

NPDES Permit No. IL0042064
Notice No. SMT:13032001.smt

Public Notice Beginning Date: **May 29, 2013**

Public Notice Ending Date: **June 28, 2013**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reactivated 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 Standard
P.O. Box 238
Standard, Illinois 61363

Name and Address of Facility:

Standard Water Treatment Plant
215 Railroad Ave.
Standard, Illinois 61363
(Putnam 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 (SIC 4941). Wastewater is generated from backwashing pressure filters. Plant operation results in an average discharge of 0.023 MGD of iron filter backwash.

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Unnamed Tributary of Allforks Creek	41° 15' 28"	North	89° 10' 59"	West	General Use	Not Rated

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

The stream segment receiving the discharge from outfall 001 is on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The receiving water has not been given an integrity rating or been listed as biologically significant in 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:

Outfall: 001 Iron Filter Backwash (DAF = 0.023 MGD)

	LOAD LIMITS lbs/day			CONCENTRATION		
	DAF (DMF)			LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Total Residual Chlorine					0.05	35 IAC 302.208
Iron (Total)				2.0	4.0	35 IAC 304.124
Manganese (Total)				1.0	2.0	35 IAC 304.124
Arsenic				0.25	0.5	35 IAC 304.124

The following explain the conditions of the proposed permit:

The special conditions clarify: flow, pH, total residual chlorine, monitoring location, discharge monitoring reports, and re-opener.

Antidegradation Assessment for Standard Water Treatment Plant
NPDES Permit No. IL0042064 Putnam County

The Village has applied for an NPDES permit for a new public water supply treatment plant red water filter backwash discharge. The plant will treat shallow well water to remove iron, manganese and arsenic and discharge the backwash water. The effluent discharge will average about 23,000 gallons per day. Approximately three days per week a discharge of 45,000 gallons over a three hour period will occur. The discharge will go to a storm sewer system with eventual discharge to an unnamed tributary of Allforks Creek.

Identification and Characterization of the Affected Water Body.

The unnamed tributary of Allforks Creek (no segment code) has a 7Q10 flow of zero cfs and is a General Use water. The unnamed tributary of Allforks Creek is not listed as impaired on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List. The Illinois EPA has not assessed this water body. The unnamed tributary of Allforks Creek is not given an integrity rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The unnamed tributary of Allforks Creek at the location of the discharge is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The unnamed tributary of Allforks Creek has a watershed of 1.93 square miles. A biological and chemical stream survey was not required given that this receiving stream is likely a 7Q1.1 zero flow stream. The water chemistry and biotic community of such streams is well known to the Illinois EPA.

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

The red water filter backwash water discharged will contain iron, manganese and arsenic which will represent new pollutant loading to the receiving water. Concentrations in the effluent will be lower than they are in the raw well water because the sand in the red water filter will remove these substances. Permit limits based on state effluent standards will be imposed in the permit. Water quality standards for dissolved iron, manganese and arsenic are predicted to be met in the effluent with no anticipated impacts on uses.

Fate and Effect of Parameters Proposed for Increased Loading.

Iron, manganese and arsenic loading will increase slightly in the receiving stream but concentrations should be about the same as ambient water. The volume of the effluent, discharged for three hours three times per week, will be a very small component of the creek during most flow conditions.

Purpose and Anticipated Benefits of the Proposed Activity.

The Village of Standard utilizes shallow wells for the community drinking water supply. The raw water is high in iron, manganese and arsenic. Treatment must be applied to reduce concentrations and meet drinking water standards.

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

The Village considered several options for supplying safe drinking water. Deep aquifers were considered, but that water is high in radium, leading to a separate set of treatment problems. Purchasing water from a nearby village was considered, but costs would be high and the communities could not work together. There are no sanitary wastewater sewers or treatment plant in Standard, so treatment at a sewage treatment plant is not feasible.

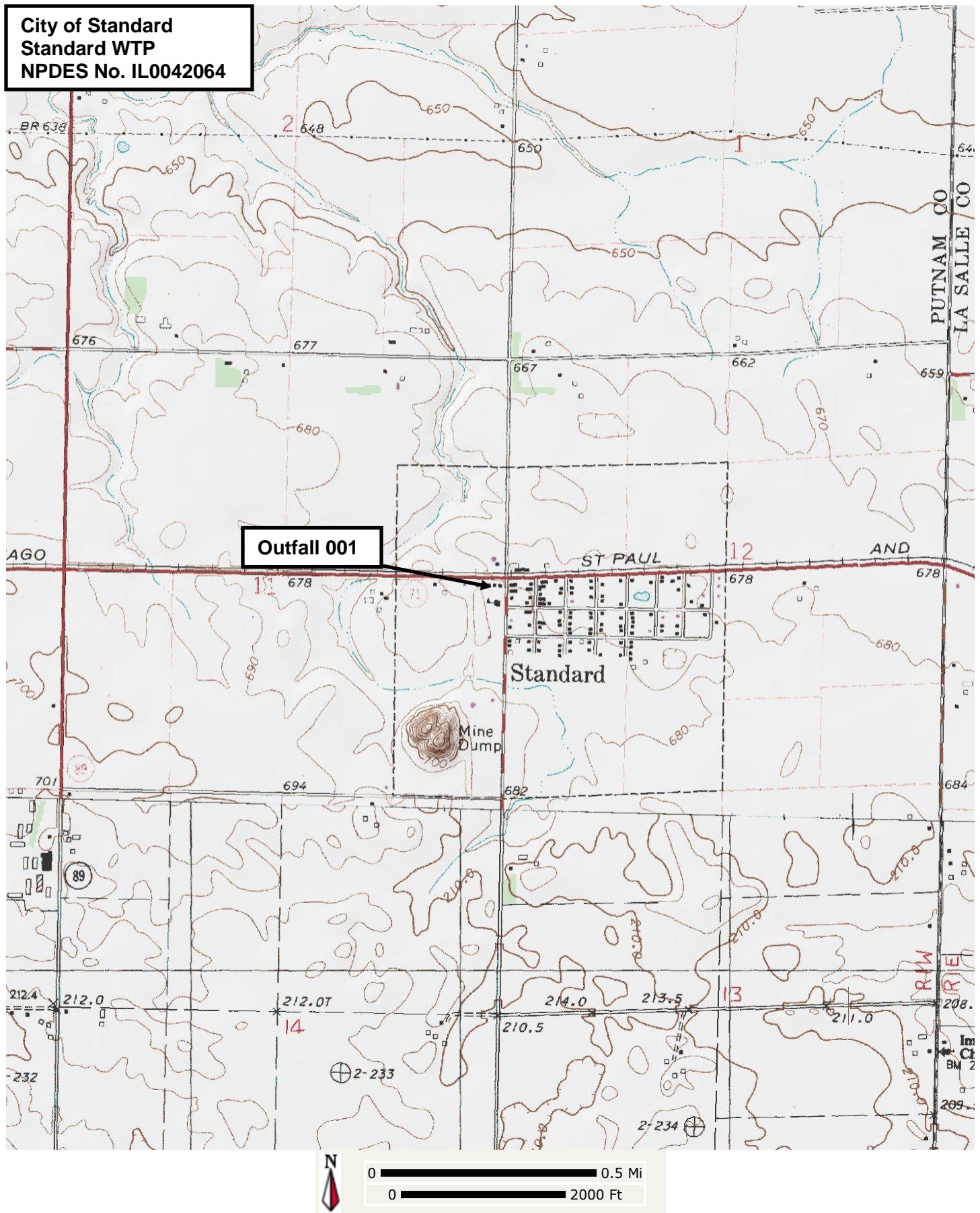
Six technologies to supply safe drinking water were considered. Many of these result in a wastewater that would not meet water quality standards and therefore are technically infeasible. The chosen alternative removes the substances from the community water supply without transferring pollutants to the wastewater. The sand in the red water filter will periodically be removed and disposed of in a landfill.

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 March 12, 2013. 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 allowing for a safe drinking water supply. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.



NPDES Permit No. IL0042064

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

Reactivated (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Facility Name and Address:

City of Standard
P.O. Box 238
Standard, Illinois 61363

Standard Water Treatment Plant
215 Railroad Ave.
Standard, Illinois 61363
(Putnam County)

Discharge Number and Name:

Receiving Waters:

001 Iron Filter Backwash

Unnamed Tributary of Allforks 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:13032001.smt

NPDES Permit No. IL0042064

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: 001 Iron Filter Backwash (DAF = 0.023 MGD)

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)	See Special Condition 1				1/Month	
pH	See Special Condition 2				1/Month	Grab
Total Suspended Solids			15	30	1/Month	Grab
Total Residual Chlorine	See Special Condition 3			0.05	1/Month	Grab
Iron (Total)			2.0	4.0	1/Month	Grab
Manganese (Total)			1.0	2.0	1/Month	Grab
Arsenic			0.25	0.5	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 value on the monthly 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. 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.

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. 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.