

NPDES Permit No. IL0060054  
Notice No. BWC:11081101.bwc

Public Notice Beginning Date: **September 16, 2011**

Public Notice Ending Date: **October 17, 2011**

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  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

City of Lawrenceville  
700 E. State Street  
Lawrenceville, Illinois 62439

Name and Address of Facility:

City of Lawrenceville WTP  
North 13<sup>th</sup> Street  
Lawrenceville, Illinois 62439  
(Lawrence 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 Brian Cox at 217/782-0610.

The applicant is engaged in the production of potable water for distribution to the City of Lawrenceville (SIC 4941). Water will be drawn from a well field, and then treated for public distribution. Four gravity filters will be used to remove iron and manganese from the water. These gravity filters will routinely be backwashed (approximately once per week), using chlorinated water. The backwash is treated with a "red water" sand filter and is dechlorinated prior to discharge. Plant operation will result in an average discharge of 0.096 MGD of iron filter backwash from outfall 001.

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

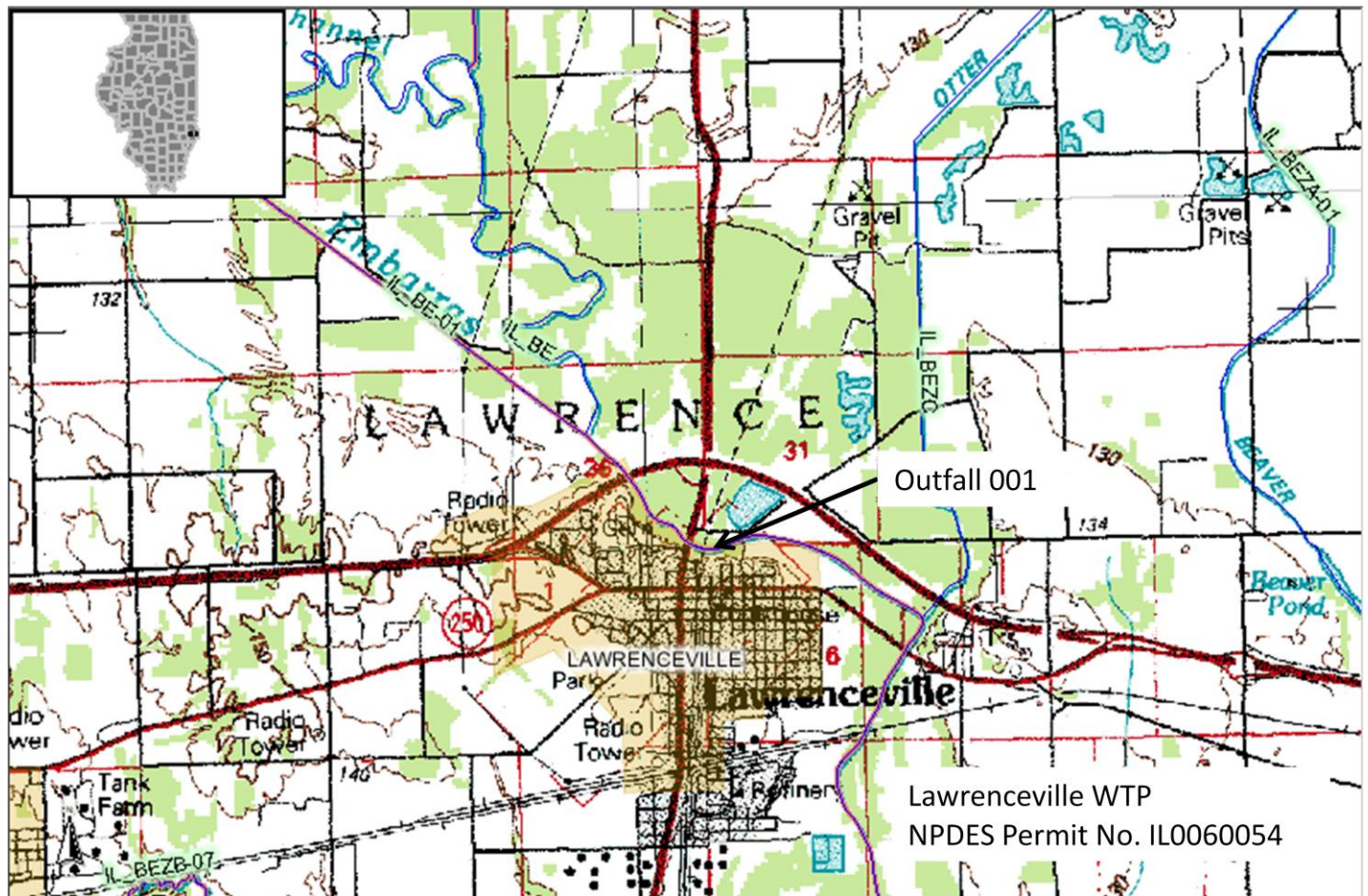
Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Integrity Rating
001	Embarras River	38° 43' 57"	North	87° 41' 05"	West	General Use	C

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

The stream segment, IL\_BE-01, receiving the discharge from outfall 001 is on the draft 2010 303(d) list of impaired waters. The stream segment, IL\_BE-01 receiving the discharge from outfall(s) 001 is not listed as a Biologically Significant Stream and has been given a C integrity rating in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

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

Designated Use	Pollutants
Primary Contact Use	Fecal Coliform



## **Antidegradation Assessment for Lawrenceville Water Treatment Plant**

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The subject facility is proposing a new discharge from a public water supply treatment plant that utilizes groundwater. Four gravity filters will be used to remove iron and manganese. The backwash from these filters will be treated in a sand filter. The effluent from the sand filter will be discharged to the Embarras River. A discharge of 0.096 MGD would occur once per week.

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

The Embarras River (segment BE-01) has a 7Q10 flow of 35.3 cfs and is a General Use water. The stream is listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact use. The cause is given as fecal coliform bacteria. Aquatic life uses are fully supported. The Embarras River 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*; it has an integrity rating of "C". The Embarras River is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The IDNR WIRT system lists the Shawnee rocksnail, a state threatened or endangered aquatic species, as residing in the receiving stream near the proposed outfall.

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

Small amounts of iron and manganese will be discharged, well under the water quality standards. Chlorine will be removed if it persists through the filtration process. No adverse impacts on the receiving stream are anticipated.

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

Manganese and iron will either precipitate in the river and become part of the bed sediment or will remain in solution. The small amounts of each that will be present in this effluent will have absolutely no impact on the environment as similar levels are already naturally present in the river.

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

The new discharge represents an improvement in the treatment of the Lawrenceville public water supply. The local community will benefit from improved drinking water treatment.

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

The effluent will be discharged to the Embarras River because the two potential alternatives to this are not feasible. The first would be a non-discharging holding lagoon, but the site does not have room for this feature. The second would be to discharge the effluent to the sanitary sewer. This is not feasible because the sewage treatment plant is already hydraulically overloaded during wet weather. Further, sending a clean water effluent to the sewage treatment plant would be a waste of resources because it uses up capacity.

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

The Illinois Department of Natural Resources was consulted regarding threatened and endangered species issues via the EcoCAT system on January 24, 2011. IDNR immediately determined that no threatened or endangered species reside in the receiving stream and consultation was terminated.

### **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 for improved treatment of drinking water. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

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

Outfall: 001

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Flow (MGD)				Monitor Only		
pH				Shall be in the range 6 to 9 S.U.		35 IAC 304.125
Iron (Total)				2.0	4.0	35 IAC 304.124
Manganese				1.0	2.0	35 IAC 304.124
Total Suspended Solids				15	30	35 IAC 304.124
Total Residual Chlorine					0.05	35 IAC 302.208 and 40 CFR 125.3

The following explain the conditions of the proposed permit:

The special conditions contained in the permit serve to clarify effluent limitations and monitoring requirements including submission requirements for discharge monitoring reports, monitoring location requirements, and TRC sampling requirements.

NPDES Permit No. IL0060054

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

New (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

City of Lawrenceville  
700 E. State Street  
Lawrenceville, Illinois 62439

Facility Name and Address:

City of Lawrenceville WTP  
North 13<sup>th</sup> Street  
Lawrenceville, Illinois 62439  
(Lawrence County)

Discharge Number and Name:

001 - Iron Filter Backwash

Receiving Waters:

Embarras River

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.

Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

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Effluent Limitations and Monitoring

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

Outfall(s): 001 - Iron Filter Backwash  
(DAF = 0.096 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Monthly	Measurement
pH	See Special Condition 2				Monthly	Grab
Iron (total)			2.0	4.0	Monthly	Grab
Manganese			1.0	2.0	Monthly	Grab
Total Suspended Solids			15	30	Monthly	Grab
Total Residual Chlorine*				0.05	Monthly	Grab

\* See Special Condition 6

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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 on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. 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 4. 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 5. 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 15th 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  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 6. When the wastewater contains or could contain total residual chlorine (TRC), the permittee will be required to test for TRC by collecting one grab sample per month.

All samples for total residual chlorine (TRC) shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

The water quality standards for TRC (0.011 mg/L ave. and 0.019 mg/L max.) are below the method detection level (0.05 mg/L) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/L reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

SPECIAL CONDITION 7. In addition to the other requirements of this permit, no effluent shall contain settleable solids, floating debris, visible oil, grease, scum, or sludge solids. Color, odor, and turbidity shall be reduced to below obvious levels.