NPDES Permit No. IL0024465 Notice No. BDF:12011001.bah

Public Notice Beginning Date: June 25, 2014

Public Notice Ending Date: July 25, 2014

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

of

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger: City of Jerseyville 115 East Prairie Street Jerseyville, Illinois 62052 Name and Address of Facility: City of Jerseyville STP 600 Maple Summit Road Jerseyville, Illinois (Jersey County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicates a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Brant Fleming at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the City of Jerseyville.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Sandy Creek, is 0 cfs.

The design average flow (DAF) for the existing facility is 1.0 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 2.0 MGD. Treatment consists of influent equalization, comminution, grit removal, primary clarification, rotating biological contactors, secondary clarification, rapid sand filtration, effluent discharge to surface waters, aerobic digestion, sludge drying beds and land application of sludge.

Public Notice/Fact Sheet -- Page 2 -- NPDES Permit No. IL0024465

The design average flow (DAF) for the previously permitted proposed facility is 2.03 million gallons per day (MGD) and the design maximum flow (DMF) for the previously permitted proposed facility is 6.0 MGD. Treatment consists of influent equalization, screening, grit removal, sequence batch reactors, chemical addition, sand filtration, post aeration, effluent discharge to surface waters, aerobic digestion, sludge thickening and land application of sludge.

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

This Permit recognizes and continues the year-round disinfection exemption approved by the IEPA on December 15, 1989 and included in past NPDES permit actions since that date. It is the IEPA's tentative decision that under Illinois Pollution Control Board regulations, the following reach of waterbody is not classified for primary contact use activities and is not subject to the fecal coliform water quality standard of 35 III. Adm. Code 302.209.

This draft permit does not contain requirements for disinfection of the discharge from discharge number(s) 001. From the point of discharge to the bridge in Section 32, T8N, R11W has been determined to be unsuited to support primary contact activities (swimming) due to physical, hydrologic or geographic configuration. Anyone knowing of primary contact activities occurring within this water segment is invited to submit comments to the IEPA. Comments should give the nature of the activities (i.e swimming, fishing, canoeing, etc.), the location and months of the year when these activities have been observed. The IEPA is also interested in obtaining information on the proximity of residential dwellings and the accessibility of the public to this water segment. Anyone with such information is asked to submit comments to the IEPA on this draft permit action. Instructions for submitting comments are contained earlier in this document.

Application is made for the existing discharge(s) which is (are) located in Jersey County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Sandy Creek	39E 06' 07" North	90E 20' 41" West	General Use	Not Rated
002	Sandy Creek	39E 06' 11" North	90E 20' 33" West	General Use	Not Rated
A02	Sandy Creek	39E 06' 11" North	90E 20' 33" West	General Use	Not Rated
006	Unnamed tributary of De Arcy Branch	39E 07' 51" North	90E 20' 31" West	General Use	Not Rated

To assist you further in identifying the location of the discharge(s) please see the attached map.

The stream segment(s), DZAG, receiving the discharge from outfall(s) 001, A02 and 002 is (are) on the 303 (d) list of impaired waters.

Potential Causes	<u>Uses Impaired</u>
Total Phosphorus	Aquatic Life

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

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

Load limits computed based on a design average flow (DAF) of 1.0 MGD (design maximum flow (DMF) of 2.0 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day* <u>DAF (DMF)</u>			С	ONCENTRA <u>LIMITS mg</u>		
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
CBOD₅	83 (167)		167 (334)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	100 (200)		200 (400)	12		24	35 IAC 304.120 40 CFR 133.102
рН	Shall be in t	he range of 6	6 to 9 Standard	Units			35 IAC 304.125
Fecal Coliform	Monitor Only	y (May throu	gh October)			35 IAC 309.146	
Chlorine Residual					0.05	35 IAC 302.208	

Ammonia Nitrogen: April - October November - February March	13 (25) 28 (57) 15 (30)	25 (50) 50 (100) 50 (100)	1.5 3.4 1.8		3.0 6.0 6.0	35 IAC 355 and 35 IAC 302
Total Phosphorus (as P)	Monitor Only					35 IAC 309.146
Total Nitrogen	Monitor Only					35 IAC 309.146
			Monthly Average not less than	Weekly Average not less than	Daily Minimum	
Dissolved Oxygen March - July August - February			 5.5	6.0 4.0	5.0 3.5	35 IAC 302.206

<sup>\*</sup>Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

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

Load limits computed based on a design average flow (DAF) of 2.03 MGD (design maximum flow (DMF) of 6.0 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

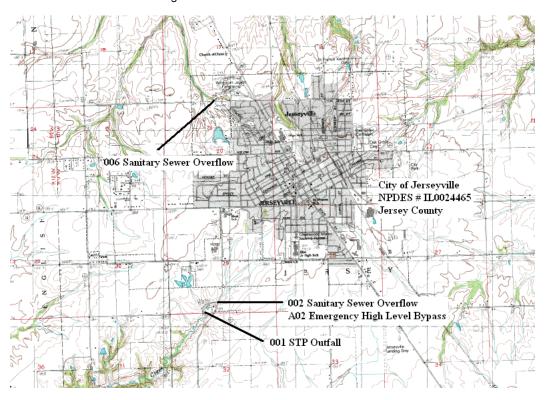
	LOA	LOAD LIMITS lbs/day* <u>DAF (DMF)</u>			NCENTRATION LIMITS mg/L	N	
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
CBOD₅	169 (500)		339 (1,001)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	203 (600)		406 (1,201)	12		24	35 IAC 304.120 40 CFR 133.102
рН	Shall be in t	he range of (	6 to 9 Standard	I Units			35 IAC 304.125
Fecal Coliform	Monitor Only	y (May throu	gh October)				35 IAC 309.146
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: April - October November - February March	25 (75) 58 (170) 30 (90)		51 (150) 102 (300) 102 (300)	1.5 3.4 1.8		3.0 6.0 6.0	35 IAC 355 and 35 IAC 302
				Monthly Average not less than	Weekly Average not less than	Daily Minimum	
Dissolved Oxygen March - July August - February				 5.5	6.0 4.0	5.0 3.5	35 IAC 302.206
Phosphorus	17 (50)			1.0			35 IAC 304.123
Total Nitrogen	Monitor Only						35 IAC 309.146

<sup>\*</sup>Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

Public Notice/Fact Sheet -- Page 4 -- NPDES Permit No. IL0024465

This draft Permit also contains the following requirements as special conditions:

- 1. Reopening of this Permit to include different final effluent limitations.
- Operation of the facility by or under the supervision of a certified operator.
- 3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
- 4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
- 5. Prohibition against causing or contributing to violations of water quality standards.
- 6. Effluent sampling point location.
- 7. Controlling the sources of infiltration and inflow into the sewer system.
- 8. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used.
- 9. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, weak acid dissociable cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required eighteen (18) months prior to the expiration date and again at twelve (12) months prior to the expiration date and to submit the results of such tests with the NPDES renewal application prior to filing of the NPDES renewal application.
- 10. Burden reduction.
- Submission of annual fiscal data.
- 12. A requirement for biomonitoring of the effluent.
- 13. Conditional approval to discharge from high level emergency bypass(es) based on 40 CFR.
- 14. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
- 15. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
- 16. Capacity, Management, Operations and Maintenance (CMOM) requirements.
- 17. Notify the Agency upon completion of the STP expansion.
- 18. Monitoring for Total Nitrogen
- 19. Provisions of 40 CFR Section 122.41 (m) & (n)
- 20. At minimum of 85% removal of CBOD<sub>5</sub> and suspended solids.



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:** 

Issue Date: Effective Date:

Name and Address of Permittee: City of Jerseyville 115 East Prairie Street Jerseyville, Illinois 62052 Facility Name and Address: City of Jerseyville STP 600 Maple Summit Road Jerseyville, Illinois (Jersey County)

Receiving Waters: Sandy 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:BDF:12011001.bah

## Effluent Limitations, Monitoring, and Reporting

## **FINAL**

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

Load limits computed based on a design average flow (DAF) of 1.0 MGD (design maximum flow (DMF) of 2.0 MGD).

From the effective date of this Permit until the expanded STP becomes operational or the expiration date, whichever comes first, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day		CC	NCENTRAT	TON			
		DAF (	DMF)*	LIMITS MG/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
CBOD <sub>5</sub> ******	83 (167)		167 (334)	10		20	1 Day/Week	Composite
Suspended Solids***	100 (200)		200 (400)	12		24	1 Day/Week	Composite
рН	Shall be in t	he range of (	6 to 9 Standar	d Units			1 Day/Week	Grab
Fecal Coliform****	Monitor Only (May through October		gh October)				1 Day/Week	Grab
Chlorine Residual						0.05	****	Grab
Ammonia Nitrogen as (N) April through October November through February March	13 (25) 28 (57) 15 (30)		25 (50) 50 (100) 50 (100)	1.5 3.4 1.8		3.0 6.0 6.0	1 Day/Week 1 Day/Week 1 Day/Week	Composite Composite Composite
Total Phosphorus (as P)	Monitor Only	y					1 Day/Month	Composite
Total Nitrogen	Monitor Only	y					1 Day/Month	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March - July August - February				 5.5	6.0 4.0	5.0 3.5	1 Day/Week 1 Day/Week	Grab Grab

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

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.

Chlorine Residual shall be reported on the DMR as daily maximum.

Dissolved oxygen shall be reported on the DMR as minimum.

Total Phosphorus and Total Nitrogen shall be reported on the DMR as a Maximum.

<sup>\*\*</sup>Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>\*\*\*</sup>The 30 day average percent removal shall not be less than 85 percent. See Special Condition 20.

<sup>\*\*\*\*</sup>Fecal coliform shall be monitored May through October with sampling results reported on the DMR as a daily maximum.

<sup>\*\*\*\*\*</sup>See Special Condition 8.

## Effluent Limitations, Monitoring, and Reporting

## **FINAL**

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

Load limits computed based on a design average flow (DAF) of 2.03 MGD (design maximum flow (DMF) of 6.0 MGD).

From the start of operation of the STP expansion until the expiration date of this Permit, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day			CC	ONCENTRA	ΓΙΟΝ		
		DAF	(DMF)*	LIMITS MG/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **'***	169 (500)		339 (1,001)	10		20	3 Days/Week	Composite
Suspended Solids***	203 (600)		406 (1,201)	12		24	3 Days/Week	Composite
рН	Shall be in t	he range of	6 to 9 Standard	d Units			3 Days/Week	Grab
Fecal Coliform****	recal Coliform**** Monitor Only (May through October)		gh October)				1 Day/Week	Grab
Chlorine Residual						0.05	****	Grab
Ammonia Nitrogen as (N) April through October November - February March	25 (75) 58 (170) 30 (90)		51 (150) 102 (300) 102 (300)	1.5 3.4 1.8		3.0 6.0 6.0	3 Days/Week 3 Days/Week 3 Days/Week	Composite Composite Composite
Phosphorus (as P)	17 (50)			1.0			3 Days/Week	Composite
Total Nitrogen*****	Monitor Onl	y					2 Days/Month	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March - July August - February				 5.5	6.0 4.0	5.0 3.5	3 Days/Week 3 Days/Week	Grab Grab

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

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.

Chlorine Residual Shall be reported on the DMR as daily maximum.

Dissolved oxygen shall be reported on the DMR as minimum.

Phosphorus and Total nitrogen shall be reported on the DMR as a maximum.

<sup>\*\*</sup>Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>\*\*\*</sup> The 30 day average percent removal shall not be less than 85 percent. See Special Condition 20.

<sup>\*\*\*\*</sup>Fecal Coliform shall be monitored May through October with sampling results reported on the DMR as a daily maximum.

<sup>\*\*\*\*\*</sup>See Special Condition 8.

<sup>\*\*\*\*\*</sup>See Special Condition 18.

# Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency**	Sample Type
Flow (MGD)	Continuous	RIT*
BOD₅	1 Day/Week	Composite
Suspended Solids	1 Day/Week	Composite

<sup>\*</sup>Recording, Indicating, Totalizing.

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<sub>5</sub> and Suspended Solids shall be reported on the DMR as a monthly average concentration.

<sup>\*\*</sup>Once the expanded STP becomes operational, influent monitoring shall be performed 3 days/week.

### **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.

<u>SPECIAL CONDITION 2</u>. The use or operation of the existing facility shall be by or under the supervision of a Certified Class 3 operator and a Certified Class 1 operator for the proposed facility.

<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 Section 122.63 and <u>Without Public Notice</u> in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

<u>SPECIAL CONDITION 5</u>. 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>. 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.

<u>SPECIAL CONDITION 8</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 9</u>. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. 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 reporting limits to be attained are as follows:

STORET		Minimum
CODE	<u>PARAMETER</u>	reporting 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
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (available*** or amenable to chlorination) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	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)**	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.

<sup>\*1.0</sup> ng/L = 1 part per trillion.

<sup>\*\*</sup>Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

<sup>\*\*\*</sup>USEPA Method OIA-1677.

### **Special Conditions**

<u>SPECIAL CONDITION 10</u>. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD<sub>5</sub>, CBOD<sub>5</sub>, Suspended Solids, pH, Dissolved Oxygen and Ammonia Nitrogen 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.

<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(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 <a href="Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012</a>. Unless substitute tests are pre-approved; the following tests are required:
  - a. Fish 96 hour static LC<sub>50</sub> Bioassay using fathead minnows (Pimephales promelas).
  - b. Invertebrate 48-hour static LC<sub>50</sub> Bioassay using Ceriodaphnia.
- Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Sample collection and testing must be conducted in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit. When possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters that may contribute to effluent toxicity.
- 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 Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification and reduction evaluation process as outlined below.
- 5. Toxicity Identification and Reduction Evaluation Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatment, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification evaluation process in accordance with Methods for Aquatic Toxicity Identification Evaluations, EPA/600/6-91/003. The IEPA may also require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation to be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, which 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 Conditions**

<u>SPECIAL CONDITION 13</u>. Discharge Numbers 002 STP Influent Sludge Facility, A02 STP emergency overflow and 006 Old Northwest STP are emergency high level overflow discharges. Discharges from these outfalls are prohibited. These prohibited discharges, if they occur, are subject to conditions 1-5 listed below.

# (1) Definitions

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a discharge. Severe property damage does not mean economic loss caused by delays in production.

## (2) Notice

- (i) Anticipated discharge. If the Permittee knows in advance of the need for a prohibited discharge from Discharge Numbers 002, A02 or 006, it shall submit prior notice, if possible at least ten days before the date of the discharge.
- (ii) Unanticipated discharge. The Permittee shall submit notice of an unanticipated discharge as required in Standard Condition 12(f) of this Permit (24-hour notice).
- (3) Limitation on IEPA enforcement discretion. The IEPA may take enforcement action against a Permittee for prohibited discharges from discharge numbers 002 STP Influent Sludge Facility, A02 STP emergency overflow and 006 Old Northwest STP, unless:
  - (i) Discharge was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (ii) There was no feasible alternative to the discharge, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a discharge which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (iii) The Permittee submitted notices as required under Standard Condition 12(f) of this Permit.
- (4) Emergency discharges when discharging, shall be monitored daily by grab sample for BOD<sub>5</sub>. Suspended Solids and Fecal Coliform. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which discharging occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD<sub>5</sub>, Suspended Solids and Fecal Coliform discharged in the concentration daily maximum column.
- (5) The above limitations on enforcement discretion apply only with respect to IEPA. They do not serve as a limitation on the ability of any other governmental agency or person to bring an enforcement action in accordance with the Federal Clean Water Act.

SPECIAL CONDITION 14. 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 25 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.

### **Special Conditions**

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

<u>SPECIAL CONDITION 15</u>. 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 (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs 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 Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 16. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan within twelve (12) months of the effective date of this Permit. The plan should utilize the USEPA document "Guide for Evaluation Capacity, Management, Operation and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems." [EPA 305 – B – 05 – 002 (January 2005)] for guidance and develop a project implementation schedule. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they were designed.

The CMOM plan shall include the following elements:

## a. Measures and Activities:

- 1. A complete map of the collection system owned and operated by the Permittee;
- 2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- 3. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
- 4. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee.

# b. Design and Performance Provisions:

- 1. Monitor the effectiveness of CMOM;
- 2. Upgrade the elements of the CMOM plan as necessary; and
- 3. Maintain summary of CMOM activities.

### **Special Conditions**

- c. Overflow Response Plan:
  - 1. Know where overflows within the facilities owned and operated by the Permittee occur;
  - 2. Respond to each overflow to determine additional actions such as clean up.
  - 3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow /infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.
- d. System Evaluation Plan.
- e. Reporting and Monitoring Requirements.
- f. Third Party Notice Plan:
  - 1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
  - 2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
  - Identifies who shall receive the notification:
  - 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
  - 5. Includes a description of the lines of communication; and
  - 6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

<u>SPECIAL CONDITION 17</u>. 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

<u>SPECIAL CONDITION 18</u>. The Permittee shall notify the IEPA in writing of any operational deficiencies and corrective measures to be taken if the expanded treatment plant exceeds the concentration value of 8 mg/l of Total Nitrogen in the effluent. Correspondence shall be directed to:

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 Illinois Environmental Protection Agency Bureau of Water Springfield Field Office, Mail Code #10 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 19. The provisions of 40 CFR Section 122.41 (m) & (n) are incorporated herein by reference.

<u>SPECIAL CONDITION 20</u>. Final Conditions - For Discharge No.  $001 \text{ BOD}_5$  and Suspended Solids (85% removal required): The arithmetic mean of the values for effluent samples collected in a period of one calendar month shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same time during the same period, except during those periods when the influent is diluted because of high flows if the tributary sewer system is combined. The percent removal need not be reported to the IEPA on DMR's but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD $_5$  concentration to determine the effluent BOD $_5$  concentration.