

NPDES Permit No. IL0027685

Notice No. 23051701.kkd

Public Notice Beginning Date: **August 10, 2023**

Public Notice Ending Date: **September 11, 2023**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Modified 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 Belvidere
401 Whitney Blvd.
Belvidere, Illinois 61008

Name and Address of Facility:

Belvidere Wastewater Treatment Plant
2001 Newburg Rd
Belvidere, Illinois 61008
(Boone 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 Kaushal Desai 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 Belvidere and West Side Industrial Park.

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, Kishwaukee River is 33.0 cfs.

The design average flow (DAF) for the facility is 5.8 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 9.85 MGD. Treatment consists of screening, grit removal, excess flow retention, primary clarification, single stage aeration, secondary clarification, rotating disk filters, disinfection (chlorine contact), gravity belt thickener, two stage anaerobic digestion, centrifuge, sludge holding/storage, land application.

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The stream segment(s), Waterbody Segment PQ-14, receiving the discharge from outfall(s) 001 is on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Mercury and polychlorinated biphenyls

Fish consumption

The next stream segment of the Kishwaukee River, Waterbody Segment P-02, is on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Mercury and polychlorinated biphenyls

Fish consumption

The next stream segment of the Kishwaukee River, Waterbody Segment PQ-12, is on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Fecal coliform

Primary contact

Mercury and polychlorinated biphenyls

Fish consumption

The next stream segment of the Rock River, Waterbody Segment P-14, is also on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Mercury and polychlorinated biphenyls

Fish consumption

The next stream segment of the Rock River, Waterbody Segment P-20, is also on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Ethanol and fish kills (non-pollutant)

Aquatic life

Mercury and polychlorinated biphenyls

Fish consumption

The next stream segment of the Rock River, Waterbody Segment P-21, is also on the 303(d) list of impaired waters.

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

Potential Causes

Uses Impaired

Ethanol and fish kills (non-pollutant)

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): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 5.8 MGD (design maximum flow (DMF) of 9.85 MGD).

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

Parameter	LOAD LIMITS lbs/day			CONCENTRATION LIMITS mg/L			Regulation	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD ₅ **	484 (821)		967 (1643)	10		20	35 IAC 304.120 40 CFR 133.102	
Suspended Solids**	580 (986)		1161 (1972)	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 (as N):								
March-May/Sept.-Oct.	73 (123)	184 (312)	227 (386)	1.5	3.8	4.7	35 IAC 355 and 35 IAC 302	
June-August	73 (123)	184 (312)	193(329)	1.5	3.8	4.0		
Nov.-Feb.	193 (329)		227 (386)	4.0		4.7		
Total Phosphorus (as P)	Monitor only							35 IAC 304.123
Total Nitrogen (as N)	Monitor only							35 IAC 309.146
Dissolved Oxygen				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
March-July				N/A	6.25	5.0	35 IAC 302.206	
August-February				6.0	4.5	4.0		

*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.