Notice No. SKT:14082601.bah

Public Notice Beginning Date: January 10, 2015

Public Notice Ending Date: February 9, 2015

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 Moline 619 16th Street Moline, Illinois 61265 Name and Address of Facility: Moline South Slope STP 2800 48th Avenue Moline, Illinois (Rock Island 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 indicate 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 Surinder Tandon 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 Moline.

The length of the Permit is approximately 5 years.

The main discharge number is 003 Diffuser Outfall and 004 High River Stage Outfall. The seven day once in ten year low flow (7Q10) of the receiving stream, Rock River is 1506.9 cfs.

The design average flow (DAF) for the facility is 9.0 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 16.8 MGD. Treatment consists of screening, comminutor, grit removal, primary clarifiers, activated sludge process and/or rotating bio-contactors, secondary clarifiers, chlorination. Primary and secondary treatment sludge is transferred to anaerobic digesters, dewatered by belt press and disposed of via land application or landfill.

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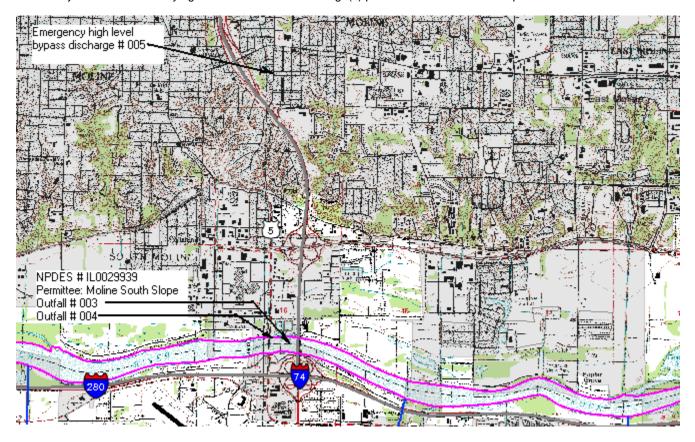
This treatment works has an approved pretreatment program. These are 0 non-categorical SIUs and 1 CIUs.

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

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

Discharge				Stream	Integrity
<u>Number</u>	Receiving Stream	<u>Latitude</u>	<u>Longitude</u>	<u>Classification</u>	<u>Rating</u>
003	Rock River	41° 27′ 42″ North	90° 25′ 49″ West	General Use	В
004	Rock River	41° 27′ 42″ North	90° 25′ 49″ West	General Use	В

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



Rock River, waterbody segment P-25, is listed as impaired on the draft 2014 Illinois Integrated Water Quality Report and Section 303 (d) List.

The following parameters have been identified as the pollutants causing impairment:

Potential Causes	<u>Uses Impaired</u>
Cause unknown	Aquatic life
Mercury and polychlorinated biphenyls	Fish consumption

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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): 003 Diffuser Outfall, 004 High River Stage Outfall

Load limits computed based on a design average flow (DAF) of 9.0 MGD (design maximum flow (DMF) of 16.8 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>		CONCENTRATION LIMITS mg/L				
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly Average	Weekly <u>Average</u>	Daily <u>Maximum</u>	<u>Regulation</u>
CBOD ₅ **	1501 (2802)	3002 (5604)		20	40		35 IAC 304.120 40 CFR 133.102
Suspended Solids**	1877 (3503)	3378 (6305)		25	50		35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual				0.75		1.50	35 IAC 302.208
Mercury***							35 IAC 201.208
Total Phosphorus (as P)	Monitor only						35 IAC 309.146
Total Nitrogen	Monitor only						35 IAC 309.146

^{*}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).

^{**} The 30-day average percent removal shall not be less than 85 percent.

^{***} Mercury shall be limited to a 12 month rolling average of 12 ng/l.

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

- 1. Reopening of this Permit to include different final effluent limitations.
- 2. 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. 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.
- 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
- 8. Effluent sampling point location.
- 9. Controlling the sources of infiltration and inflow into the sewer system.
- Seasonal fecal coliform limits.
- 11. The Permittee implements and administers an industrial pretreatment program pursuant to 40 CFR §403.
- 12. Burden reduction.
- 13. Submission of annual fiscal data.
- 14. A requirement for biomonitoring of the effluent.
- 15. Emergency bypass provisions.
- 16. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
- 17. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
- 18. Special Condition for ZID and mixing zone for ammonia.
- 19. A minimum of 85% removal of CBOD₅ and suspended solids.
- 20. Submission of Capacity, Management, Operation and Maintenance (CMOM) plan.

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 Moline
619 16th Street
Moline, Illinois 61265

Moline, Illinois (Rock Island County)

Facility Name and Address:

Moline South Slope STP
2800 48th Avenue
Moline, Illinois
(Rock Island County)

Receiving Waters: Rock River

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:SKT:14082601.bah

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 003 Diffuser Outfall, 004 High River Stage Outfall

Load limits computed based on a design average flow (DAF) of 9.0 MGD (design maximum flow (DMF) of 16.8 MGD).

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

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>			CONCENTRATION <u>LIMITS mg/L</u>				
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly Average	Weekly <u>Average</u>	<u>Daily</u> <u>Maximum</u>	Sample <u>Frequency</u>	Sample <u>Type</u>
Flow (MGD)							Continuous	
CBOD ₅ **, ***	1501 (2802)	3002 (5604)		20	40		4 Days/Week	Composite
Suspended Solids***	1877 (3503)	3378 (6305)		25	50		4 Days/Week	Composite
рН	Shall be in the range of 6 to 9 Standard Units			3			4 Days/Week	Grab
Fecal Coliform****	Daily Maximum shall not exceed 400 per 100 mL (May through October)					5 Days/Week	Grab	
Chlorine Residual****				0.75		1.50	5 Days/Week	Grab
Mercury****							1 Day/Month	Grab
Total Phosphorus (as P)	Monitor only						1 Day/Month	Composite
Total Nitrogen	Monitor only						1 Day/Month	Composite

^{*}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.

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

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

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

^{**}Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

^{***}The 30-day average percent removal shall not be less than 85 percent. See Special Condition 19.

^{****}See Special Condition 10.

^{******}Mercury shall be limited to a 12 month rolling average of 12 ng/l. 1 ng/l = 1 part per trillion.

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD ₅	4 Days/Week	Composite
Suspended Solids	4 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.

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

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 and regulations. 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 Without Public Notice.

<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> 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 Net-DMRs 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 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

<u>SPECIAL CONDITION 8.</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 9</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 10</u>. Fecal Coliform limits for Discharge Number 003 and 004 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 11

A. Publicly Owned Treatment Works (POTW) Pretreatment Program General Provisions

1. The Permittee shall implement and enforce its approved Pretreatment Program which was approved on June 4, 1985 and all approved subsequent modifications thereto. The Permittee shall maintain legal authority adequate to fully implement the Pretreatment Program in compliance with Federal (40 CFR 403), State, and local laws and regulations. All definitions in this section unless specifically otherwise defined in this section, are those definitions listed in 40 CFR 403.3. USEPA Region 5 is the Approval Authority for the administration of pretreatment programs in Illinois. The Permittee shall:

- a. Develop and implement procedures to ensure compliance with the requirements of a pretreatment program as specified in 40 CFR 403.8 (f) (2).
- b. Carry out independent inspection and monitoring procedures at least once per year, which will determine whether each significant industrial user (SIU) is in compliance with applicable pretreatment standards;
- c. Evaluate whether each SIU needs a slug control plan or other action to control slug discharges. If needed, the SIU slug control plan shall include the items specified in 40 CFR 403.8(f)(2)(vi). For Industrial Users (IUs) identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU;
- d. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;
- e. Receive and review self monitoring and other IU reports to determine compliance with all pretreatment standards and requirements, and obtain appropriate remedies for noncompliance by any IU with any pretreatment standard and/or requirement;
- f. Investigate instances of noncompliance, collect and analyze samples, and compile other information with sufficient care as to produce evidence admissible in enforcement proceedings, including judicial action;
- g. Require development, as necessary, of compliance schedules by each industrial user to meet applicable pretreatment standards; and,
- h. Maintain an adequate revenue structure and staffing levels for continued operation of the Pretreatment Program.
- 2. The Permittee shall issue/reissue permits or equivalent control mechanisms to all SIUs prior to expiration of existing permits or prior to commencement of discharge in the case of new discharges. The permits at a minimum shall include the elements listed in 40 CFR § 403.8(f)(1)(iii).
- 3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the general and specific prohibitions in 40 CFR § 403.5 which prohibit the introduction of any pollutant(s) which cause pass through or interference and the introduction of specific pollutants to the waste treatment system from <u>any</u> source of nondomestic discharge.
- 4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by <u>all industrial users</u> of the POTW. These limitations include specific standards for certain industrial categories as determined by Section 307(b) and (c) of the Clean Water Act, State limits, or local limits, whichever are more stringent.
- 5. The USEPA and IEPA individually retain the right to take legal action against any industrial user and/or the POTW for those cases where an industrial user has failed to meet an applicable pretreatment standard by the deadline date regardless of whether or not such failure has resulted in a permit violation.
- 6. The Permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system.
- 7. Unless already completed, the Permittee shall within <u>one (1) year</u> of the effective date of this Permit submit to USEPA and IEPA a proposal to modify and update its approved Pretreatment Program to incorporate Federal revisions to the general pretreatment regulations. The proposal shall include all changes to the approved program and the sewer use ordinance which are necessary to incorporate the revisions of the Pretreatment Streamlining Rule (which became effective on November 14, 2005), which are considered required changes, as described in the Pretreatment Streamlining Rule Fact Sheet 2.0: Required changes, available at: http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=3. This includes any necessary revisions to the Permittee's Enforcement Response Plan (ERP).
- 8. Within 1 year from the effective date of this permit, the Permittee shall conduct a technical re-evaluation of its local limitations consistent with U.S. EPA's Local Limits Development Guidance (July 2004 and spreadsheet found at: http://www.epa.gov/region5/water/npdestek/Locallmt.XLS), and submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, the following information must be submitted to U.S. EPA:
 - a. Total plant flow
 - b. Domestic/commercial pollutant contributions for pollutants of concern
 - c. Industrial pollutant contributions and flows

Special Conditions

- d. Current POTW pollutant loadings, including loadings of conventional pollutants
- e. Actual treatment plant removal efficiencies, as a decimal (primary, secondary, across the wastewater treatment plant)
- f. Safety factor to be applied
- g. Identification of applicable criteria:
 - NPDES permit conditions
 - Specific NPDES effluent limitations
 - •Water-quality criteria
 - •Whole effluent toxicity requirements
 - •Criteria and other conditions for sludge disposal
 - ii. Biological process inhibition
 - Nitrification
 - Sludge digester
 - iii. Collection system problems
- h. The Permittee's sludge disposal methods (land application, surface disposal, incineration, landfill)
- i. Sludge flow to digester
- j. Sludge flow to disposal
- k. % solids in sludge to disposal, not as a decimal
- I. % solids in sludge to digester, not as a decimal
- m. Plant removal efficiencies for conventional pollutants
- n. If revised industrial user discharge limits are proposed, the method of allocating available pollutants loads to industrial users
- o. A comparison of maximum allowable headworks loadings based on all applicable criteria listed in g, above
- p. Pollutants that have caused:
 - i. Violations or operational problems at the POTW, including conventional pollutants
 - ii. Fires and explosions
 - iii. Corrosion
 - iv. Flow obstructions
 - v. Increased temperature in the sewer system
 - vi. Toxic gases, vapors or fumes that caused acute worker health and safety problems
 - vii. Toxicity found through Whole Effluent Toxicity testing
 - viii. Inhibition
- q. Pollutants designated as "monitoring only" in the NPDES permit
- r. Supporting data, assumptions, and methodologies used in establishing the information a through q above.
- 9 Modifications of your Pretreatment Program shall be submitted in accordance with 40 CFR § 403.18, which established conditions for substantial and nonsubstantial modifications. All requests should be sent in electronic format to r5npdes@epa.gov, attention: NPDES Programs Branch.
- B. Reporting and Records Requirements
- 1. The Permittee shall provide an annual report briefly describing the permittee's pretreatment program activities over the previous calendar year. Permittees who operate multiple plants may provide a single report providing all plant-specific reporting requirements are met. Such report shall be submitted no later than April 28th of each year to USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Water Enforcement and Compliance Assurance Branch, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:
 - a. An updated listing of the Permittee's significant industrial users, indicating additions and deletions from the previous year, along with brief explanations for deletions. The list shall specify which categorical Pretreatment standards, if any, are applicable to each Industrial User.
 - b. A descriptive summary of the compliance activities including numbers of any major enforcement actions, (i.e., administrative orders, penalties, civil actions, etc.), and the outcome of those actions. This includes an assessment of the compliance status of the Permittee's industrial users and the effectiveness of the Permittee's Pretreatment Program in meeting its needs and objectives.
 - c. A description of all substantive changes made to the Permittee's Pretreatment Program. Changes which are "substantial modifications" as described in 40 CFR § 403.18(c) must receive prior approval from the USEPA.
 - d. Results of sampling and analysis of POTW influent, effluent, and sludge.

- e. A summary of the findings from the priority pollutants sampling. As sufficient data becomes available the IEPA may modify this Permit to incorporate additional requirements relating to the evaluation, establishment, and enforcement of local limits for organic pollutants. Any permit modification is subject to formal due process procedures pursuant to State and Federal law and regulation. Upon a determination that an organic pollutant is present that causes interference or pass through, the Permittee shall establish local limits as required by 40 CFR § 403.5(c).
- The Permittee shall maintain all pretreatment data and records for a minimum of three (3) years. This period shall be extended during the course of unresolved litigation or when requested by the IEPA or the Regional Administrator of USEPA. Records shall be available to USEPA and the IEPA upon request.
- 3. The Permittee shall establish public participation requirements of 40 CFR 25 in implementation of its Pretreatment Program. The Permittee shall at least annually, publish the names of all IU's which were in significant noncompliance (SNC), as defined by 40 CFR § 403.8(f)(2)(viii), in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the Permittee or based on any more restrictive definition of SNC that the POTW may be using.
- 4. The Permittee shall provide written notification to the USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: NPDES Programs Branch and to the Deputy Counsel for the Division of Water Pollution Control, IEPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 within five (5) days of receiving notice that any Industrial User of its sewage treatment plant is appealing to the Circuit Court any condition imposed by the Permittee in any permit issued to the Industrial User by Permittee. A copy of the Industrial User's appeal and all other pleadings filed by all parties shall be mailed to the Deputy Counsel within five (5) days of the pleadings being filed in Circuit Court.

C. Monitoring Requirements

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on monitoring report forms provided by the IEPA and include them in its annual report. Samples shall be taken at semi-annual intervals at the indicated reporting limit or better and consist of a 24-hour composite unless otherwise specified below. Sludge samples shall be taken of final sludge and consist of a grab sample reported on a dry weight basis.

STORET		Minimum
CODE	PARAMETER	reporting limit
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hex) (grab not to exceed 24 hours)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide* (grab) (available **** or amenable to chlorination)	5.0 ug/L
00720	Cyanide (total) (grab)	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 (effluent 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
01059	Thallium	0.3 mg/L
01092	Zinc	0.025 mg/L

^{*} Influent and effluent only

^{**1} ng/L = 1 part per trillion.

^{***}Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E, other approved methods may be used for influent (composite) and sludge.

^{****} USEPA Method OIA-1677.

Minimum reporting limits are defined as - (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

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. Where constituents are commonly measured as other than total, the phase is so indicated.

- 2. The Permittee shall conduct an analysis for the one hundred and ten (110) organic priority pollutants identified in 40 CFR 122 Appendix D, Table II as amended. This monitoring shall be done annually and reported on monitoring report forms provided by the IEPA and shall consist of the following:
 - a. The influent and effluent shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. The sampling shall be done during a day when industrial discharges are expected to be occurring at normal to maximum levels.

Samples for the analysis of acid and base/neutral extractable compounds shall be 24-hour composites.

Five (5) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) mL of each grab included in the composite.

Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with USEPA Methods 624 and 625 of 40 CFR 136 as amended.

- b. The sludge shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. A sludge sample shall be collected concurrent with a wastewater sample and taken as final sludge.
 - Sampling and analysis shall conform to USEPA Methods 624 and 625 unless an alternate method has been approved by IEPA.
- c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.
- 3. In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA.
- 4. Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(e) of this Permit.
- 5. Analytical detection limits shall be in accordance with 40 CFR 136. Minimum detection limits for sludge analyses shall be in accordance with 40 CFR 503.
- D. <u>Pretreatment Reporting</u>

USEPA Region 5 is the Approval Authority for administering the pretreatment program in Illinois. All requests for modification of pretreatment program elements should be submitted in redline/strikeout electronic format and should be sent to USEPA at r5npdes@epa.gov.

Permittee shall upon notice from USEPA, modify any pretreatment program element found to be inconsistent with 40 CFR 403.

<u>SPECIAL CONDITION 12</u>. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD5, CBOD5, Suspended Solids and pH due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 5 days/week 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 IEPA.

<u>SPECIAL CONDITION 13</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 Conditions

SPECIAL CONDITION NO.14. The Permittee shall conduct biomonitoring of the effluent from Outfall 003.

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. 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. Test Requirements The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. 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. Sample collection and testing must be conducted in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit. Effluent samples must be analyzed for ammonia given that this parameter has been associated with acute toxicity in past testing.
- 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. Results from ammonia analyses, as well as any other parameter believed to contribute to effluent toxicity, must be included in the bioassay report.
- 4. Toxicity Mixing for acute whole effluent toxicity is granted providing effluent does not exceed 1.0 Toxic Units outside of the ZID and toxicity only occurs in response to a parameter that has been granted a ZID in this permit. Should a bioassay result in greater than 1.0 Toxic Units outside of the ZID, or should the 100% effluent treatment exceed 1.0 Toxic Units due to an unknown toxicant or a parameter that has not been granted a ZID, 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 greater than 1.0 Toxic Units outside of the ZID, or should the 100% effluent treatment exceed 1.0 Toxic Unit due to an unknown toxicant or a parameter that has not been granted a ZID, 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.
- 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 CONDITION 15. Discharge Number 005 is an emergency high level outfall overflow discharges. Discharges from this outfall are prohibited. The Permittee shall maintain continuous electronic monitors capable of detecting all discharges from each prohibited discharge outfall or shall inspect each listed prohibited discharge outfall listed above within 24 hours of receiving .25 inches of precipitation or greater within a 24 hour period as recorded at the nearest National Weather Service Reporting Station. The Permittee shall utilize chalk or block devices or other discharge confirming devices approved by the Department to enhance visual monitoring. 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 Number 003, 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 Number 003, 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 BOD₅, 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 BOD₅, 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 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 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.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

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 17</u>. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

<u>SPECIAL CONDITION 18</u>. A zone of initial dilution (ZID) is recognized for ammonia with dimensions of 100 feet from the end-of-pipe and 18.4 feet downstream from this point. Within the ZID 100:1 dilution is afforded. A mixing zone is recognized for ammonia with dimensions extending 100 feet from the end-of-pipe and 18.4 feet downstream. Within the mixing zone 100:1dilution is afforded.

<u>SPECIAL CONDITION 19</u>. Final Conditions - For Discharge No. 003 and 004 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.

SPECIAL CONDITION 20. 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;
 - Upgrade the elements of the CMOM plan as necessary; and
 - 3. Maintain summary of CMOM activities.
- 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;
 - 3. 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.