Notice No. BDF:13042903.bah

Public Notice Beginning Date: July 24, 2013

Public Notice Ending Date: August 23, 2013

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

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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:

City of East Dubuque 303 Sinsinawa Avenue East Dubuque, Illinois 61025 Name and Address of Facility:

East Dubuque STP 185 Wisconsin Avenue East Dubuque, Illinois (JoDaviess 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 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 and industrial wastewater for the City of East Dubuque.

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, Mississippi River is 13260 cfs.

The design average flow (DAF) for the facility is 0.465 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 1.16 MGD. Treatment consists of screening, activated sludge process, aerobic sludge digestion, sludge storage and chlorination.

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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(s) which is located in JoDaviess 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> | Rating |
| 001 | Mississippi River | 42° 29′ 32" North | 90° 39′ 03" 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), segment K-12, receiving the discharge from outfall(s) 001 is on the 2012 303(d) list of impaired waters.

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

| Potential Causes | Uses Impaired |
|------------------|------------------|
| mercury and PCBs | fish consumption |

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 0.465 MGD (design maximum flow (DMF) of 1.16 MGD).

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

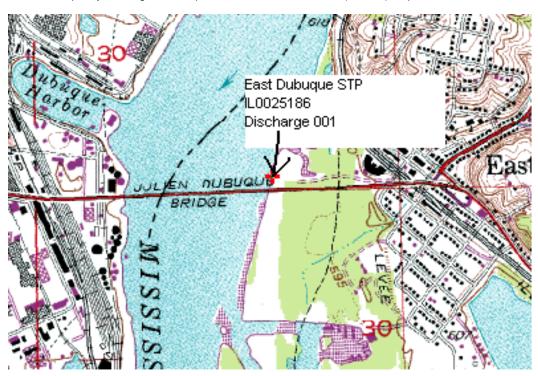
| | LOAD LIMITS lbs/day <u>DAF (DMF)*</u> | | | CONCENTRATION LIMITS mg/L | | | |
|-------------------|---|--------------------------|-------------------------|------------------------------|--------------------------|-------------------------|----------------------------------|
| <u>Parameter</u> | Monthly <u>Average</u> | Weekly <u>Average</u> | Daily <u>Maximum</u> | Monthly <u>Average</u> | Weekly <u>Average</u> | Daily <u>Maximum</u> | <u>Regulation</u> |
| CBOD₅ | 97 (242) | 155 (387) | | 25 | 40 | | 35 IAC 304.120 40 CFR 133.102 |
| Suspended Solids | 116 (290) | 175 (435) | | 30 | 45 | | 35 IAC 304.120 40 CFR 133.102 |
| рН | 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 |

^{*}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).

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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. 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. Prohibition against discharging from sanitary sewer overflows.
- 15. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
- 16. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
- 17. Recognitition of ZID and mixing for ammonia and residual chlorine.
- 18. Capacity, Management, Operations and Maintenance (CMOM) requirements



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 East Dubuque
303 Sinsinawa Avenue
East Dubuque, Illinois 61025

East Dubuque, Illinois (JoDaviess County)

Receiving Waters: Mississippi 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:BDF:13042903.bah

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 0.465 MGD (design maximum flow (DMF) of 1.16 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:

| | 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 ** | 97 (242) | 155 (387) | | 25 | 40 | | 2 Days/Month | Composite |
| Suspended Solids | 116 (290) | 175 (435) | | 30 | 45 | | 2 Days/Month | Composite |
| рН | 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*** | | | | | | 0.75 | 2 Days/Month | Grab |

^{*}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 the DMR as daily maximum value.

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

^{***}See Special Condition 11.

Special Conditions

NPDES Permit No. IL0025186

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 | 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.

 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, 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.

<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> 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 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>. Final Conditions - For Discharge No. 001 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.

<u>SPECIAL CONDITION 10</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 11</u>. 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.

<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 2 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.

Special Conditions

<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".

<u>SPECIAL CONDITION 14.</u> Overflows from sanitary sewers are expressly prohibited by III. Adm. Code 306.304. Therefore, the Permittee is prohibited to discharge from the following sanitary sewer overflows (the use of an overflow point is subject to reporting requirements contained in Standard Condition 12(e) of this Permit):

Discharge Number(s)

Name

002

Hiawatha Lift Station

SPECIAL CONDITION 15. 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

<u>SPECIAL CONDITION 16</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 17</u>. A zone of initial dilution is recognized for ammonia and residual chlorine with dimensions of 1.0 feet across the width of the river from the end-of-pipe and 1.0 feet downstream from this point. Within the ZID, 13.2:1 dilution is afforded. A mixing zone is recognized for ammonia and residual chlorine with dimensions extending 3.5 feet across the width of the river and 3.5 feet downstream. Within the mixing zone 43.4:1 dilution is afforded.

SPECIAL CONDITION 18. The Permittee shall work to eliminate discharges from sanitary sewer overflows or basement backups caused by conditions in the pemittee's collection system 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 the Permit.

The CMOM plan shall include the following elements:

Special Conditions

A. Measures and Activities:

- 1. A complete map of the collection system;
- 2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment;
- 3. An assessment of the capacity of the collection and treatment system 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.

B. Design and Performance Provisions:

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

C. Overflow Response Plan:

- 1. Know where overflows and backups occur; and,
- 2. Respond to each overflow or backup to determine additional actions such as clean up.
- D. System Evaluation Plan.
- E. Reporting and Monitoring Requirements.