

NPDES Permit No. IL0080252  
Notice No. KPM:23080101.docx

Public Notice Beginning Date: September 11, 2023

Public Notice Ending Date: October 11, 2023

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:

Village of St. Anne  
190 W. Station St.  
P.O. Box 396  
St. Anne, Illinois 60964

Name and Address of Facility:

Village of St. Anne WTP  
7000E Road and 7000S Road  
St. Anne, Illinois 60964  
(Kankakee 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 Keegan MacDonna at 217/782-0610.

The applicant is engaged in the operation of a water treatment plant used to produce potable water for the Village of St. Anne (SIC Code 4941). Facility operations result in a discharge of filter backwash water from Outfall 001, from the facility's iron/manganese filtration system.

Application is made for the new discharge(s) which are located in Putnam 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 Little Beaver Creek	41° 01' 11" North	87° 43' 56" West	General Use	Not Rated

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

The stream segment IL\_FLDA-01 receiving the discharge from Outfall 001 is not listed on the 2020/2022 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

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

PARAMETER	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		REGULATION	CONCENTRATION <u>LIMITS mg/L</u>		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Outfall: 001						
Flow						35 IAC 309.146
pH					6-9 s.u.	35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Iron (Total)				2	4	35 IAC 304.124
Manganese				1	2	35 IAC 304.124
Total Residual Chlorine					0.05	35 IAC 302.208 & 40 CFR 125.3

The following explain the conditions of the proposed permit:

Special Conditions will require flow monitoring and reporting, pH limits and reporting, monitoring location, monthly DMR submission, and re-opener.

All production activities take place indoors at the facility, so there is no potential for stormwater to come into contact with industrial materials or activities.

**Antidegradation Assessment**

NPDES Permit No. IL0080252

The Village of St. Anne (Village) proposes to construct an iron/manganese backwash filtration system with a DAF of 0.05 MGD. The Village is located in Kankakee County, at the southeast corner of East 7000 South Road and South 7000 East Road, on the west side of State Route 1. The proposed project will consist of installation of a new filtration system at the Village’s well house already located at the proposed project site. The system is designed to remove iron and manganese from influent prior to being pumped to the public water supply for distribution.

Influent will enter the well house via Well No. 5 at a rate of 50,000 GPD where it will be treated with fluoride, chlorine gas, and polyphosphates. Before it reaches the 150,000 gallon multi-legged tank for distribution, it will enter the Iron/Manganese filters. Backwash water will be run through red water sand filters to remove Total Iron and Manganese before discharging into a field tile.

Improvements to the well house include installation of a new water main as well as pavement removal and replacement as necessary, and an addition to the existing well house for construction of an iron/manganese filtration system. Additionally parking and ADA access to the building will be constructed.

The information in this antidegradation assessment was obtained from the application materials dated September 28, 2022, February 8, 2023, and June 20, 2023.

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

The subject facility will discharge to a field tile tributary to Little Beaver Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has a DAF of 0.05 MGD. The unnamed tributary to Little Beaver Creek is classified

as a General Use Water. The unnamed tributary to Little Beaver 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. This segment of the unnamed tributary to Little Beaver Creek is not subject to enhanced dissolved oxygen standards. The unnamed tributary to Little Beaver Creek, tributary to Waterbody Segment, IL\_FLDA-01, is not listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as it has not been assessed.

The USGS Illinois Streamstats basin characteristics program gives a watershed size of 0.12 square miles at the discharge point on the unnamed tributary of Little Beaver Creek. According to the Illinois State Water Survey, the unnamed tributary of Little Beaver Creek in the area of the proposed discharge is likely to be 7Q1.1 zero flow streams. In this region of Illinois, 7Q1.1 zero flow streams are streams with a watershed area of 1 square mile or less. These streams will exhibit no flow for at least a continuous seven-day period nine out of ten years. Aquatic life communities in these headwater streams are tolerant of the effects of drying. Depending on the rainfall received before biological surveys, either a very limited aquatic life community, or no community at all would be found. Given this flow regime, no additional biological characterization is required.

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

The facility is proposing Total Iron removal with discharge of the backwash water through red water sand filters before discharging to a field tile. Total Iron concentrations will have to meet permit limits. Dissolved Iron is not expected to exceed the water quality standards.

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

The facility will be removing total iron from the public water supply.

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

This proposed activity will greatly increase the water quality of the public water supply for the Village of St. Anne by reducing the Iron levels in the drinking water supply as they have recently (October 2022) violated the Maximum Contaminant Level (MCL) for Iron.

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

There are no viable alternatives available to avoid/minimize impacts and pollutant loadings. The preferred alternative is the proposed alternative that filters the backwash through red water sand filters prior to discharge into a field tile.

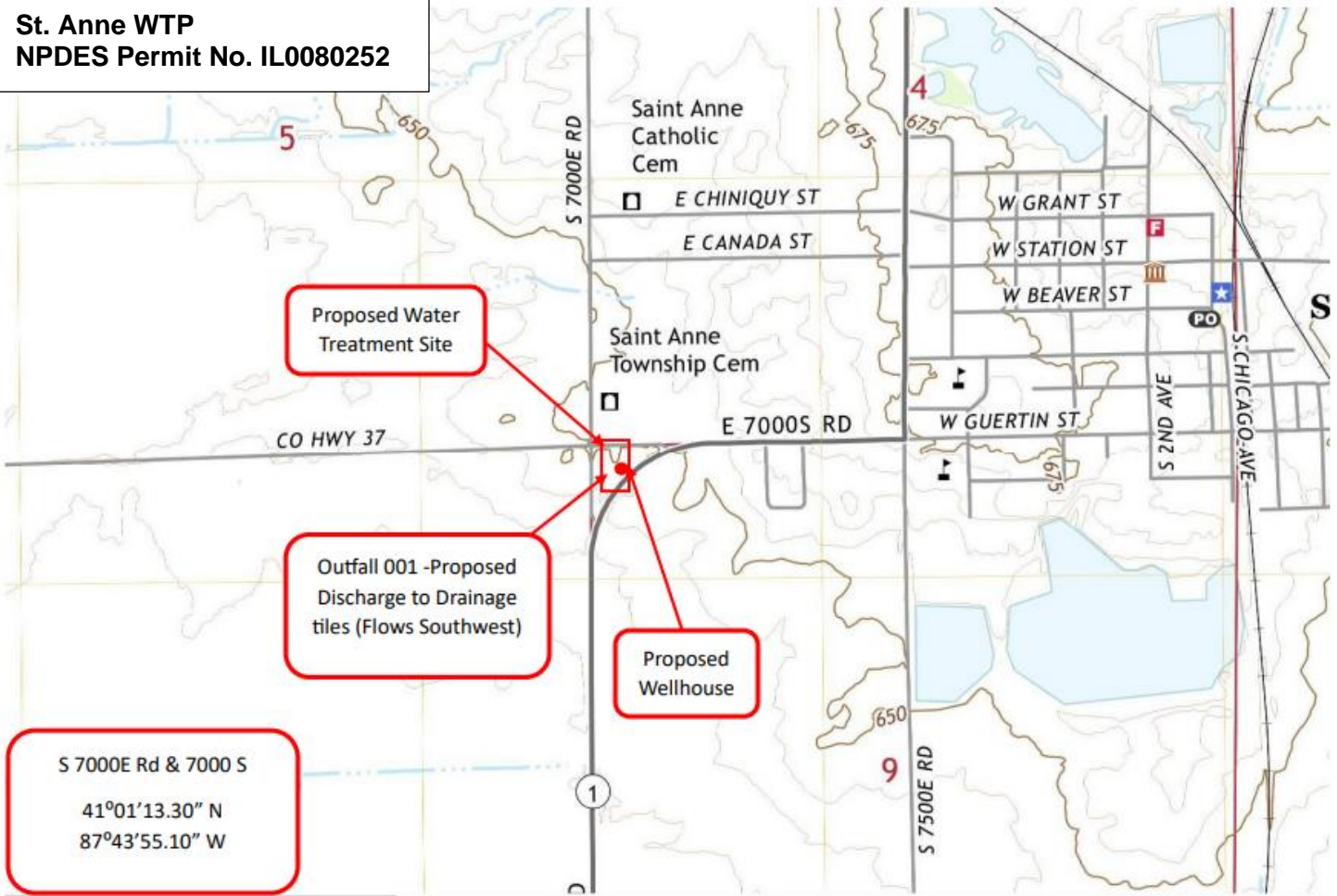
#### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.**

On June 19, 2023, an IDNR EcoCAT consultation, Project #2114916, was initiated for the project's construction activities. The Illinois Natural Heritage Database showed Weed Shiner (*Notropis texanus*) may be in the vicinity of the project location. On June 20, 2023, the Department issued a letter stating that the natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is 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 total iron and manganese removal from the public water supply. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

**St. Anne WTP  
NPDES Permit No. IL0080252**



NPDES Permit No. IL0080252

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 Discharger:

Village of St. Anne  
190 W. Station St.  
P.O. Box 396  
St. Anne, Illinois 60964

Name and Address of Facility:

Village of St. Anne WTP  
7000E Road and 7000S Road  
St. Anne, Illinois 60964  
(Kankakee County)

Discharge Number and Name:

001 – Iron/Manganese Filter Backwash

Receiving Waters:

Unnamed Tributary to Little Beaver 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

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:

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		
<u>Outfall 001 – Iron/Manganese Filter Backwash</u> (DAF = 0.05 MGD)						
Flow (MGD)	See Special Condition 1.				1/Month	Measurement
pH	See Special Condition 2.				1/Month	Single Reading
Total Suspended Solids			15	30	1/Month	Grab
Iron (Total)			2	4	1/Month	Grab
Manganese			1	2	1/Month	Grab
TRC				0.05	1/Month	Grab

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. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge after treatment, 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://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/Pages/quick-answer-guide.aspx>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25<sup>th</sup> 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  
1021 North Grand Avenue East  
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. 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.

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