

NPDES Permit No. IL0079375
Notice No. SMT:10110401.daa

Public Notice Beginning Date: **June 30, 2011**

Public Notice Ending Date: **August 1, 2011**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft 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 Fairfield
109 NE Second Street
Fairfield, Illinois 62837

Name and Address of Facility:

City of Fairfield Water Treatment Plant
East Highway 15
Fairfield, Illinois 62837
(Wayne 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 Shu-Mei Tsai at 217/782-0610.

The applicant is engaged in the operation of a public water supply treatment plant (SIC 4941). Waste water is generated due to treatment of water by membrane backwash, clarifier blowdown, and carbon filter backwash. Plant operation results in an average discharge of 0.258 MGD of membrane backwash, clarifier blowdown, and carbon filter backwash water from outfall 001

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Integrity Rating
001	Unnamed Tributary to Pond Creek	38° 22' 49 "	North	88° 18' 58"	West	General Use	Not Rated

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

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

Outfall: 001 Membrane Backwash, Clarifier Blowdown, and Carbon Filter Backwash (DAF = 0.258 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow					Measure	
pH	Shall be in the range of 6.0 - 9.0 standard units					35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Total Residual Chlorine					0.05	40 CFR 125

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

Special conditions include the descriptions of flow reporting, pH limitation, monitoring location, DMR submission, re-opener, total residual chlorine sampling method, and no offensive condition.

Antidegradation Assessment for Fairfield PWS
NPDES Permit No. IL0079375 Wayne County

The subject facility has applied for an NPDES permit for a discharge for a new drinking water treatment plant. The facility will consist of a static mixer, proprietary settling units for solids removal, membrane filters, carbon contact tanks and two settling basins for membrane and carbon backwash and sludge blowdown. At full capacity, the system will discharge 0.258 MGD of settled backwash and blowdown water. The receiving stream will be an unnamed tributary of Pond Creek. Information for this analysis was provided in an undated document entitled Water Treatment Facility for the City of Fairfield, Illinois Anti-degradation Assessment.

Identification and Characterization of the Affected Water Body.

The unnamed tributary of Pond Creek (tributary to segment CC-FF-C3) has a 7Q10 flow of zero cfs and is a General Use water. The stream is not listed in the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List. Pond Creek is approximately one-third of a mile downstream of the new outfall. The unnamed tributary 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. The unnamed tributary is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The IDNR WIRT system does not list any state threatened or endangered aquatic species as residing in the receiving stream. The unnamed tributary has a watershed size of less than 40 acres at the point of discharge. No biological stream survey was required because headwater streams of this size are 7Q1.1 zero flow and will have biological communities that are tolerant of intermittent flow conditions and are well known to Illinois EPA.

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

The treated backwash and sludge blowdown effluent will chemically resemble the nature of the source water body, the Little Wabash River. No measurable chlorine will be allowed in the effluent. Total suspended solid concentrations will be set at the state effluent

standard and will generally be at lower levels than ambient water in the unnamed tributary. No adverse impacts on the receiving stream are anticipated.

Fate and Effect of Parameters Proposed for Increased Loading.

Residual total suspended solids will form part of the bed sediment in the unnamed tributary. No other constituents will differ appreciably from the surrounding ambient water.

Purpose and Social & Economic Benefits of the Proposed Activity.

The treatment plant is necessary to provide the local community with safe drinking water in adequate quantities.

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

The plans for construction of a drinking water treatment plant are consistent with appropriate technology for this size and type of project. Treatment plant specifications have been selected to avoid or minimize environmental impacts. They also represent an economically reasonable design taking into consideration both initial capital costs and ongoing maintenance expenses. Viable alternatives to the selected treatment process do not exist for this project.

The city considered making the wastewater available for irrigation of golf courses, large plant nurseries or sod farms. However, no facilities of this nature exist near the treatment plant.

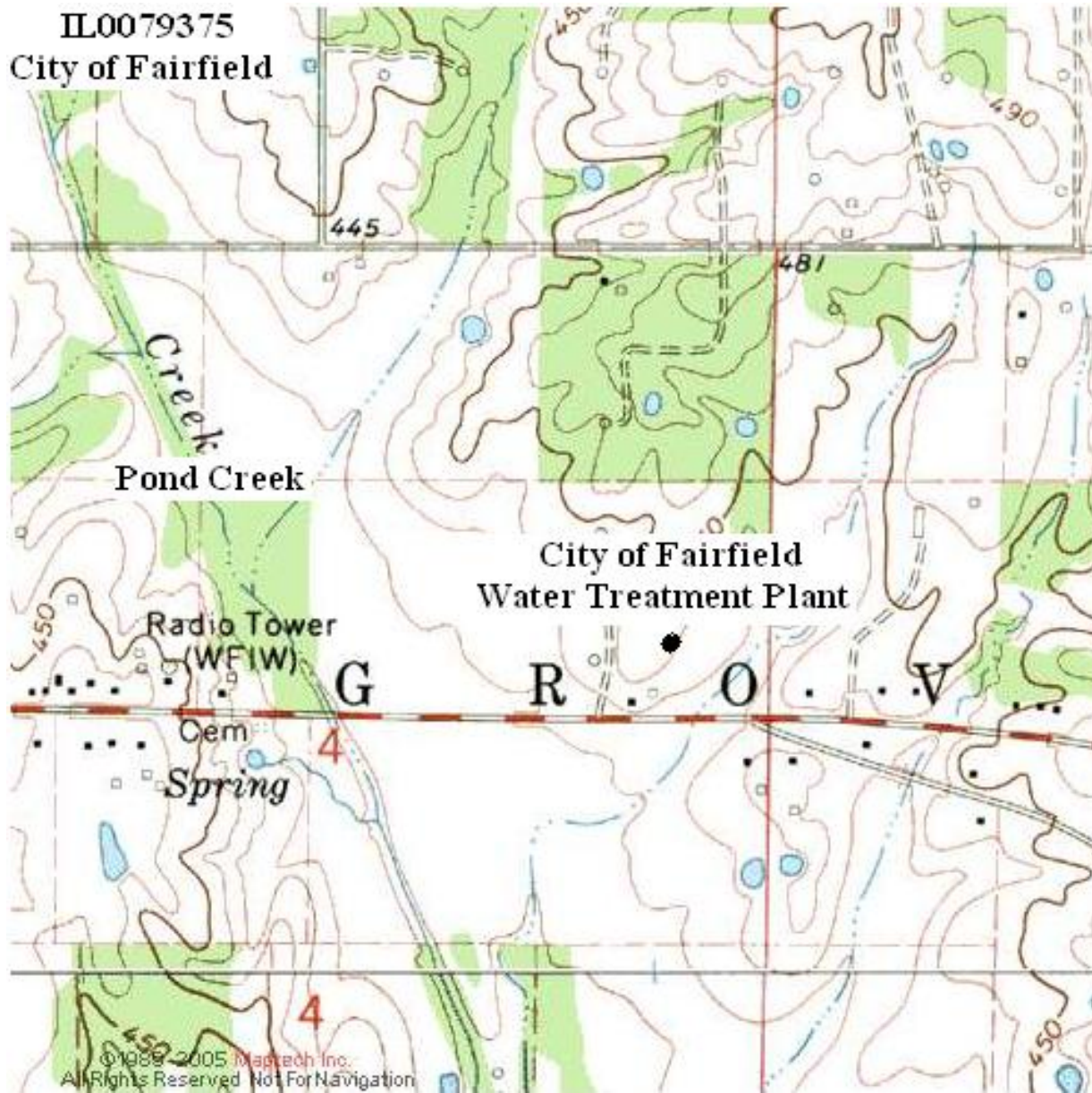
Land application was also considered. This option is not feasible because land suitable for winter storage is not available near the treatment plant.

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 May 13, 2011. It was 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 future drinking water treatment. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.



NPDES Permit No. IL0079375

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 Fairfield
109 NE Second Street
Fairfield, Illinois 62837

Facility Name and Address:

City of Fairfield Water Treatment Plant
East Highway 15
Fairfield, Illinois 62837
(Wayne County)

Discharge Number and Name:

001 Membrane Backwash, Clarifier Blowdown,
and Carbon Filter backwash

Receiving Waters:

Unnamed Tributary to Pond 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.

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

SAK: SMT:10110401.daa

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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 Membrane Backwash, Clarifier Blowdown, and Carbon Filter backwash (DAF = 0.258 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*	See Special Condition 1				Measure	Continuous
pH	See Special Condition 3				Once per Month	Grab
Total Suspended Solids			15	30	Once per Month	Grab
Total Residual Chlorine				0.05	Once per Month	Grab

Special Conditions

SPECIAL CONDITION 1. Flow shall be reported in million gallons per day as a daily maximum and monthly average on the Discharge monitoring Report form.

SPECIAL CONDITION 2. 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 3. 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 4. 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 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. In addition to the other requirements of this, 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.

SPECIAL CONDITION 7. All samples for total residual chlorine shall be analyzed by an applicable method contained 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.

