

NPDES Permit No. IL0023094

Notice No. IL0023094-12.TTL

Public Notice Beginning Date: **August 24, 2012**

Public Notice Ending Date: **September 24, 2012**

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 Permittee:

Village of East Alton  
119 West Main Street  
East Alton, Illinois 62024

Name and Address of Facility:

Village of East Alton-STP  
320 Levee Road  
East Alton, Illinois 62024  
(Madison 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 Permittee. 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 Todd Lamm 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 Village of East Alton.

The length of the Permit is approximately 5 years.

The main discharge number is 002. The seven day once in ten year low flow (7Q10) of the receiving stream, Mississippi River is 21330 cfs. An alternate discharge point exists, numbered 001. The seven day once in ten year low flow (7Q10) of the receiving stream for 001, Wood River is 0 cfs.

The design average flow (DAF) for the facility is 0.91 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 2.73 MGD. Treatment consists of screening, grit removal, primary sedimentation (settling or clarifiers), activated sludge, chemical precipitation, phosphorus removal, final sedimentation (settling), disinfection (chlorine), and discharge to surface water. Sludge treatment consists of aerobic digestion, sludge lagoons, and land application.

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

Pursuant to the waiver provisions authorized by 40 CFR Section 123.24, this draft permit is within the class, type, and size for which the Regional Administrator, Region V, has waived his right to review, object, or comment on this draft permit action.

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

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
002	Mississippi River	38° 51' 32" North	90° 7' 34" West	General Use	Not Rated
001	Wood River	38° 52' 41" North	90° 7' 32" 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, J-05, receiving the discharge from outfall 001 is on the Draft 2010 303(d) list of impaired waters.

<u>Uses Impaired</u>	<u>Potential Causes</u>
Fish consumption	Mercury and PCBs
Primary contact	Fecal coliform bacteria

The stream segment, JR-02, receiving the discharge from outfall 002 is on the Draft 2010 303(d) list of impaired waters.

<u>Uses Impaired</u>	<u>Potential Causes</u>
Aquatic life	Alteration in stream-side vegetative cover (non-pollutant), loss of instream cover (non-pollutant), manganese and total suspended solids
Primary contact	Fecal coliform bacteria

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): STP Outfall 002 (to Mississippi River)

Load limits computed based on a design average flow (DAF) of 0.91 MGD (design maximum flow (DMF) of 2.73 MGD).

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

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Regulation
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD <sub>5</sub>	190 (569)	304 (911)		25	40		35 IAC 304.120 40 CFR 133.102
Suspended Solids	228 (683)	342 (1,025)		30	45		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	35 IAC 302.208
Phosphorus	7.6 (23)			1.0			35 IAC 304.123

\*Load Limits are calculated by using the formula:  $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$ .

Discharge Number(s) and Name(s): STP Outfall 001 (to Wood River)

Load limits computed based on a design average flow (DAF) of 0.91 MGD (design maximum flow (DMF) of 2.73 MGD).

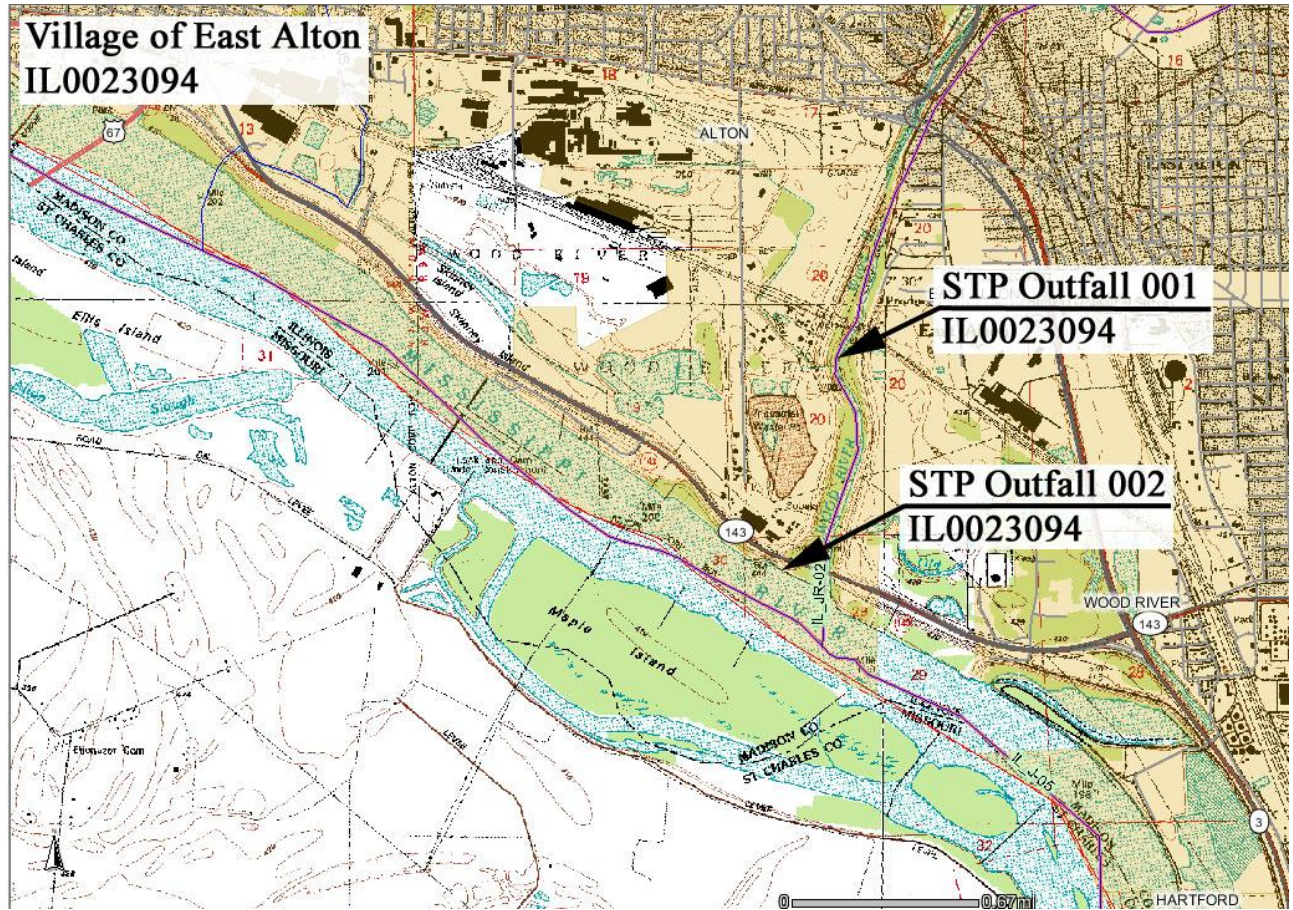
The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Regulation
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD <sub>5</sub>	76 (228)		152 (455)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	91 (273)		182 (546)	12		24	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						0.05	35 IAC 302.208
Ammonia Nitrogen: Mar.-May, Sept.-Oct.	11 (34)	29 (87)	36 (109)	1.5	3.8	4.8	35 IAC 355 and
June-August	9.1 (27)	23 (68)	51 (153)	1.2	3	6.7	35 IAC 302
November-February	20 (61)		48 (143)	2.7	NA	6.3	
Phosphorus	7.6 (23)			1.0			35 IAC 304.123
Dissolved Oxygen March-July				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
August-February				NA	6.0	5.0	35 IAC 302.206
				5.5	4.0	3.5	

\*Load Limits are calculated by using the formula:  $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$ .

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. Effluent sampling point location.
8. Provisions of 40 CFR Section 122.41 (m) & (n).
9. At minimum of 85% removal of CBOD5 and suspended solids (Outfall 002 only).
10. Controlling the sources of infiltration and inflow into the sewer system.
11. Seasonal fecal coliform limits.
12. Submission of annual fiscal data.
13. Zone of initial dilution and mixing zone delineation.
14. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
15. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.



NPDES Permit No. IL0023094

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:

Village of East Alton  
119 West Main Street  
East Alton, Illinois 62024

Facility Name and Address:

Village of East Alton-STP  
320 Levee Road  
East Alton, Illinois 62024  
(Madison County)

Receiving Waters: Mississippi River (002) and Wood River (001)

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

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

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

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## NPDES Permit No. IL0023094

Effluent Limitations, Monitoring, and Reporting

## FINAL

Discharge Number(s) and Name(s): STP Outfall 002 (Main discharge, to Mississippi River)

Load limits computed based on a design average flow (DAF) of 0.91 MGD (design maximum flow (DMF) of 2.73 MGD).

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

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **	190 (569)	304 (911)		25	40		2 Days/Week	Composite
Suspended Solids	228 (683)	342 (1,025)		30	45		2 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						2 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						2 Days/Week	Grab
Chlorine Residual***						0.75	2 Days/Week	Grab
Phosphorus	7.6 (23)			1.0			2 Days/Week	Composite

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

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

\*\*\*See Special Condition 11.

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.

Phosphorus shall be reported on the DMR as a monthly average and daily maximum value.



## NPDES Permit No. IL0023094

Effluent Limitations, Monitoring, and Reporting

## FINAL

Discharge Number(s) and Name(s): STP Outfall 001 (Alternate Discharge, to Wood River)

Load limits computed based on a design average flow (DAF) of 0.91 MGD (design maximum flow (DMF) of 2.73 MGD).

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

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **	76 (228)		152 (455)	10		20	Daily When Discharging	Composite
Suspended Solids	91 (273)		182 (546)	12		24	Daily When Discharging	Composite
pH	Shall be in the range of 6 to 9 Standard Units						Daily When Discharging	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						Daily When Discharging	Grab
Chlorine Residual***						0.05	Daily When Discharging	Grab
Ammonia Nitrogen: (as N) Mar.-May, Sept.-Oct.	11 (34)	29 (87)	36 (109)	1.5	3.8	4.8	Daily When Discharging	Composite
June-August	9.1 (27)	23 (68)	51 (153)	1.2	3	6.7	Daily When Discharging	Composite
November-February	20 (61)		48 (143)	2.7	NA	6.3	Daily When Discharging	Composite
Phosphorus	7.6 (23)			1.0			Daily When Discharging	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				NA	6.0	5.0	Daily When Discharging	Grab
August-February				5.5	4.0	3.5	Daily When Discharging	Grab

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

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

\*\*\*See Special Condition 11.

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.

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

Phosphorus shall be reported on the DMR as a monthly average and daily maximum value.

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Continuous	
BOD <sub>5</sub>	2 Days/Week	Composite
Suspended Solids	2 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<sub>5</sub> and Suspended Solids shall be reported on the DMR as a monthly average concentration.

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 2 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 Section 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: 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 25th 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  
Attention: Compliance Assurance Section, Mail Code # 19  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7: 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.

SPECIAL CONDITION 8: The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

SPECIAL CONDITION 9: Final Conditions - For Discharge No. 002, BOD5 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 CBOD5 concentration to determine the effluent BOD5 concentration.

SPECIAL CONDITION 10: 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.

SPECIAL CONDITION 11: Fecal Coliform limits for Discharge Numbers 001 and 002 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 12: 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 13: A zone of initial dilution (ZID) for outfall 002 is recognized for ammonia and total residual chlorine with dimensions of 1.1 feet outward across the width of the river from the outfall point and 1.1 feet downstream from this point. Within the ZID 13.1:1 dilution is afforded. A mixing zone is recognized with dimensions extending 2 feet outward across the width of the river from the outfall point and 2 feet downstream from this point. Within the mixing zone at least 22:1 dilution is afforded.

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.

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 15: 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.