

NPDES Permit No. IL0023159

Notice No. SKT:11091401.bah

Public Notice Beginning Date: **November 15, 2011**

Public Notice Ending Date: **December 16, 2011**

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:

Greater Chillicothe Sanitary District
P.O. Box 109
Chillicothe, Illinois 61523

Name and Address of Facility:

Greater Chillicothe Sanitary District STP
17116 North Second Street
Chillicothe, Illinois
(Peoria 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 Chillicothe.

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, Illinois River is 3279 cfs.

The design average flow (DAF) for the facility is 0.8 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 2.0 MGD. Treatment consists of primary clarifiers, activated sludge, final settling and chlorination. Primary sludge is treated by anaerobic digestion and secondary sludge is treated by aerobic digestion.

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 § 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(s) which is (are) located in Peoria County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

| <u>Discharge Number</u> | <u>Receiving Stream</u> | <u>Latitude</u> | <u>Longitude</u> | <u>Stream Classification</u> | <u>Integrity Rating</u> |
|-------------------------|-------------------------|-------------------|------------------|------------------------------|-------------------------|
| 001 | Illinois River | 40° 53' 50" North | 89° 29' 42" 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) receiving the discharge from outfall(s) 001 is (are) on the 303(d) list of impaired waters.

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

| <u>Potential Causes</u> | <u>Uses Impaired</u> |
|--|---|
| Mercury and PCB's | Fish Consumption |
| Fecal coliform bacteria | Primary Contact |
| Atrazine, manganese and total dissolved solids | Public and food processing water supply |

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

Load limits computed based on a design average flow (DAF) of 0.8 MGD (design maximum flow (DMF) of 2.0 MGD).

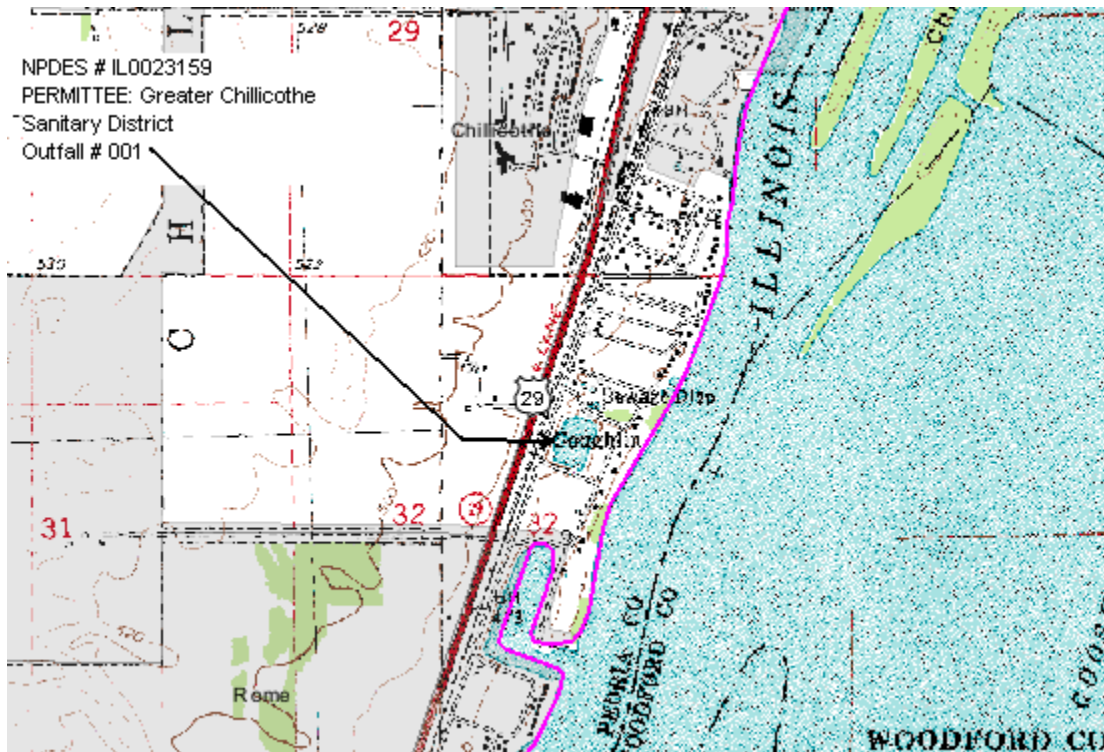
The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

| <u>Parameter</u> | <u>LOAD LIMITS lbs/day</u> <u>DAF (DMF)*</u> | | | <u>CONCENTRATION</u> <u>LIMITS mg/L</u> | | | <u>Regulation</u> |
|-------------------|--|-----------------------|----------------------|--|-----------------------|----------------------|----------------------------------|
| | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Maximum</u> | |
| CBOD ₅ | 167 (417) | 267 (667) | | 25 | 40 | | 35 IAC 304.120 40 CFR 133.102 |
| Suspended Solids | 200 (500) | 300 (751) | | 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 | | | | | | 0.50 | 35 IAC 302.208 |

*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. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.
8. Effluent sampling point location.
9. At minimum of 85% removal of CBOD₅ and suspended solids.
10. Controlling the sources of infiltration and inflow into the sewer system.
11. Seasonal fecal coliform limits.
12. Burden reduction.
13. Submission of annual fiscal data.
14. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
15. Special Condition recognizing zone of initial dilution (ZID) and mixing zone for ammonia and chlorine residual.



NPDES Permit No. IL0023159

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:

Greater Chillicothe Sanitary District
P.O. Box 109
Chillicothe, Illinois 61523

Facility Name and Address:

Greater Chillicothe Sanitary District STP
17116 North Second Street
Chillicothe, Illinois
(Peoria County)

Receiving Waters: Illinois 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

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Effluent Limitations, Monitoring, and Reporting

FINAL

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

Load limits computed based on a design average flow (DAF) of 0.8 MGD (design maximum flow (DMF) of 2.0 MGD).

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

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

| <u>Parameter</u> | <u>LOAD LIMITS lbs/day DAF (DMF)*</u> | | | <u>CONCENTRATION LIMITS mg/L</u> | | | <u>Sample Frequency</u> | <u>Sample Type</u> |
|----------------------|--|---------------------------|--------------------------|--------------------------------------|---------------------------|--------------------------|-----------------------------|------------------------|
| | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Weekly Average</u> | <u>Daily Maximum</u> | | |
| Flow (MGD) | | | | | | | Continuous | |
| CBOD ₅ ** | 167 (417) | 267 (667) | | 25 | 40 | | 2 Days/Month | Composite |
| Suspended Solids | 200 (500) | 300 (751) | | 30 | 45 | | 2 Days/Month | Composite |
| pH | Shall be in the range of 6 to 9 Standard Units | | | | | | 2 Days/Month | Grab |
| Fecal Coliform*** | Daily Maximum shall not exceed 400 per 100 mL (May through October) | | | | | | 2 Days/Month | Grab |
| Chlorine Residual*** | | | | | | 0.50 | 2 Days/Month | Grab |

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

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

***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.

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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 ₅ | 2 Days/Month | Composite |
| Suspended Solids | 2 Days/Month | 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.

BOD₅ 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 § 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. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

SPECIAL CONDITION 8. 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 9. Final Conditions - For Discharge No. 001 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 Number 001 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. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD₅, CBOD₅, Suspended Solids, pH, Fecal Coliform and Chlorine Residual due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 2 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

Special Conditions

SPECIAL CONDITION 13. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

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

SPECIAL CONDITION 14. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

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

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

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

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

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

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

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

SPECIAL CONDITION 15. A zone of initial dilution (ZID) is recognized for ammonia and chlorine residual with dimensions of 5.9 feet from the end-of-pipe and 5.9 feet downstream from this point. Within the ZID, 41:1 dilution is afforded. A mixing zone is recognized for ammonia and chlorine residual with a dimension 13 feet for the end-of-pipe and 13 feet downstream. Within the mixing zone 91:1 dilution is afforded.

