

NPDES Permit No. IL0045527

Notice No. ALD:12020901.bah

Public Notice Beginning Date: **December 11, 2013**

Public Notice Ending Date: **January 10, 2014**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Modified 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:

Aqua Illinois, Inc.
2026 Candlewick Drive
Poplar Grove, Illinois 61065

Name and Address of Facility:

Aqua Illinois, Inc. - Candlewick Lake STP
2026 Candlewick Drive
Poplar Grove, Illinois
(Boone 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 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 Amy Dragovich 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 Candlewick Lake 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, Beaver Creek is 1.2 cfs.

The design average flow (DAF) for the facility is 0.50 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 1.65 MGD. Treatment consists of screening, grit removal, comminutor, sequencing batch reactor, and filtration. Sludge is treated by aerobic digestion and drying beds with sludge solids being land applied.

This Modified 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.

The IEPA will accept comments on the following draft modifications to the Permit:

1. Capacity, Management, Operations and Maintenance (CMOM) requirements have been included in Special Condition 12.

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

<u>Discharge Number</u>	<u>Receiving Stream</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Beaver Creek	42° 19' 59" North	88° 50' 55" 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), PQD-07, receiving the discharge from outfall(s) 001 is 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 0.50 MGD (design maximum flow (DMF) of 1.65 MGD).

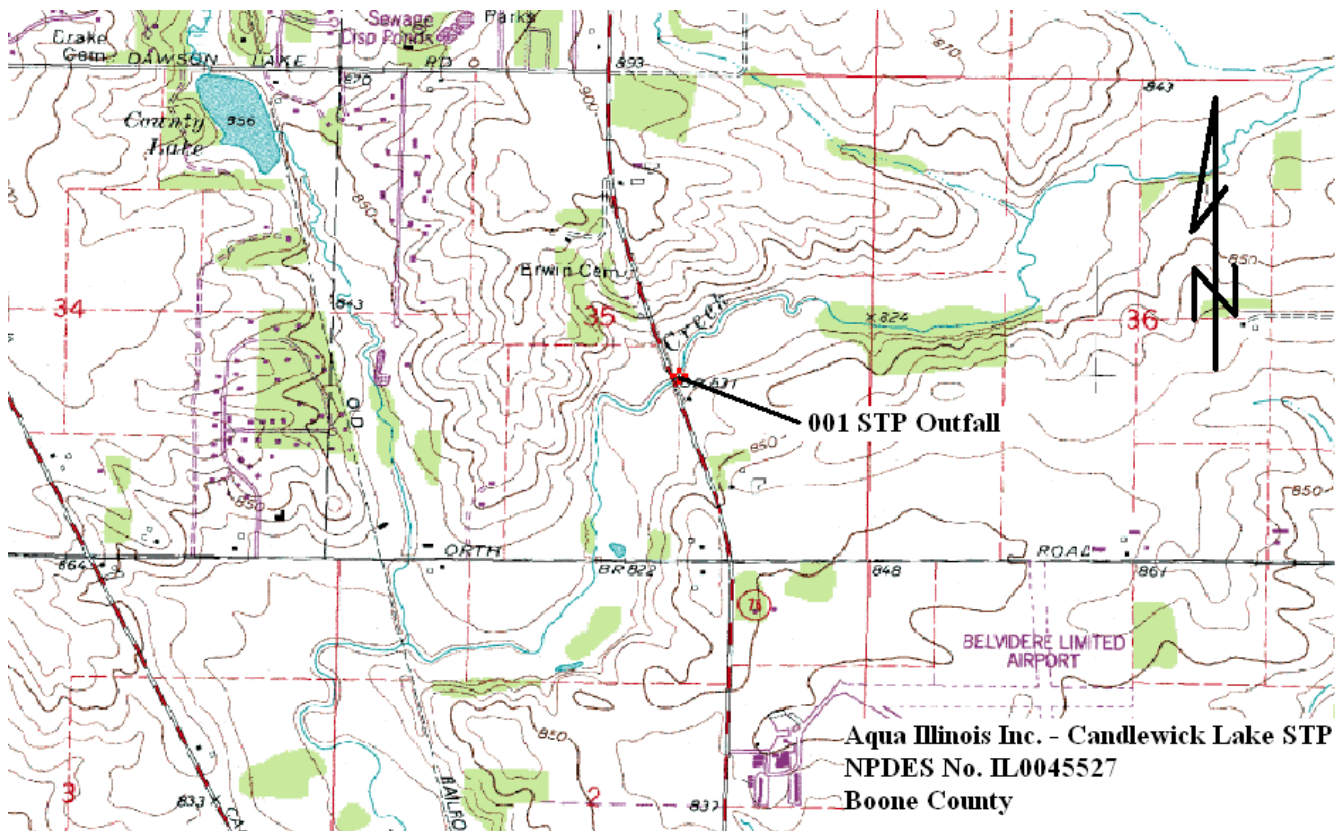
The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

<u>Parameter</u>	<u>LOAD LIMITS lbs/day</u> <u>DAF (DMF)*</u>			<u>CONCENTRATION</u> <u>LIMITS mg/L</u>			<u>Regulation</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	
CBOD ₅	42 (138)		83 (275)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	50 (165)		100 (330)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Monitor only (May through October)						35 IAC 309.146
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March	6.3 (21)	16 (52)	18 (59)	1.5	3.8	4.3	35 IAC 355 and 35 IAC 302
April-October	5.0 (17)		11 (37)	1.2		2.7	
Nov.-Feb.	10 (34)		18 (59)	2.5		4.3	
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.25	5.0	35 IAC 302.206
August-February				6.0	4.5	4.0	

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

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. 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.
7. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.
8. Effluent sampling point location.
9. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used.
10. Burden reduction.
11. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
12. Capacity, Management, Operations and Maintenance (CMOM) requirements.



NPDES Permit No. IL0045527

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

Modified (NPDES) Permit

Expiration Date: **April 30, 2017**

Issue Date: **May 1, 2012**

Effective Date: **May 1, 2012**

Modification Date:

Name and Address of Permittee:

Aqua Illinois, Inc.
2026 Candlewick Drive
Poplar Grove, Illinois 61065

Facility Name and Address:

Aqua Illinois, Inc. - Candlewick Lake STP
2026 Candlewick Drive
Poplar Grove, Illinois
(Boone County)

Receiving Waters: Beaver Creek

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:ALD:12020901.bah

NPDES Permit No. IL0045527

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 0.50 MGD (design maximum flow (DMF) of 1.65 MGD).

From the modification 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:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD ₅ **	42 (138)		83 (275)	10		20	2 days/week	Composite
Suspended Solids	50 (165)		100 (330)	12		24	2 days/week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						2 days/week	Grab
Fecal Coliform***	Monitor only (May through October)						1 day/month	Grab
Chlorine Residual						0.05	****	Grab
Ammonia Nitrogen: As (N) March-May/Sept.-Oct.	6.3 (21)	16 (52)	18 (59)	1.5	3.8	4.3	2 days/month	Composite
June-August	5.0 (17)		11 (37)	1.2		2.7	2 days/month	Composite
Nov.-Feb.	10 (34)		18 (59)	2.5		4.3	2 days/month	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.25	5.0	2 days/week	Grab
August-February				6.0	4.5	4.0	2 days/week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***Fecal Coliform shall be monitored May thru October with sample results reported as a daily maximum value on the DMR.

**** See Special Condition 9.

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

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

Dissolved oxygen shall be reported on the DMR as a minimum value.

NPDES Permit No. IL0045527

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Continuous	
BOD ₅	2 days/week	Composite
Suspended Solids	2 days/week	Composite

Influent samples shall be taken at a point representative of the influent.

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

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

NPDES Permit No. IL0045527

Special Conditions

SPECIAL CONDITION 1. 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 2 operator.

SPECIAL CONDITION 3. 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.

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

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

SPECIAL CONDITION 6. 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 25th 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
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

SPECIAL CONDITION 8. 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 9. 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.

SPECIAL CONDITION 10. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for ammonia due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 2 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required Without Public Notice when a permit modification is received by the Permittee from the IEPA.

SPECIAL CONDITION 11. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Special Conditions

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 23 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 12. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA three (3) copies of the Capacity, Management, Operations, and Maintenance (CMOM) plan within twelve (12) months of the modification date of this Permit. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents.

The CMOM plan shall include the following elements:

A. Measures and Activities:

1. A complete map of the collection system;
2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment;
3. An assessment of the capacity of the collection and treatment system at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
4. Identification and prioritization of structural deficiencies in the system.

B. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and,
3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and backups occur; and,
2. Respond to each overflow or backup to determine additional actions such as clean up.

D. System Evaluation Plan.

E. Reporting and Monitoring Requirements.