NPDES Permit No. IL0074861 Notice No. JCH:06120601.bah

Public Notice Beginning Date: May 27, 2011

Public Notice Ending Date: June 27, 2011

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

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Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
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:

Name and Address of Facility:

Paul and Nancy Sorgen 2929 Sally Drive Carbondale, Illinois 62901 Williams Subdivision STP East Haven Road Carbondale, Illinois (Jackson 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. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. 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 numbers 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 indicates 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 Jeff Hutton at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the Williams Subdivision.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, unnamed Tributary of Big Muddy River, is 0 cfs.

The design average flow (DAF) for the facility is 0.0068 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 0.0275 MGD. Treatment consists of a two cell facultative lagoon with rock filter.

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This reissued NPDES Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

Pursuant to the waiver provisions authorized by 40 CFR § 123.24, this draft permit is within the class, type, and size for which the Regional Administrator, Region V, has waived his right to review, object, or comment on this draft permit action.

This Permit recognizes and continues the year-round disinfection exemption approved by the IEPA on September 15, 2001 and included in past NPDES permit actions since that date. It is the IEPA's tentative decision that under Illinois Pollution Control Board regulations, the following reach of waterbody is not classified for primary contact use activities and is not subject to the fecal coliform water quality standard of 35 III. Adm. Code 302.209.

This draft permit does not contain requirements for disinfection of the discharge from discharge number(s) 001. An unnamed tributary of the Big Muddy River from the point of discharge to the confluence with another unnamed tributary of the Big Muddy River in Section 30, T8S, R1E has been determined to be unsuited to support primary contact activities (swimming) due to physical, hydrologic or geographic configuration. Anyone knowing of primary contact activities occurring within this water segment is invited to submit comments to the IEPA. Comments should give the nature of the activities (i.e swimming, fishing, canoeing, etc.), the location and months of the year when these activities have been observed. The IEPA is also interested in obtaining information on the proximity of residential dwellings and the accessibility of the public to this water segment. Anyone with such information is asked to submit comments to the IEPA on this draft permit action. Instructions for submitting comments are contained earlier in this document.

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

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating	
001	An Unnamed tributary of the Big Muddy River	37° 46' 18" North	89° 09' 30" West	General Use	Not Rated	

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

The stream segment(s) receiving the discharge from outfall(s) 001 is (are) not on the 303 (d) list of impaired waters.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 - STP Outfall

Load limits computed based on a design average flow (DAF) of 0.0068 MGD (design maximum flow (DMF) of 0.0275 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

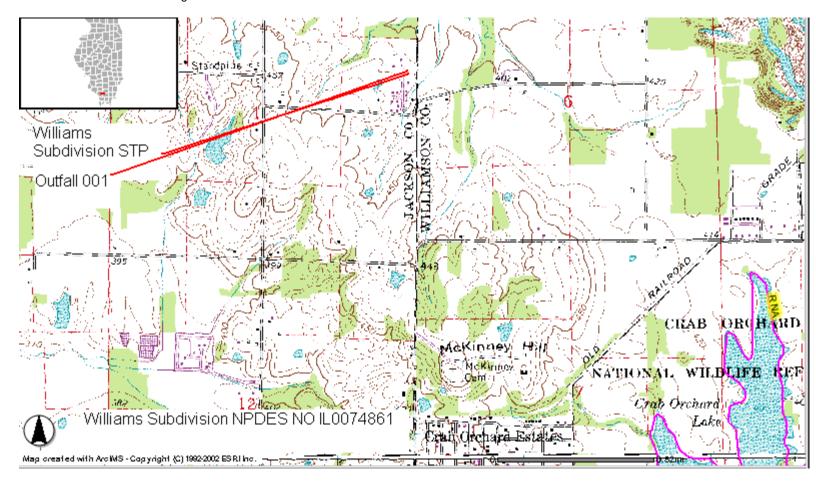
		LOAD LIMITS lbs/day* <u>DAF (DMF)</u>			CONCENTRATION LIMITS mg/L		
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Regulation
CBOD <sub>5</sub>	1.4 (5.5)	2.3 (8.8)		25	40		35 IAC 304.120 40 CFR 133.102
Suspended Solids	2.1 (8.2)	2.6 (9.9)		37	45		35 IAC 304.120 40 CFR 133.102
Fecal Coliform	Monitor Only	Monitor Only					35 IAC 309.146
pН	Shall be in the	Shall be in the range of 6 to 9 Standard Units					35 IAC 304.125
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July					6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

<sup>\*</sup>Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

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This draft Permit also contains the following requirements as special conditions:

- 1. Reopening of this Permit to include different final effluent limitations.
- 2. Operation of the facility by or under the supervision of a certified operator.
- 3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
- 4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
- 5. Prohibition against causing or contributing to violations of water quality standards.
- 6. Effluent sampling point location.
- 7. At minimum of 85% removal of CBOD<sub>5</sub> and suspended solids.
- 8. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used.
- 9. A requirement to take four grab samples at a minimum of 7 day intervals for fecal coliform in order to verify the original assumptions made in the modeling used to grant the disinfection exemption.
- 10. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
- 11. A specification that the possession of this permit does not release them from compliance with applicable statues and regulations.



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

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee: Facility Name and Address:

Paul and Nancy Sorgen 2929 Sally Drive Carbondale, Illinois 62901 Williams Subdivision STP East Haven Road Carbondale, Illinois (Jackson County)

Receiving Waters: Unnamed Tributary of Big Muddy River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, 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:JCH:06120601.bah

# Effluent Limitations, Monitoring, and Reporting

## **FINAL**

Discharge Number(s) and Name(s): 001 - STP Outfall

Load limits computed based on a design average flow (DAF) of 0.0068 MGD (design maximum flow (DMF) of 0.0275 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>			CONCENTRATION LIMITS MG/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							See Below	
CBOD <sub>5</sub> **	1.4 (5.5)	2.3 (8.8)		25	40		1 Day/Month	Grab
Suspended Solids	2.1 (8.2)	2.6 (9.9)		37	45		1 Day/Month	Grab
Dissolved Oxygen	Shall not be less than 6 mg/L					1 Day/Month	Grab	
pН	Shall be in the range of 6 to 9 Standard Units						1 Day/Month	Grab
Fecal Coliform***	Monitor Only (May through October)						1 Day/Month	
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen March-July					6.0	5.0	1 Day/Month	Grab
August-February				5.5	4.0	3.5	1 Day/Month	Grab

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

pH shall be reported on the DMR as a minimum and a maximum.

Dissolved oxygen shall be reported on DMR as minimum.

Influent BOD $_5$ , TSS shall be a composite sample at the same frequency as effluent monitoring as indicated above. Influent and effluent measurement for flow shall be continuous if hardware allows otherwise it shall be once a week single reading. Influent flow measurement, BOD $_5$ , TSS sampling shall be taken at a point representative of the influent. Influent BOD $_5$  and Suspended Solids shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

<sup>\*\*</sup>Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>\*\*\*</sup>see Special Condition 9

## **Special Conditions**

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 4 operator.

<u>SPECIAL CONDITION 3</u>. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and <u>Without Public Notice</u> in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

<u>SPECIAL CONDITION 5</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 6</u>. 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.

<u>SPECIAL CONDITION 7</u>. Final Conditions - For Discharge No. 001:  $BOD_5$  and Suspended Solids (85% removal required): The arithmetic mean of the values for effluent samples collected in a period of one calendar month shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same time during the same period, except during those periods when the influent is diluted because of high flows if the tributary sewer system is combined. The percent removal need not be reported to the IEPA on DMR's but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent  $CBOD_5$  concentration to determine the effluent  $BOD_5$  concentration.

<u>SPECIAL CONDITION 8</u>. For Discharge No. 001, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/L (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.

<u>SPECIAL CONDITION 9</u>. For Discharge No. 001, the Permittee shall initiate sampling for fecal coliform after the revised facility has reached stable operation, but not later than six (6) months after start up. Sampling shall be a minimum of four (4) grab samples, at a minimum of seven (7) day intervals in order to verify the original assumptions made in the modeling used to grant the disinfection exemption. The four (4) results, expressed in terms of fecal coliform per 100 mL of sample ("too numerous to count" results cannot be accepted), shall be reported to the IEPA within seven (7) days of the final sample being analyzed and submitted to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control, Water Quality Standards Unit 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

<u>SPECIAL CONDITION 10</u>. 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.

# **Special Conditions**

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

<u>SPECIAL CONDITION 11</u>. The issuance or possession of this permit does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois or with applicable local laws ordinances and regulations, including the Public Utilities Act, 220 ILCS 5/1. This permit does not authorize the operation of a public utility in violation of the Public Utilities Act 220 ILCS 5/1.