

NPDES Permit No. IL0031933

Notice No. FJA: 20050701

Public Notice Beginning Date: **August 14, 2020**

Public Notice Ending Date: **September 14, 2020**

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:

Northern Moraine Wastewater Reclamation District  
P.O. Box 240  
Island Lake, Illinois 60042-0240

Name and Address of Facility:

Northern Moraine Wastewater Reclamation District WWTP  
420 Timber Trail  
Island Lake, Illinois 60042  
(McHenry 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 Frantz Altidor 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 Villages of Island Lake, Lakemoor, and Port Barrington.

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, Fox River is 99.0 cfs

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 (Existing Plant)

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			CONCENTRATION			Regulation	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD <sub>5</sub> **	334 (834)	667 (1668)		20	40		35 IAC 304.120 40 CFR 133.102	
Suspended Solids**	417 (1043)	751 (1877)		25	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	The monthly geometric mean shall not exceed 200 per 100 mL No more than 10% of the samples during the month shall exceed 400 per mL						35 IAC 304.121	
Chlorine Residual							0.05 35 IAC 302.208	
Ammonia Nitrogen: (as N)								
April-October	25 (63)		42 (104)	1.5		2.5	35 IAC 355 and 35 IAC 302	
November-February	62 (154)		82 (204)	3.7		4.9		
March	25 (63)		60 (150)	1.5		3.6		
Total Nitrogen (as N)	Monitor Only						35 IAC 309.146	
Dissolved Phosphorus	Monitor Only						35 IAC 309.146	
Nitrate/Nitrite	Monitor Only						35 IAC 309.146	
Total Kjeldahl Nitrogen (TKN)	Monitor Only						35 IAC 309.146	
Alkalinity	Monitor Only						35 IAC 309.146	
Temperature	Monitor Only						35 IAC 309.146	
Total Phosphorus (as P)				Annual*** Average			Annual*** Average	
				17 (42)		1.0	35 IAC 309.123	
Dissolved Oxygen				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
March-July				N/A	6.0	5.0	35 IAC 302.206	
August-February				5.5	4.0	3.5		

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

\*\* BOD<sub>5</sub> 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.

\*\*\*Annual Average is defined as the 12 month rolling average (calculated monthly).

**DRAFT**

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PUBLIC NOTICE

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. 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.
10. Burden reduction.
11. Submission of annual fiscal data.
12. A requirement for biomonitoring of the effluent.
13. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
14. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
15. Optimization of biological nutrient removal (BNR) facilities.
16. A requirement for participation in the Fox River Study Group.
17. Compliance schedule for meeting 1.0 mg/L Phosphorus limit.
18. Updating the Phosphorus Removal Feasibility Study (PRFS) to achieve 0.1 mg/L Phosphorus limit.
19. Requirement to meet 0.5 mg/L Phosphorus limit by 2030.
20. Submission of a Phosphorus Discharge Optimization Plan.
21. Notify IEPA upon completion of the proposed plant.
22. Monitoring of the wastewater effluent for dissolved phosphorus, total phosphorus, nitrate/nitrite, total nitrogen, total Kjeldahl nitrogen, ammonia, total nitrogen (calculated), alkalinity and temperature once a month.
23. Capacity, Management, Operations, and Maintenance (CMOM) plan.