

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
**State Pollutant Discharge Elimination System (SPDES)**  
**DISCHARGE PERMIT**



First3.99

Industrial Code:	<b>9999</b>	SPDES Number:	<b>NY0244741</b>
Discharge Class (CL):	<b>01</b>	DEC Number:	<b>7-5099-00009/00001</b>
Toxic Class (TX):	<b>N</b>	Effective Date (EDP):	<b>05/01/2013</b>
Major Drainage Basin:	<b>07</b>	Expiration Date (ExDP):	<b>04/30/2018</b>
Sub Drainage Basin:	<b>05</b>	Modification Dates:(EDPM)	
Water Index Number:	<b>Ont. 12-66-P296</b>		
Compact Area:	<b>IJC</b>		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

**PERMITTEE NAME AND ADDRESS**

Name:	<b>Cornell University</b>	Attention:	<b>Patrick McNally</b>
Street:	<b>300 Day Hall</b>		
City:	<b>Ithaca</b>	State:	<b>NY</b> Zip Code: <b>14853</b>

is authorized to discharge from the facility described below:

**FACILITY NAME AND ADDRESS**

Name:	<b>Cornell University Lake Source Cooling Facility</b>		
Location (C,T,V):	<b>Ithaca</b>	County:	<b>Tompkins</b>
Facility Address:	<b>1000 East Shore Drive</b>		
City:	<b>Ithaca</b>	State:	<b>NY</b> Zip Code: <b>14882</b>
NYTM -E:		NYTM - N:	
From Outfall No.:	<b>001</b>	at Latitude:	<b>48 ° 28 ' 15 " &amp; Longitude: 76 ° 30 ' 10 "</b>
into receiving waters known as:	<b>Southern Basin of Cayuga Lake</b>		Class: <b>A</b>

and; (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

**DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS**

Mailing Name:	<b>Cornell University</b>		
Street:	<b>395 Pine Tree Road, Suite 230</b>		
City:	<b>Ithaca</b>	State:	<b>NY</b> Zip Code: <b>14850</b>
Responsible Official or Agent:	<b>Timothy Peer</b>	Phone:	<b>(607) 254-8722</b>

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator  
RWE/RPA  
EPA Region II - Michelle Josilo  
NYSEFC  
IJC  
NYSDOH District Office

Deputy Chief Permit Administrator: Stuart M. Fox	
Address: Division of Environmental Permits 625 Broadway Albany, NY 12233-1750	
Signature: <i>Stuart M. Fox</i>	Date: 3/ 27/ 13

### PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING		
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)		
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE	
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.			
PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (PQL)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2 which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

**Note 1: DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the ‘daily discharge’ is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the ‘daily discharge’ is calculated as the average measurement of the pollutant over the day. **DAILY MAX:** The highest allowable daily discharge. **DAILY MIN:** The lowest allowable daily discharge. **MONTHLY AVG (daily avg):** The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. **RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. **7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week. **12 MRA (twelve month rolling avg):** The average of the most recent twelve month’s monthly averages. **30 DAY GEOMETRIC MEAN (30 d geo mean):** The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. **7 DAY GEOMETRIC MEAN (7 d geo mean):** The highest allowable geometric mean of daily discharges over a calendar week.

**Note 2: ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. **TYPE I:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level. **TYPE II:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

**PERMIT LIMITS, LEVELS AND MONITORING**

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Non-Contact Cooling Water	Cayuga Lake	05/01/2013	04/30/2018

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	8.5	SU	Weekly	Grab	

PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	Monitor	2.0			m <sup>3</sup> /s	Continuous	Instantaneous	
Dissolved Oxygen	Monitor	Monitor			mg/l	Weekly	Grab	
Phosphorus, Total	4.8	Monitor			lb/d	Weekly	Grab	1
Phosphorus, Total	Monitor	Monitor			mg/l	Weekly	Grab	1
Phosphorus, Soluble Reactive	Monitor	Monitor			mg/l	Weekly	Grab	
Temperature (effluent)	Monitor	21.1			°C	Continuous	Instantaneous	

FOOTNOTES:

1. During the period of the Schedule of Compliance on pages 7 and 8 of this Permit, the enforceable effluent limit for Phosphorus, Total from Outfall 001 shall be **6.4 lb/d**. Following the conclusion of the compliance schedule period, the effluent limit of 4.8 lb/day shall become effective unless the final effluent limit is otherwise determined in the approved phosphorus TMDL for Cayuga Lake.

## **SPECIAL CONDITIONS**

1. Discharge Notification Requirements: No discharge sign is required.
2. Data Retention: The permittee shall retain records for a minimum period of 5 years in accordance with 6NYCRR Part 750-1.12(b)(2) and Part 750-2.5(c)(1). These records, which include discharge monitoring reports (DMRs), must be retained at a repository accessible to the public. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be the business office, wastewater treatment plant, village, town, city, or county clerk's office, the local library, or other location approved by the Department.
3. No biocides, algaecides or other chemical treatment for biological activity or any other water treatment chemicals may be used without express permission of the Department.
4. No chemical methods for Zebra/Quagga mussel control shall be allowed without express written permission of this Department. Evaluation of mussel control alternatives must include a complete available technology review. Application for chemical control of Zebra/Quagga mussels must be made no less than sixty (60) days prior to the proposed date of treatment.
5. An annual report of scheduled downtime shall be provided to this Department by April 1 for the following twelve months.

## CAYUGA LAKE WATER QUALITY MODEL PLAN

The permittee shall oversee the development of the lake nutrient model and watershed model for Cayuga Lake. This model shall be suitable for the development of a Total Maximum Daily Load (TMDL) by the Department to address the phosphorus impairment for the southern zone of Cayuga Lake as listed in the most recent 303(d) list. The development of the model shall include, but not be limited to, the following components:

- **Lake-wide sampling and water quality model:** The permittee shall develop a Quality Assurance Project Plan (QAPP) and collect samples along Cayuga Lake as well as at the mouths of selected significant tributaries, analyze the samples and develop the nutrient model of Cayuga. The water quality model shall also include sampling and analysis to enable an assessment of the impacts of plankton of various types and Zebra and Quagga mussels on water quality in Cayuga Lake.
- **Watershed sampling and model development:** The permittee shall gather appropriate watershed data to enhance an existing watershed model, for use as an input to the lake model. This work includes analysis of synoptic samples along selected significant lake tributaries. Work may also include the development of a more sophisticated model if necessary.
- **Model development community outreach:** The permittee shall assist the Department to engage stakeholders as the model is developed and foster their input and feedback.

### Schedule of Quality Assurance Program Plan (QAPP) Submittal

The permittee shall submit the following QAPP to the Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page of this Permit, and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505 for Departmental review and approval:

Outfall	Required Action	Due Date	FN
001	<p><b><i>Cayuga Lake Water Quality Model Plan</i></b>            The permittee shall submit an approvable QAPP to develop the monitoring, data analysis and simulation modeling program for Cayuga Lake and selected significant tributaries in accordance with the Model Plan on Page 5 of this Permit, including an approved implementation schedule for the proposed activities. Upon receipt of Department approval, the permittee shall conduct the proposed plan in accordance with the approved QAPP. The QAPP and approved schedule will become an enforceable condition of this SPDES permit.</p>	11/01/2013	1

1. The above actions are one time requirements. The permittee shall submit the results of the above actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submittal(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

## Special Conditions: BIOLOGICAL MONITORING REQUIREMENTS

The permittee shall submit two (2) paper and electronic copy to the Steam Electric Unit Leader, NYSDEC, Bureau of Habitat, 625 Broadway 5<sup>th</sup> Floor, Albany, NY 12233-4756; One (1) copy of the cover letter to the Division of Water SPDES Compliance Information Section; and one (1) copy of the cover letter to the Regional Water Engineer, unless otherwise noted.

### Entrainment Characterization Study

1. **By 02/01/2014**, the permittee must submit an approvable plan for an *Entrainment Characterization Study* at the Cornell University Lake Source Cooling Facility. The study plan must include a schedule for implementation, standard operating procedures for data collection, and a final report. At a minimum, the study must include:
  - a) Duration – April through August during 2014
  - b) Intensity – at least one 24 hour collection made in every seven calendar day period through the study duration
  - c) All samples will be analyzed for ichthyoplankton and juvenile fish
  - d) Concurrent samples shall also be collected in the near shore area so as to provide a baseline density of ichthyoplankton, and basis for comparison with entrainment samples.
  - e) The final report shall be submitted within 9 months of completion of data collection and include a summary table of the total number of fish entrained by species and life stage based upon continuous operation of all pumps at full rated flow and actual operation and cooling water volume over the study period. All data collected during the entrainment study must be provided to the department in an agreed upon electronic format.

Once approved by the Department, the permittee must conduct the *Entrainment Characterization Study* according to the approved schedule. If, based on the results of the *Entrainment Characterization Study*, the Department determines that the performance goals of CP-52 have been met the Department will modify this SPDES permit to: (1) identify the current location, design, construction, and capacity of the cooling water intake structure as BTA thereby meeting the requirements of 6 NYCRR Part 704.5; and (2) remove Biological Monitoring Requirements Nos. 2, 3, 4, 5, and 6.

### Design and Construction Technology Review

2. Within nine (9) months after Department notification that based on the results of the *Entrainment Characterization Study* the Cornell LSC intake structure does not meet the performance goals of CP-52, the permittee must submit an approvable *Design and Construction Technology Review* that include an analysis of all feasible technologies and/or operational measures capable of being installed and implemented at Cornell University Lake Source Cooling Facility. For each feasible alternative include:
  - i. A detailed description of the alternative (including preliminary drawings and site maps, if appropriate);
  - ii. A discussion of the engineering feasibility of the alternative;
  - iii. An assessment of the mitigative benefits in reducing impingement mortality and entrainment abundance for all life stages of fish, through utilization of the alternative;
  - iv. A breakdown of all applicable costs including costs associated with capital improvements, operation and maintenance, and construction downtime;
  - v.. An estimate of the time required to implement the alternative; and
  - vi. An evaluation of any adverse environmental impacts to aquatic biota, habitat, or water quality that may result from construction, installation, and use of the alternative.

### Proposed Technologies

3. Within 2 months of the Department's approval of the *Design and Construction Technology Review*, the permittee must submit, for Department review and consideration, a proposed suite of technologies or operational measures that meets the requirements of 6 NYCRR Part 704.5, Section 316(b) CWA and the performance goals of Commissioner Policy #52:
  - a. Alone, or in combination, these technologies or operational measures *minimize* entrainment of fish at Cornell University Lake Source Cooling Facility.
  - b. The reductions in entrainment resulting from the proposed technologies and/or operational measures must meet the performance goals of Commissioner Policy #52.

NOTE: Based on this and other relevant information, the Department will select technologies and/or operational measures that meet the requirements of 6 NYCRR Part 704.5, Section 316(b) CWA, and the performance goals of Commissioner Policy #52 and will modify this SPDES permit to require the use of these selected technologies and/or operational measures.

## **Special Conditions: BIOLOGICAL MONITORING REQUIREMENTS ctd.**

### **Technology Installation and Operation Plan**

4. Within 4 months of the effective date of the permit modification requiring technologies and/or operational measures to meet requirements of 6 NYCRR Part 704.5, Section 316(b) CWA , and the performance goals of Commissioner Policy #52, the permittee must submit an approvable *Technology Installation and Operation Plan*. This plan must include:
  - a. a schedule for installing and implementing the technologies and/or operational measures selected to meet requirements of 6 NYCRR Part 704.5, Section 316(b) CWA , and the performance goals of Commissioner Policy #52; and
  - b. the methodology for assessing the efficacy of these technologies and operational measures.

Upon receipt of Department approval, the permittee must implement the *Technology Installation and Operation Plan* in accordance with the approved schedule. The *Technology Installation and Operation Plan* and approved schedule will become an enforceable condition of this SPDES permit.

### **Verification Monitoring Plan**

5. Within 3 months of Department approval of the *Technology Installation and Operation Plan*, the permittee must submit an approvable *Verification Monitoring Plan*. This plan must include details of procedures to confirm that the necessary reductions in entrainment required by this permit are being achieved, and must include the following:
  - a. At a minimum, two years of in-plant entrainment monitoring to verify the full-scale performance of BTA measures.
  - b. A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring.
  - c. A schedule of implementation.
  - d. A draft proposed Standard Operation Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP must be updated as required by the Department. Upon receipt of Department approval the permittee must complete the *Verification Monitoring Plan* studies in accordance with the approved schedule. The *Verification Monitoring Plan* and approved schedule will become an enforceable condition of this SPDES permit.

### **Demonstration of Compliance**

6. Within 6 months of the completion of the *Verification Monitoring Plan* the permittee must submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and Section 316(b) CWA .

### **Additional Reporting Requirements**

7. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6 NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from the Effective Date of the Permit.
8. The permittee must submit status reports **by 11/01/2015**. At a minimum, these status reports must include a description of the operational status of the facility during the preceding two years and compliance with Biological Requirements 1 through 6 of this permit.
9. **By 11/01/2017**, the permittee must submit a report that includes:
  - a. A description and detailed analysis of the cumulative reductions in entrainment achieved during the first four years of this permit modification, and
  - b. a detailed analysis of technologies and/or operational measures available at that time, which have been demonstrated to, or have the potential to, further reduce fish mortality at Cornell University Lake Source Cooling Facility. The list of technologies and/or operational measures included in this analysis must be selected with the concurrence of the Department.

### **General Requirement**

10. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Steam Electric Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 7, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR Part 704.5, Section 316(b) CWA, and Commissioner Policy #52. As determined by NYS DEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

**Schedule of Compliance** – Biological Monitoring Requirements

The permittee shall comply with the following schedule:

Outfall	Compliance Action	Due Date	FN
N/A	1. Submit an approvable <i>Entrainment Study Plan</i>	02/01/2014	1
	2. Submit an approvable <i>Design and Construction Technology Review</i>	Department notification + 9 months	1
	3. Submit a proposed suite of technologies or operational measures for Department review and consideration	DCTR approval + 2 months	1
	4. Submit an approvable <i>Technology Installation and Operation Plan</i>	EDFPM + 4 months	1, 2
	5. Submit an approvable <i>Verification Monitoring Plan</i>	TIOP approval + 3 months	1
	6. Submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and 316(b) of the Clean Water Act	VMP approval + 6 months	1
	8. Submit status reports	11/01/2015	1
	9. Submit report on cumulative reductions in impingement and entrainment and analyses of technologies.	11/01/2017	1

**FOOTNOTES:**

- The above actions are one time requirements. The numbers correspond to the items in the preceding Biological Monitoring Requirements section. The permittee shall submit the results of the above actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submittal(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."
- From the suite of technologies and/or operational measures submitted for review, the Department will select technologies and/or operational measures that meet the requirements of 6NYCRR Part 704, section 704.5, and Section 316(b) of the Clean Water Act. Subsequent to these selections the Department will modify this permit. This date is hereby referred to as the "Effective Date of Future Permit Modification" or EDFPM.



**SCHEDULE OF SUBMITTALS – OUTFALL REDESIGN**

The permittee shall comply with the following schedule. The permittee shall submit the required information to the Region 7 Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page of this Permit, and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505:

<b>Outfall</b>	<b>Required Action</b>	<b>Due Date</b>	<b>FN</b>
001	The permittee shall develop and submit an approvable plan for an Outfall Redesign Study to evaluate potential alternative sites for relocating the discharge from Outfall 001 to a location within the Class AA segment of Cayuga Lake (as depicted by transect A-A' on the Monitoring Locations map, and defined in 6 NYCRR Part 898.4, Table I, Item 227). The requirement of this Study shall be to evaluate the current mixing zone of the discharge, identify one or more discharge locations, in waters of sufficient depth to ensure that the discharge plume remains below the photic zone, and to determine that the discharge will not contribute to an impairment of the designated uses of the Lake.	02/01/2014	
001	The permittee shall commence the approved Outfall Redesign Study	Effective Date of Approval (EDA)	
001	The permittee shall submit Outfall Redesign Study status reports to the addresses above.	EDA + 8 months EDA + 16 months EDA + 24 months	
001	The permittee shall submit an approvable report summarizing the results of the Outfall Redesign Study. This report shall identify the recommended location for the outfall, based upon the results of the Study, and include a proposed schedule for implementation. The implementation schedule shall include submittal dates for preliminary and final design reports and a proposed schedule for construction. This report shall be submitted to the addresses listed above.	EDA + 30 months	
001	In the event that an outfall relocation is determined by the permittee to be the most practical approach to ensure that the discharge will not contribute to an impairment (as determined by the Department) of the designated uses of the receiving water, and to comply with the final phosphorus effluent limit or the Cayuga Lake TMDL as listed on the following page, the permittee shall submit preliminary and final design reports and complete construction of the approved redesigned outfall in accordance with the approved implementation schedule in the Outfall Redesign Study.	In accordance with the approved schedule	
<p>The above actions are one time requirements. The permittee shall submit the results of the above actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submittal(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."</p>			

**SCHEDULE OF COMPLIANCE – BEST MANAGEMENT PRACTICES AND FINAL EFFLUENT LIMIT**

a) The permittee shall comply with the following schedule:

Outfall Number	Compliance Action	Due Date	FN
001	<p>Best Management Practices - Optimization Program:</p> <p>The permittee shall submit a program that, to the degree practical, will maximize the efficiency of the Lake Source Cooling system while minimizing the volume of water used. The program shall review all major campus facilities over the five-year permit cycle, including components or systems, to identify areas of cost-effective optimization, and shall implement identified practices. The program may include the implementation of practices such as minimization of the use of campus chilled cooling water in noncritical buildings during times of limited or no occupancy, optimization of building temperatures to reduce cooling needs, optimization of heat transfer equipment, and the use of automated valves and other equipment to minimize campus chilled water use. The program shall continuously seek to identify areas of greater efficiency in the use of campus chilled cooling water so that that additional use of the Lake Source Cooling system may proceed while increases in the volume of water taken from Cayuga Lake are minimized to the degree practical.</p> <p>The permittee shall submit an annual report summarizing any ongoing or additional practices identified and implemented and identify new buildings which use the Lake Source Cooling plant that have been placed online.</p>	02/01/2014	
001	The permittee shall comply with the final effluent limit of Phosphorus, Total of 4.8 lb/d. or such phosphorus allocation as assigned by the TMDL.	02/01/2018	1
<p><b>The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."</b></p>			

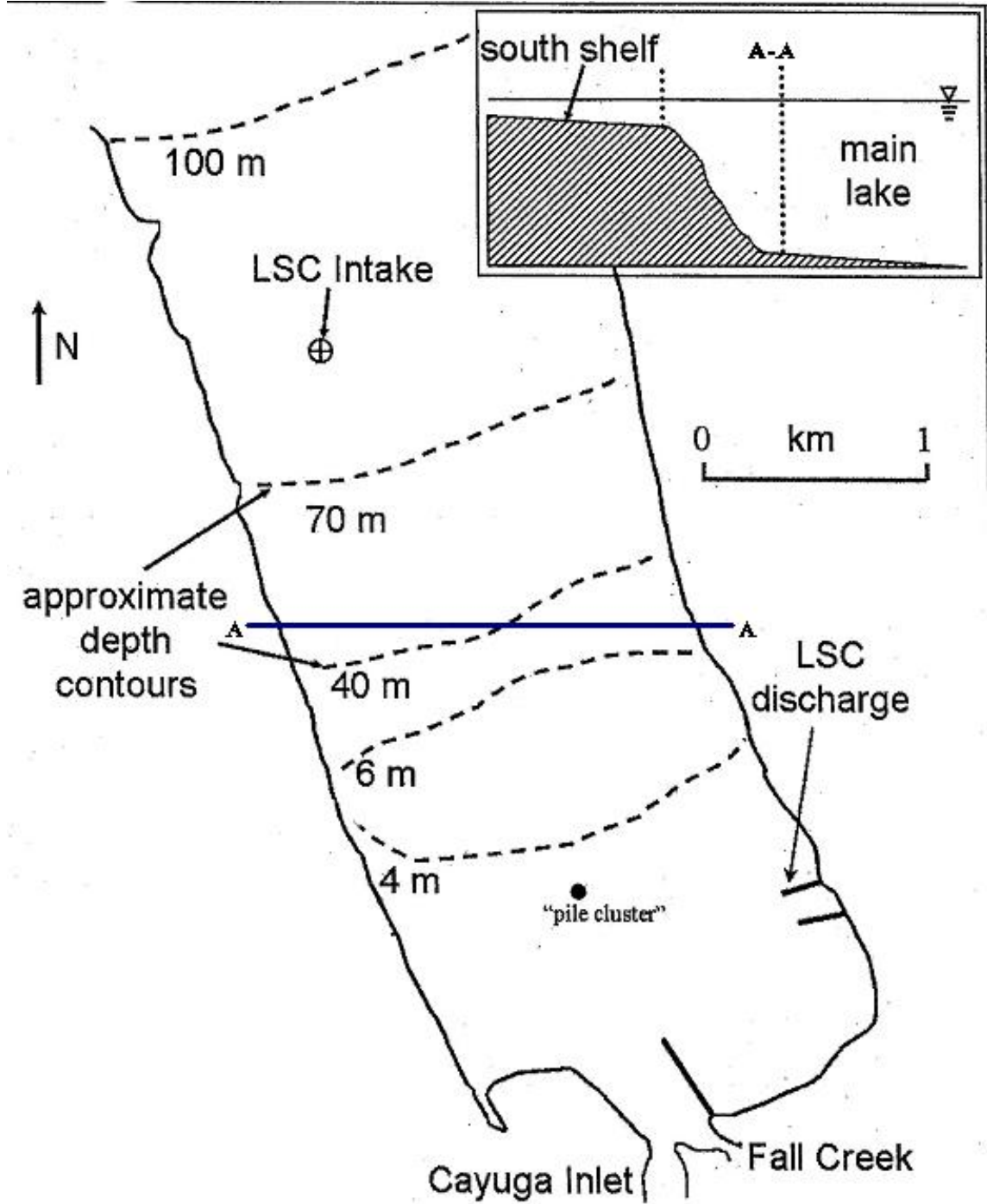
- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
  2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
  3. A description or any factors which tend to explain or mitigate the non-compliance; and
  4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

**FOOTNOTE (FN):**

1. The permittee may request an extension of the final compliance date in accordance with 6 NYCRR Part 750-1.18 should the final compliance action be delayed as a result of extended review by a federal, state or local government or as a result of public process, resulting in a delay in issuing the TMDL past 02/01/2018. Such request shall be made in writing to the Region 7 Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505. The Department shall make all best efforts to respond to such written request as soon as practicable and, if the Department is in agreement with the request, will grant the proposed extension at that time. The Department will not unreasonably withhold its approval for a modification. The due dates referenced for these Schedule of Compliance items may also be revised by the Department based upon the completion date of the TMDL Implementation Plan.

### MONITORING LOCATIONS

The Permittee shall take samples and measurements, to comply with the monitoring requirements of this permit, at these locations: Effluent monitoring is done inside the LSC facility.



**RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS**

- a) 6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all conditions set forth in this permit and with 6 NYCRR Part 750, including, but not limited to: additional monitoring and reporting requirements and conditions, including noncompliance reporting.
- b) In addition to a) above, all **POTWs** shall provide adequate notice to the Department and USEPA of the following: (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- c) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each one month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 and must summarize information for January to December of the previous year in a format acceptable to the Department.

(if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:

Regional Water Engineer and/or  County Health Department or Environmental Control Agency specified below

Send the DMRs with **original signatures** to:

Department of Environmental Conservation  
Division of Water  
Bureau of Water Compliance Programs  
625 Broadway  
Albany, New York 12233-3506  
Phone: (518) 402-8177

Send a **copy** of each DMR page to:

Department of Environmental Conservation  
Regional Water Engineer  
615 Erie Boulevard West  
Syracuse, New York 13204-2400  
Phone: (315) 426-7500

Send an **additional copy** of each DMR page to:

Town of Ithaca  
Director of Planning  
215 N. Tioga Street  
Ithaca, New York 14850

- d) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.