

NPDES Permit No. IL0039004

Notice No. FRB:12020601.bah

Public Notice Beginning Date: **April 11, 2012**

Public Notice Ending Date: **May 11, 2012**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Reactivated 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:

Village of Lisbon
104 North Canal Street
Newark, Illinois 60541

Name and Address of Facility:

Village of Lisbon WWTP
200 East Joliet Street
Lisbon, Illinois
(Kendall 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 Francis Burba 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 Village of Lisbon.

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 Saratoga Creek is 0 cfs.

The design average flow (DAF) for the proposed facility is 0.030 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 0.122 MGD. Treatment consists of primary settling, a recirculating sand filter, UV disinfection, and post aeration.

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.

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

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	unnamed tributary of Saratoga Creek	41° 28' 42" North	88° 28' 44" 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 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 0.030 MGD (design maximum flow (DMF) of 0.122 MGD).

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			Regulation
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD ₅	2.5 (10)		5.0 (20)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	3.0 (12)		6.0 (24)	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	Daily Maximum shall not exceed 400 per 100 mL						35 IAC 304.121
Ammonia Nitrogen: March-May/Sept.-Oct.	0.43 (1.7)	1.1 (4.4)	1.7 (6.8)	1.7	4.3	6.7	35 IAC 355 and 35 IAC 302
June-August	0.38 (1.5)	0.95 (3.9)	1.8 (7.2)	1.5	3.8	7.1	
Nov.-Feb.	0.73 (3.0)		1.5 (6.1)	2.9		6.0	
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*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. Submission of annual fiscal data.
11. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
12. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
13. Notify IEPA upon completion of the proposed STP.

Antidegradation Assessment

Lisbon is proposing to build a 0.03 MGD recirculating sand filter facility. At this time, the Village of Lisbon does not have a dedicated municipal sanitary sewer collection or treatment system. The majority of the residences and businesses in the community are served by septic tanks. A small percentage of these installations are served by leach fields, while the majority of the systems involve septic tank effluents that are directly connected to the Village's storm sewer system. The storm sewer system ultimately discharges into an unnamed tributary to Saratoga Creek near the elementary school's playground. The flow of untreated wastewater to the tributary is both a health and environmental concern. The Agency sent a Violation Notice W-2010-30294 to the Village of Lisbon stating that the Village should cease and desist the discharge of untreated wastewater to the waters of the State.

Lisbon is located less than two miles from the proposed Prairie Parkway interstate highway, which is in the planning phase with IDOT. The construction of this interstate and the local interchange with U.S. Route 52 could have a significant impact on the future growth of the Village of Lisbon in residential, commercial, and light industrial growth.

The Village's current population is estimated to be 276 persons. For the purpose of determining the 20-year population of the Village, it is estimated that population growth in the Village will maintain the current, fairly moderate, 1.4% growth rate for the next 10 years, due to the current economic situation and until the Prairie Parkway has been completed. For years 11-20, a high population growth rate of 3% is assumed to account for the impact of the Prairie Parkway and an improved economic situation. Based on this methodology, the Village's 2029 population is estimated to be approximately 426 persons.

The information in this antidegradation assessment came from the April 2009 Facility Plan prepared by Chamlin & Associates and the February 2011 Antidegradation Assessment prepared by Chamlin & Associates.

Identification and Characterization of the Affected Water Body.

The subject facility proposes to discharge to an unnamed tributary of Saratoga Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The unnamed tributary of Saratoga Creek is classified as a General Use Water. The unnamed tributary of Saratoga 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. The unnamed tributary of Saratoga Creek, tributary to Waterbody Segment, DWBA, is not listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed. The unnamed tributary of Saratoga Creek is not subject to enhanced dissolved oxygen standards.

The USGS Illinois Streamstats basin characteristics program gives a watershed size of 0.58 square miles at the proposed discharge point on the unnamed tributary of Saratoga Creek. According to the Illinois State Water Survey, the unnamed tributary of Saratoga Creek in the area of the proposed discharge is likely to be a 7Q1.1 zero flow stream. 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 are poorly developed in these types of streams due to lack of water during dry periods during most years. Given this flow regime, no additional biological characterization is required.

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

The treated domestic waste that characterizes this proposed effluent would be similar to other treated effluents of largely domestic origin. Ammonia limits in the permit will be set at water quality standards. Biochemical oxygen demand (BOD) permit limits will be set at the appropriate effluent standards present in 35 IAC 304.120. Since untreated or poorly treated sewage is currently being discharged to local waterways due to the lack of a centralized sewage treatment system, loadings of BOD and ammonia making their way into streams may be reduced once the treatment plant and collection system is operational, however, the amount of reduction is not known due to lack of current sampling from the tile lines.

Likewise, nutrient loading may or may not increase given the aforementioned existing condition. Any nutrient load increase that possibly will occur will be extremely small. Nutrients may decrease as they are necessary for microbial growth that occurs in treatment plant processes. No phosphorus effluent standard applies to the planned facility. The Illinois Nutrient Standards Workgroup has been convened to develop nutrient standards and will strive to keep NPDES permitted dischargers aware of its findings, allowing them to anticipate future nutrient permit limits. A future NPDES permit for this facility may be subject to limits based on these yet to be developed standards.

Fate and Effect of Parameters Proposed for Increased Loading.

The BOD and ammonia discharged by this facility will decay into simpler and harmless byproducts by naturally occurring organisms in the receiving stream. Some of the nitrogen originating in the ammonia will remain in the stream in the form of nitrates or organic nitrogen. The nutrients discharged will be absorbed by aquatic or riparian terrestrial plants or will remain in the stream. Ammonia and dissolved oxygen standards will be met in the effluent prior to discharge to the receiving stream.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed project will reduce surface water pollution by providing a centralized wastewater collection and treatment system for the unsewered community and will provide treatment capacity for future growth.

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

An evaluation was performed and determined that land application was not cost effective. In addition, there are no golf courses in close proximity to the Village of Lisbon.

The facility investigated the feasibility of regionalization; however, it was determined to not be cost effective since the closest community (Morris) is approximately 9.5 miles away.

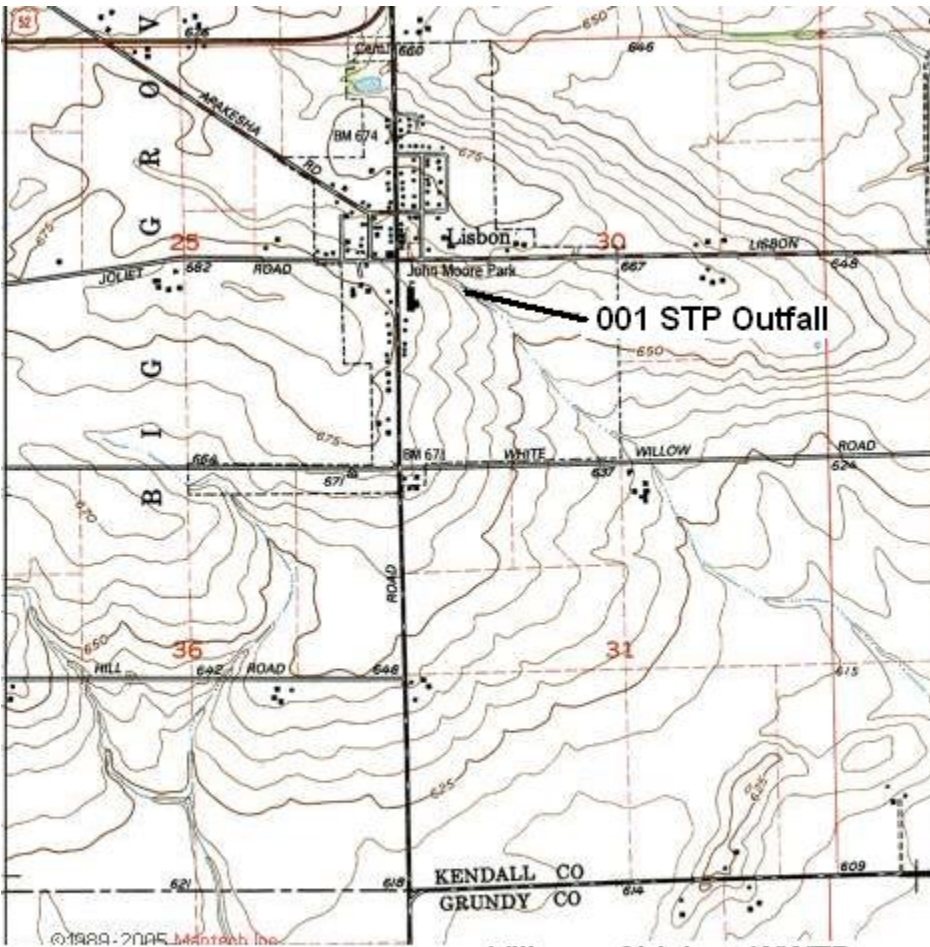
The facility determined that the cost of the proposed recirculating sand filter is a significant impact on the residents of Lisbon. In accordance with the *Interim Economic Guidance for Water Quality Standards – Workbook* (EPA-823-B-95-002), published by USEPA, dated March 1995, the addition of nutrient removal would represent a substantial impact and an undue financial burden on the Village residents.

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

The consultant used the IDNR EcoCAT web-based tool and indicated that there were no aquatic endangered/threatened species present in the vicinity of the discharge. The IDNR EcoCAT web-based tool did not terminate the consultation because of the near-by presence of wetland sites; however, in a letter dated December 20, 2010, IDNR terminated consultation.

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 reducing surface water pollution by providing a centralized wastewater collection and treatment system for the unsewered community and providing treatment capacity for future growth. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.



Village of Lisbon WWTP
NPDES No. IL0039004
Kendall County

NPDES Permit No. IL0039004

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:

Village of Lisbon
104 North Canal Street
Newark, Illinois 60541

Facility Name and Address:

Village of Lisbon WWTP
200 East Joliet Street
Lisbon, Illinois
(Kendall County)

Receiving Waters: unnamed tributary of Saratoga 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:FRB:12020601.bah

NPDES Permit No. IL0039004

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 0.030 MGD (design maximum flow (DMF) of 0.122 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:

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 **	2.5 (10)		5.0 (20)	10		20	1 Day/Month	Composite
Suspended Solids	3.0 (12)		6.0 (24)	12		24	1 Day/Month	Composite
pH	Shall be in the range of 6 to 9 Standard Units						1 Day/Month	Grab
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL						1 Day/Month	Grab
Ammonia Nitrogen: As (N) March-May/Sept.-Oct.	0.43 (1.7)	1.1 (4.4)	1.7 (6.8)	1.7	4.3	6.7	1 Day/Month	Composite
June-August	0.38 (1.5)	0.95 (3.9)	1.8 (7.2)	1.5	3.8	7.1	1 Day/Month	Composite
Nov.-Feb.	0.73 (3.0)		1.5 (6.1)	2.9		6.0	1 Day/Month	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	1 Day/Month	Grab
August-February				5.5	4.0	3.5	1 Day/Month	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.

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

Fecal Coliform shall be reported on the DMR as a daily maximum value.

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. IL0039004

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	1 Day/Month	Composite
Suspended Solids	1 Day/Month	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.

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 3 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. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

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. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

SPECIAL CONDITION 13. The Permittee shall notify the IEPA in writing once the proposed 0.03 MGD treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:

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