

NPDES Permit No. IL0029343

Notice No. SKT:20012202.bah

Public Notice Beginning Date: **July 2, 2020**

Public Notice Ending Date: **July 31, 2020**

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 Kewanee
401 East Third Street
Kewanee, Illinois 61443

Name and Address of Facility:

Kewanee STP
194 Fischer Avenue
Kewanee, Illinois 61413
(Henry 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 Kewanee.

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, West Fork Spoon River is 0 cfs.

The design average flow (DAF) for the facility is 2.0 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 5.0 MGD. Treatment consists of screening, grit removal, flow equalization, oxidation ditch, secondary clarification, tertiary filters. Sludge treatment consists of aerobic digester, gravity sludge thickener, vacuum dry beds, sludge storage lagoon, land application.

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

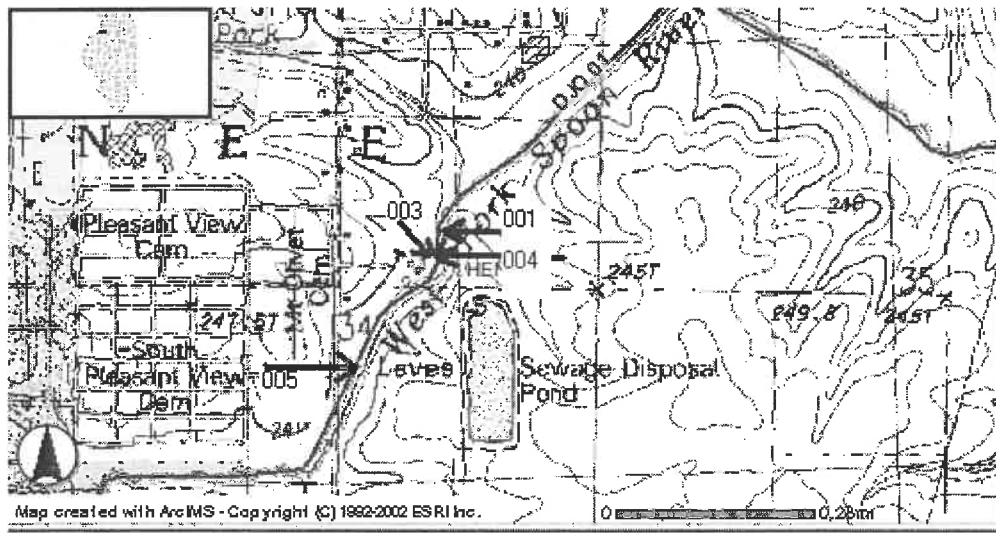
This Permit recognizes and continues the year-round disinfection exemption approved by the IEPA on June 4, 1990 and revalidated on December 6, 2012 and included in past NPDES permit actions since that date. It is the IEPA's tentative decision that under Illinois Pollution Control Board regulations, the following reach of waterbody is not classified for primary contact use activities and is not subject to the fecal coliform water quality standard of 35 Ill. Adm. Code 302.209.

This draft permit does not contain requirements for disinfection of the discharge from discharge numbers(s) 001. West Fork Spoon River from point of discharge to the bridge in section 36, T15N, R5E, approximately 1.7 miles, has been determined to be unsuited to support primary contact activities (swimming) due to physical, hydrologic or geographic configuration. Anyone knowing of primary contact activities occurring within this water segment is invited to submit comments to the IEPA. Comments should give the nature of the activities (i.e swimming, fishing, canoeing, etc.), the location and months of the year when these activities have been observed. The IEPA is also interested in obtaining information on the proximity of residential dwellings and the accessibility of the public to this water segment. Anyone with such information is asked to submit comments to the IEPA on this draft permit action. Instructions for submitting comments are contained earlier in this document.

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

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	West Fork Spoon River	41° 14' 35" North	89° 54' 01" West	General Use	Not Rated
003	West Fork Spoon River	41° 14' 34" North	89° 54' 07" West	General Use	Not Rated
004	West Fork Spoon River	41° 14' 32" North	89° 54' 01" West	General Use	Not Rated
005	West Fork Spoon River	41° 14' 24" North	89° 54' 09" West	General Use	Not Rated

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



The West Fork Spoon River, Waterbody Segment, IL_DJO-01, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use with potential causes given as chloride and sedimentation/siltation. Aesthetic quality use is fully supported. From the treatment plant to the end of segment IL_DJO-01 is a distance of 19.77 stream miles.

The West Fork Spoon River joins the East Branch Spoon River to form the Spoon River. The Spoon River, Waterbody Segment, IL_DJ-06, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact use with potential cause given as fecal coliform. Aesthetic quality and aquatic life uses are fully supported. Segment IL_DJ-06 is 25.62 stream miles in length.

Segment IL_DJ-02 is the next segment of the Spoon River. The Spoon River, Waterbody Segment, IL_DJ-02, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact use with potential cause given as fecal coliform. Aesthetic quality and aquatic life uses are fully supported. Segment IL_DJ-02 is 24.55 stream miles in length.

Segment IL_DJ-09 is the next segment of the Spoon River. The Spoon River, Waterbody Segment, IL_DJ-09, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as mercury and primary contact use with potential cause given as fecal coliform. Aesthetic quality and aquatic life uses are fully supported. Segment IL_DJ-09 is 33.7 stream miles in length.

Segment IL_DJ-08 is the next segment of the Spoon River. The Spoon River, Waterbody Segment, IL_DJ-08, is listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact use with potential cause given as fecal coliform. Aesthetic quality and aquatic life uses are fully supported. Segment IL_DJ-08 is 35.07 stream miles in length.

Segment IL_DJ-01 is the next segment of the Spoon River. The Spoon River, Waterbody Segment, IL_DJ-01, is not listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List. Aesthetic quality and aquatic life uses are fully supported. Segment IL_DJ-01 is 28.19 stream miles in length.

The Kewanee effluent travels a total of 166.9 miles in the receiving stream before it joins the Illinois River. There is no algae impairment noted in the 303(d) List nor is there any impairment due to a cause of dissolved oxygen anywhere in this downstream continuum. There is no evidence to imply that phosphorus from the Kewanee facility is causing any impairment prohibited by the narrative water quality standard.

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 2.0 MGD (design maximum flow (DMF) of 5.0 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 ₅ **	167 (417)		334 (834)	10		20	35 IAC 304.120 40 CFR 133.102		
Suspended Solids**	200 (500)		400 (1001)	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	Monitor only (May through October)						35 IAC 309.146		
Chlorine Residual							0.038	35 IAC 302.208	
Ammonia Nitrogen: (as N)								35 IAC 355 and 35 IAC 302	
March-May/Sept.-Oct.	23 (54)	58 (146)	73 (183)	1.3	3.5	4.4			
June-August	15 (38)	38 (96)	100 (250)	0.9	2.3	6.0			
Nov.-Feb.	42 (104)		72 (179)	2.5	N/A	4.3			
Total Phosphorus (as P)	Monitor only							35 IAC 304.146	
Total Nitrogen (as N)	Monitor only							35 IAC 309.146	
Chloride							8340 (20850)	500	35 IAC 302.208(g)
Dissolved Oxygen									
March-July							Monthly Avg. not less than	N/A	
August-February							Weekly Avg. not less than	6.0	
							Daily Minimum	4.0	35 IAC 302.206

*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)

**BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent.

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This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): 004 and 005 Excess Flow Lagoon Outfalls

Parameter	CONCENTRATION LIMITS (mg/L)		Regulation
	Monthly Average	Weekly Average	
BOD ₅ *	30	45	40 CFR 133.102
Suspended Solids*	30	45	40 CFR 133.102
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		35 IAC 304.121
pH	Shall be in the range of 6 to 9 standard units		35 IAC 304.125
Chlorine Residual	Daily maximum shall not exceed 0.75		35 IAC 302.208
Ammonia Nitrogen (as N)	Monitor only		35 IAC 355 and 35 IAC 302
Total Phosphorus (as P)	Monitor only		35 IAC 309.146
Dissolved Oxygen	Monitor only		35 IAC 302.206

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

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.
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. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
10. Conditional authorization to discharge from high level emergency bypass(es) based on 40 CFR.
11. Controlling the sources of infiltration and inflow into the sewer system.
12. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, available cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required to be conducted semi-annually beginning 3 months from the effective date.
13. Submission of annual fiscal data.
- ~~14. A requirement for biomonitoring of the effluent.~~
15. Capacity, Management, Operations, and Maintenance (CMOM) plan.
16. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
17. Burden reduction.
18. A requirement to monitor and a limit of 0.038 mg/L for residual chlorine when it is used.

19. Submission of phosphorus removal feasibility study.
20. Phosphorus Discharge Optimization plan.
21. Requirement to meet 0.5 mg/L Total Phosphorus 12 month rolling geometric mean by 2030.
22. Submission of Reasonable Potential Analysis and Mixing Study Plan.

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