shall notify the IEPA in writing once the treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:

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

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SPECIAL CONDITION 18. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) 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 Permittee may choose to submit electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/edmr/index.html.

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.

Permittees not using eDMRs shall mail Discharge Monitoring Reports with an original signature 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, Mail Code # 19

SPECIAL CONDITION 19. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

ATTACHMENT H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat., Sec. 1001 1052 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.

Daily 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 randomly-selected 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 milliliters, 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 milliliters 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 pollutants 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) Duty 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 the 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.

(6) 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 this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (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 permit compliance or as otherwise authorized by the Act, any substances or parameters at 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 all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this 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 or 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 40 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, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.

(a) Application. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of 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 the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) Reports. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) 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 for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.