

NPDES Permit No. IL0080283  
Notice No. FJH:25022701.docx

Public Notice Beginning Date: April 14, 2025

Public Notice Ending Date: May 14, 2025

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft New NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency  
Bureau of Water  
Division of Water Pollution Control  
Permit Section  
2520 West Iles Avenue  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

City of Waterloo  
100 W 4<sup>th</sup> Street  
Waterloo, Illinois 62298

Name and Address of Facility:

City of Waterloo Water Treatment Plant  
313 East Hunters Ridge  
Valmeyer, Illinois 62295  
(Monroe 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. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. 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 number(s) 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 Francisco J. Herrera at 217/782-0610.

The applicant is engaged in the operation of a new public water supply water treatment plant (SIC 4941). Plant operation results in an average discharge of 0.03 MGD of filter backwash wastewater from Outfall 001.

Application is made for a new discharge which is located in Monroe County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude</u>		<u>Longitude</u>		<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Unnamed Tributary to Bond Creek	38° 18' 31"	North	90° 16' 29"	West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The unnamed tributary to Bond Creek, waterbody segment IL\_JHB, is a General Use waterbody with a 0 cfs 7Q10 flow receiving the discharge from Outfall 001. The unnamed tributary to Bond Creek is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List and is not biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*. The unnamed tributary to Bond Creek is not subject to enhanced dissolved oxygen standards.

The discharge from the facility shall be monitored and limited at all times as follows:

Outfall: 001 Filter Backwash (DAF= 0.03 MGD)

PARAMETER	LOAD LIMITS lbs/day <u>DAF (DMF)</u>			REGULATION	CONCENTRATION <u>LIMITS mg/l</u>		
	30 DAY AVERAGE	DAILY MAXIMUM			30 DAY AVERAGE	DAILY MAXIMUM	
Flow (MGD)							35 IAC 309.146
pH					6.5 – 9.0		35 IAC 302.204
Total Suspended Solids					15	30	35 IAC 304.124
Iron (Total)					2.0	4.0	35 IAC 304.124

The following explain the conditions of the proposed permit:

The special conditions of the permit serve to clarify flow and pH monitoring and reporting requirements, monitoring locations, and discharge monitoring report submission.

**Antidegradation Assessment  
NPDES Permit No. IL0080283 (Monroe County)**

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The City of Waterloo has plans to construct a new municipal water treatment plant which will include a settling lagoon to treat the filter backwash water from the groundwater treatment plant. All sanitary waste will be sent to the Village of Valmeyer for treatment. The proposed settling lagoon will discharge into an unnamed tributary to Bond Creek.

The maximum daily discharge will be 120,000 gallons per day with an average of 17,143 gallons per day due to intermittent backwashing. The plant backwash effluent turbidity levels are expected to be less than 15 NTUs, this level should not be distinguishable in the receiving stream and will be much lower than that typically present in southern Illinois streams.

The information in this antidegradation assessment came from the December 2024 antidegradation report by HMG Engineers titled "Waterloo Water Supply Anti-Degradation Assessment".

**Identification and Characterization of the Affected Water Body.**

The subject facility proposes to discharge to an unnamed tributary of Bond Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility will have a DAF of 0.03 MGD. The unnamed tributary of Bond Creek is classified as a General Use Water. The unnamed tributary of Bond Creek is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. The unnamed tributary of Bond Creek, tributary to Waterbody Segment, IL\_JHB, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed. The unnamed tributary of Bond Creek is not subject to enhanced dissolved oxygen standards.

**Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

Total suspended solids, iron and manganese may increase as a result of the discharge of filter backwash from groundwater treatment. These parameters will be monitored, and water quality standards will be met at end of pipe.

**Fate and Effect of Parameters Proposed for Increased Loading.**

Small amounts of TSS, iron and manganese are expected to be discharged into a settling pond before discharging to the unnamed tributary of Bond Creek. The plant backwash effluent turbidity levels are expected to be less than 15 NTUs, this level should not be distinguishable in the receiving stream and will be much lower than that typically present in southern Illinois streams.

**Purpose and Social & Economic Benefits of the Proposed Activity.**

The proposed project will provide potable water for the City of Waterloo and the surrounding area.

**Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

As an alternative to discharge into the tributary of Bond Creek, the possibility of sending all waste to the Valmeyer Wastewater Treatment Facility was explored. However, the discharge volume would overwhelm the capabilities of the Valmeyer facility. The construction of this proposed outfall will follow conditions set forth by EPA and US Army Corps of Engineers. Erosion control measures will need to be implemented to prevent any additional impacts to the outfall stream.

**Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.**

On December 19, 2024, the IDNR EcoCAT web-based tool was used (IDNR Project Number: 2507852) and indicated that there were endangered/threatened species (Great Plains Rat Snake (*Pantherophis emoryi*), Illinois Cave Aphipod (*Gammarus acherondytes*), Northern Long-eared Bat (*Myotis septentrionalis*), Timber Rattlesnake (*Crotalus horridus*)) present in the vicinity of the discharge. IDNR evaluated the submittal and determined that impacts to the protected resources are unlikely. IDNR terminated the consultation request on December 20, 2024.

Due to the project scope and proximity to protected resources, the Department offers the following comments and recommends the following actions be taken to avoid adversely impacting protected natural areas in the vicinity of the project:

**Indiana Bat & Northern Long-eared Bat**

If tree removal is necessary, the Department recommends no trees be felled from April 1 through October 31<sup>st</sup> to avoid potential impacts to the state and federally-threatened Indiana and northern long-eared bats. If these dates cannot be accommodated, a bat habitat

assessment should be conducted, and results submitted to the Department and USFWS (as necessary) for review and further guidance.

**Timber Rattlesnake and Great Plains Ratsnake**

Timber rattlesnakes and great plains ratsnakes are known to occur in the area. Both species could be found onsite, therefore good housekeeping practices should be in place during construction activities to ensure no potential habitat is created. Exclusionary practices such as wrapping the construction site with properly installed silt fence or other exclusionary fencing is encouraged.

Given the above recommendations are adopted, the Department has determined that impact to the bats and snakes are unlikely. Impacts to other identified resources are unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

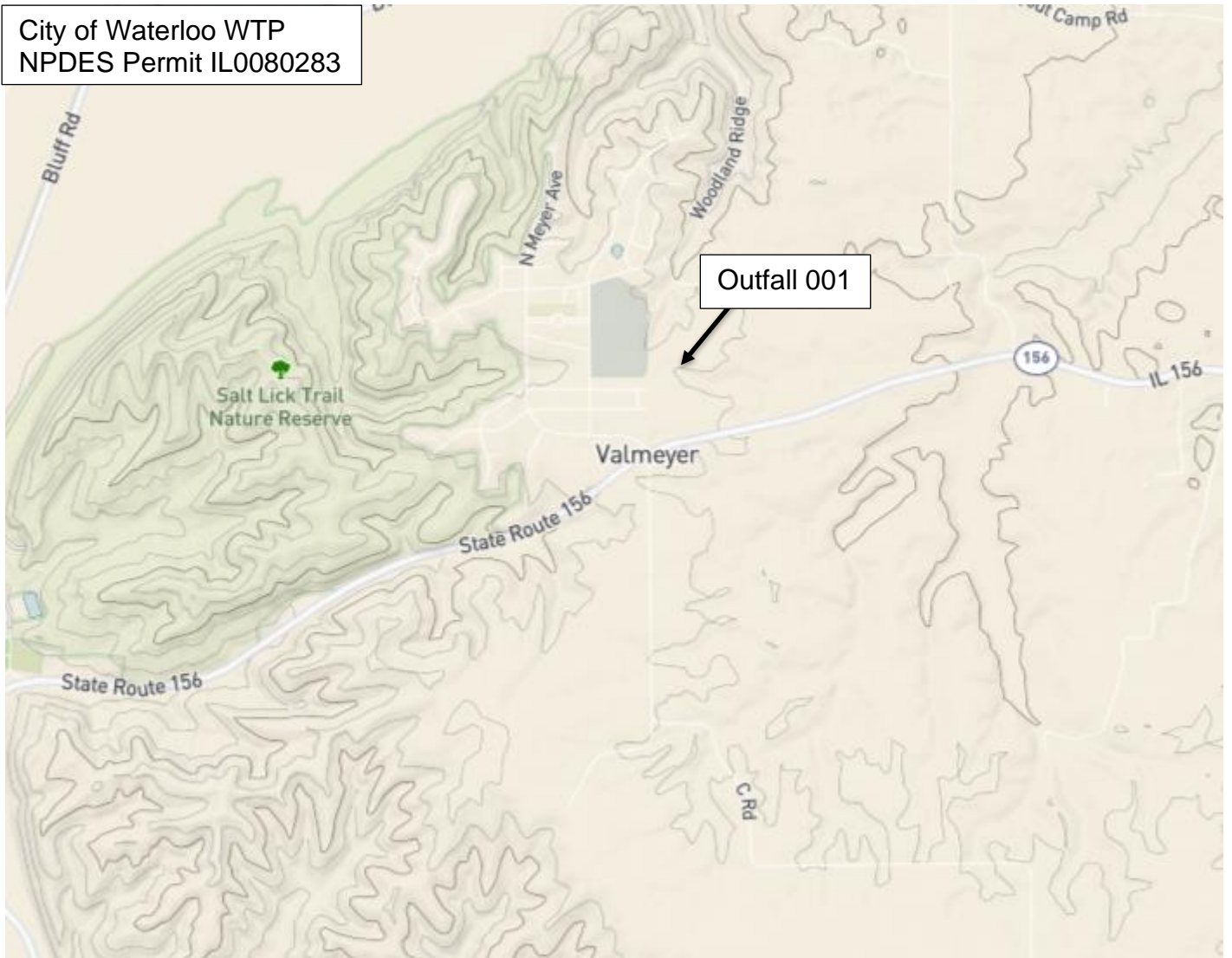
**Interagency Wetland Policy Act**

This project was reviewed for compliance with Title 17 Illinois Administrative Code Part 1090 of the Interagency Wetland Policy Act and was determined to be in compliance. Consultation for Part 1090 is valid for three years.

**Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by providing potable water for the City of Waterloo and the surrounding area. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

City of Waterloo WTP  
NPDES Permit IL0080283



NPDES Permit No. IL0080283

Illinois Environmental Protection Agency

Division of Water Pollution Control

2520 West Iles Avenue

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

New (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

City of Waterloo  
100 W 4<sup>th</sup> Street  
Waterloo, Illinois 62298

Facility Name and Address:

City of Waterloo Water Treatment Plant  
313 East Hunters Ridge  
Valmeyer, Illinois 62295  
(Monroe County)

Discharge Number and Name:

001 Filter Backwash

Receiving Waters:

Unnamed Tributary to Bond Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, 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.

Darin E. LeCrone, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

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Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall 001: Filter Backwash (DAF = 0.03 MGD)

PARAMETER	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION <u>LIMITS mg/l</u>		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1.				1/Month	Measure
pH	See Special Condition 2.				1/Month	Grab
Total Suspended Solids			15	30	1/Month	Grab
Iron (Total)			2.0	4.0	1/Month	Grab

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Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.5 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. 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 4. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic 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 is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <https://epa.illinois.gov/topics/water-quality/surface-water/netdmr/quick-answer-guide.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 that have been granted a waiver 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  
2520 West Iles Avenue  
Post Office Box 19276  
Springfield, Illinois 62794-9276

SPECIAL CONDITION 5. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 6. 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 7. No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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2520 WEST ILES AVENUE, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

**JB PRITZKER, GOVERNOR**

**JAMES JENNINGS, ACTING DIRECTOR**

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**PLEASE PRINT ON RECYCLED PAPER**