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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

APR 2 6 2005

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY GOVERNING SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE) STATE OF ILLINOIS) Pollution Control Board)
Petitioner,)
v.) PCB 02-105) (NPDES Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	
Respondent.)

NOTICE OF FILING

Dorothy Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Street Chicago, IL 60601

Carol Sudman Hearing Officer Illinois Pollution Control Board 1021 N. Grand Ave. East P.O. Box 19274 Springfield, IL 62794-9274 Joel A. Benoit MOHAN, ALEWELT, PRILLAMAN & ADAMI First of America Center 1 N. Old Capitol Plaza, Ste. 325 Springfield, IL 62701

Kim L. Kirn Southern Illinois University Edwardsville Office of the General Counsel Rendleman Hall, Room 3311 Edwardsville, IL 62026-1019

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board an original and four (4) copies of the <u>AGENCY'S MOTION FOR AND MEMORANDUM OF LAW IN SUPPORT OF SUMMARY JUDGMENT</u> of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Sanjay K. Sofat, Assistant Counsel Division of Legal Counsel

Dated: April 25, 2005 Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62794-9276

(217) 782-5544

THIS FILING PRINTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD RECEIVED

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STATE OF ILLINOIS Pollution Control Board
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) PCB 02-105
) (NPDES Permit Appeal)
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AGENCY'S MOTION FOR SUMMARY JUDGMENT

NOW COMES, the Respondent, Illinois Environmental Protection Agency ("Illinois EPA" or "Agency") by and through its attorney, Sanjay K. Sofat, Assistant Counsel and Special Assistant Attorney General, pursuant to 35 Ill. Adm. Code 101.516, and 105.202, 105.204, 105.206, and 105.212, hereby submits this Agency's Motion For and Memorandum of Law in Support of Summary Judgment to the Illinois Pollution Control Board ("Illinois PCB" or "Board"). The Illinois EPA respectfully requests that the Illinois PCB <u>AFFIRM</u> the Agency's decision to grant a National Pollution Discharge Elimination System ("NPDES") permit, IL0075311 to the Southern Illinois University at Edwardsville's ("SIUE" or "Petitioner") to discharge non-contact cooling water into Tower Lake, and <u>DISMISS</u> the Petitioner's petition filed on May 6, 2002, asking for the Board's review of the Agency determination. In support of its Motion, the Illinois EPA states as follows:

- On March 8, 2001, the Agency received SIUE's application for a once through cooling water discharge from its Heating & Refrigeration Plant into Tower Lake.
 Agency Record at 1.
- SIUE's application concerned an existing source that came into operation in 1965
 to provide cooling water for refrigeration units. SIUE did not seek an NPDES
 permit for the source until March 2001.
- 3. SIUE in its application requested that the monitoring and testing for BOD, TSS, Oil and Grease, COD, TOC, Ammonia (as N), and pH be waived. *Agency record* at 6.
- 4. On July 19, 2001, the Agency sent a draft NPDES permit to SIUE for its review and asked for comments within fifteen (15) days of the date of the letter. *Agency Record at 21*.
- 5. The draft permit contained limits for flow and temperature. Special Condition 1 is a monitoring requirement and requires that the flow shall be reported as a monthly average and daily maximum. Under the "sample type" column, the permit specifies that a single reading for flow shall be reported to the Agency.

 Agency Record at 26.
- 6. Special Condition 2: Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administrative Code, Title 35, Chapter 1, Subtitle C, as amended:
- A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C)

B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one percent of the hours in the 12-month period ending with any month. Moreover, at no times shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

<u>Jan</u>	<u>Feb</u>	<u> Mar</u>	<u>Apr</u>	<u>il May</u>	June	<u>July</u>	Aug	<u>Sept.</u>	<u>. Oct</u>	Nov	<u>Dec</u>	
				90								
°C	16	16	16	32	32	32	32	32	32	32	32	16

- C. The monthly maximum value shall be reported on the DMR form.
- 7. SIUE did not provide any comments during the 15-day notice period. Agency Record at 30.
- The Agency public notice the draft permit on August 10, 2001 for thirty (30)
 days. No changes were made to the draft permit prior to the public notice.

 Agency Record at 39.
- 9. On August 28, 2001, the Agency received the SIUE's comments on the draft permit. Agency Record at 43. SIUE raised the following concerns:
 - i. The permit appears to be drafter for discharge into a stream. Though the SIUE plant discharges into an artificial cooling lake.
 - ii. Section 302.211 Paragraph J applies to this facility.
 - iii. Special Condition 2.A requires that maximum temperature rise above natural temperature must not exceed 5°F. However, due to the circulating nature of an artificial cooling lake, the temperature of the body of water will rise more than 5 degrees. Also, what would be the "natural temperature" of the lake without the heat source.
 - iv. Special Condition 2B. SIUE's argues that due to the nature of an artificial cooling nature as opposed to a stream, once the temperature of the body of water rises above the limit it will remain there for a long period of time. If the lake temperatures rise in August it will not be appreciably cool until November.
 - v. It is not clear how Special Condition 2 would be applied to a lake. *Agency Record at 43-44*.

- 10. On January 2, 2002, the Agency issued the final NPDES permit for discharge of non-contact cooling water into Tower Lake. As no changes were made to the draft permit language, the final NPDES permit contains the draft language for flow and temperature conditions. In the cover letter, the Agency addressed the issued raised by SIUE during the 30-day comment period. Specifically, the Agency instructed that Tower Lake is not an artificial cooling lake, but rather is a waters of the state as defined in 35 Ill. Adm. Code 301.440. The letter further clarified that temperature monitoring will be required at a point representative of the discharge but prior to entry into Tower Lake. Agency Record at 47.
- 11. After receiving the extension of time within which to appeal the Agency's final decision, on May 6, 2002, SIUE filed a petition asking the Board to review the terms and conditions of the NPDES permit issued on January 2, 2002.
- 12. In its petition, SIUE raised the following legal and technical arguments:
 - A. SIUE's non-contact cooling water is not subject to Section 302.211(e) of the Board regulations;
 - B. SIUE is not required to satisfy the temperature requirements of 35 Ill. Adm. Code 302.211(d) or (e);
 - C. Section 302.211(d) does not apply to SIUE because Tower Lake is a manmade lake which has always been affected by the cooling and heating plant, and that Tower Lake has no "natural temperature";
 - D. Permit conditions directed at rivers and not lakes are not applicable to SIUE discharge;
 - E. SIUE has no means to assure compliance with 35 Ill. Adm. Code 302.211(d) or (e);
 - F. The permit requires SIUE to utilize two inconsistent methods of monitoring; and
 - G. The permit monitoring requirements are inconsistent because it requires "monthly average", "daily maximum", and "monthly maximum value" reporting for a single reading taken each month.
- 13. As a relief, SIUE requests the Board to determine that SIUE's discharge is not covered under an NPDES permit or that the NPDES permit as issued requires the

- Petitioner to comply with conditions not required by the Board's regulations or that permit conditions are inapplicable to SIUE. SIUE Petition, Requested Relief.
- 14. In its Order of May 16, 2002, the Board found that SIUE's petition meets the requirements of 35 Ill. Adm. Code 105.210.
- 15. The Board should grant the Agency's summary judgment. SIUE has no real legal basis to appeal this permit as the Agency's final decision is consistent with the mandates of Section 39 of the Illinois Environmental Protection Act ("Act").
- 16. Under Section 39(a), it is the SIUE's duty to apply for a permit. This section, however, makes it the Agency's duty to ensure that the permit, as issued, "will not cause a violation of this Act or of regulations thereunder." 415 ILCS 5/39(a) (2004).
- 17. Section 309.102(a) requires that, "the discharge of any contaminant or pollutant by any person into the waters of the state from a point source or into a well shall be unlawful." 35 Ill. Adm. Code 309.102(a).
- 18. Pursuant to Section 309.102, an NPDES permit is required if SIUE is discharging a pollutant from a point source into the waters of the state.
- 19. The discharge of heat from SIUE's Heating & refrigeration Plant falls with the definition of a "pollutant" as defined in Section 301.340. 35 Ill. Adm. Code 301.340.
- 20. The discharge of non-contact water by a submerged discharge line or by a flume is a discharge of a pollutant from a point source¹.

Point source means: any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. 40 CFR 122.2.

- 21. Tower Lake not a perched lake and thus not exempt from the definition of waters of the state.
- 22. Therefore, the discharge of non-contact cooling water from the SIUE's Heating & Refrigeration plant must be regulated by an NPDES permit.
- 23. Section 39(a) of the Act also mandates that the Agency must ensure that the permitted discharge "will not cause a violation of this Act or regulations thereunder." 415 ILCS 5/39(a) (2004).
- 24. Tower Lake is a general use waters of the State. The Board regulations require that the general use water quality standards must be met in waters of the state for which there is no specific designation. 35 Ill. Adm. Code 302.201. The general use standards are designed to protect the "State's water for aquatic life." 35 Ill. Adm. Code 302.202.
- 25. Section 302.211 contains temperature standard that is applicable to the general use waters. To comply with the Section 39(a) mandate, the Agency issued SIUE an NPDES permit that is consistent with the temperature standard provided in Section 302.211. Special Condition 2A is identical to Section 302.211(d) language. And Special Condition 2B is identical to Section 302.211(e) language.
- 26. The NPDES permit requires SIUE to meet the Section 302.211 temperature standard at the end of pipe because no mixing zone is provided for in the permit.
- 27. Section 302.211 applies to all general use waters, whether the waterbody is a stream or a lake. Though the Section 302.211 language makes references to streams, it applies to both the rivers and streams.

28. Also, as the permit only requires a single reading per month, SIUE only needs to report the single reading under the headings, "monthly average", "daily maximum", and "monthly maximum value".

29. The Act provides limited authority to the Agency in authorizing discharge of pollutants in the waters of the state. The Agency must follow the Board regulations in authorizing discharge of non-contact cooling water into Tower Lake. Therefore, the Agency has no authority to either not require SIUE to obtain an NPDES permit, or relax the temperature standards that apply to SIUE's discharge.

WHEREFORE, the Agency respectfully requests that the Board GRANT its' summary judgment, as the permit as issued to SIUE, contains conditions and limits necessary to protect Tower Lake, assures protection of applicable water quality standards, complies with the Federal Water Pollution Control Act, and Illinois law.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

Sanjay K. Sofat

Assistant Counsel

Special Assistant Attorney General

DATED: April 25, 2005

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

(217) 782-5544

STATEMENT OF FACTS

On March 8, 2001, the Agency received SIUE's application for a once through cooling water discharge from its Heating & Refrigeration Plant into Tower Lake. Agency Record at 1. The permit application concerned an existing source that came into operation in 1965 to provide cooling water for refrigeration units. However, SIUE did not seek an NPDES permit for this existing source until March 2001. This Heating & Refrigeration plant has two absorption and two centrifugal chillers to provide SIUE campus with cool air. Agency Record at 6. Water withdrawn from Tower Lake is used to cool the chillers. This operation is performed on a once-through basis and water is returned to Tower Lake. Id. Tower Lake serves as a reservoir for providing cooling water for the Heating & Refrigeration Plant operations. SIUE does not allow recreational boating or swimming activities in Tower Lake. *Id*. The chillers are operated depending upon ambient temperatures. Usually in the month of August, the air conditioning needs of the SIUE campus are at peak due to the maximum student population and still higher ambient temperatures. Id. At peak demand, cooling water flows are approximately 19.5 MGD. The cooling water flowing through the condensers gains about 10 Fahrenheit degrees from the ambient temperatures. The water is returned to Tower Lake. The difference in temperature of the cooling water drawn from the lake to the water returned to the lake ranges from 2 to 8 degrees Fahrenheit. Id.

On March 23, 2001, SIUE filed supplement information on cooling flume profile; flume cross-sections; aerial view of water intake structure, location of pumps that draw water from the lake, the Heating & Refrigeration Plant, the flume, and the

return of water to the lake via the rip-rapped slope; and map showing flume's location with respect to SIUE. Agency Record at 7. The engineer notes that the facility is permitted to discharge through two outfalls. Outfall 001 is a non-contact cooling water discharge point with an average flow of 15 MGD and a maximum flow of 19.5 MGD. Outfall 2 is classified as a non-contact cooling water discharge point though used only for flume discharge during summer months. Agency Record at 13. The flume is 1750 feet long. Agency Record at 17. Tower Lake is not listed on the Illinois' impaired water list.

On January 2, 2002, the Agency issued the SIUE's NPDES permit for discharge of non-contact cooling water into Tower Lake. *Agency Record at 47*. On May 16, 2002, the Board accepted the SIUE's petition. In order to find resolution to the pending issues, the Agency asked SIUE to perform a thermal monitoring study of Tower Lake. The basic objective of the study was to determine if the lake conditions will allow the Agency to assign a mixing zone in SIUE's NPDES permit. In December 2003, SIUE filed the results of its thermal study. The study found that: 1) discharge from the Heating & Refrigeration Plant met the current NPDES permit limits during 2003; 2) the surface temperatures at the Heating & Refrigeration Plant did not vary much from the surface temperatures at the far end of Tower Lake; 3) During high summer temperatures, SIUE will have difficulty complying with the temperature limits in the permit; and 4) there was not much difference between the surface water temperatures and the temperatures at the condenser inlet, which is at four meter depth.

On June 6, 2001, the Agency issued an NPDES permit to SIUE for its sewage treatment plant. The permit incorporate limits for CBOD₅ Suspended Solids, pH, Fecal Coliform, Chlorine residue, Ammonia Nitrogen, , and Phosphorus. Tower Lake is listed as the receiving waters in this permit.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

BOARD OF TRUSTEES OF SOUTHERN)
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PROTECTION AGENCY,)
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Respondent.)

AGENCY'S MEMORANDUM OF LAW IN SUPPORT OF SUMMARY JUDGMENT

NOW COMES the Respondent, Illinois Environmental Protection Agency

("Illinois EPA" or "Agency") by and through its attorney, Sanjay K. Sofat, Assistant

Counsel and Special Assistant Attorney General, pursuant to 35 Ill. Adm. Code 101.516,
and 105.202, 105.204, 105.206, and 105.212, hereby submits this Agency's

Memorandum of Law in Support of Summary Judgment to the Illinois Pollution Control

Board ("Illinois PCB" or "Board"). The Illinois EPA respectfully requests that the

Illinois PCB <u>AFFIRM</u> the Agency's decision to grant a National Pollution Discharge

Elimination System ("NPDES") permit, IL0075311 to the Southern Illinois University at

Edwardsville's ("SIUE" or "Petitioner") to discharge non-contact cooling water into

Tower Lake, and <u>DISMISS</u> the Petitioner's petition filed on May 6, 2002, asking for the

Board's review of the Agency determination. The Illinois EPA states as follows:

MEMORANDUM IN SUPPORT OF SUMMARY JUDGMENT

The "purpose of a summary judgment proceeding is to determine whether there are any genuine issues of triable fact." Kobus v. Formfit Co., 35 Ill.2d 533, 538, 221 N.E.2d 633 (1966). The courts have granted a motion for summary judgment when "the pleadings, depositions, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." 735 ILCS 5/2-1005(c), also see, Fooden v. Board of Governors, 48 Ill.2d 580, 586-87, 272 N.E.2d 497 (1971), cert. denied (1972), 408 U.S. 943, 92 S.Ct. 2847 (emphasis added). "While use of the summary judgment procedure is to be encouraged as an aid in the expeditious disposition of a lawsuit, it is a drastic means of disposing of litigation and therefore should be allowed only when the right of the moving party is clear and free from doubt." Purtill v. Hess, 111 Ill.2d 229, 239, 489 N.E.2d 867, 871 (1986) (emphasis added), citing Allen v. Meyer, 14 Ill.2d 284, 292, 152 N.E.2d 576 (1958); Beverly Bank v. Alsip Bank, 106 Ill.App.3d 1012, 1016, 62 Ill. Dec. 572, 436 N.E.2d 598 (1982); Schnabel v. County of Du Page, 101 Ill.App.3d 553, 560, 57 Ill.Dec. 121, 428 N.E.2d 671 (1981). However, a party opposing a motion for summary judgment may not rest on its pleadings, but must "present a factual basis which would arguably entitle [it] to a judgment." Gauthier v. Westfall, 266 Ill. App. 3d 213, 219, 639 N.E.2d 994, 999 (2nd Dist. 1994).

In this case, there are no genuine issues of material fact and the Agency is entitled to judgment as a matter of law. Further, the Agency's right is clear and free from doubt.

By granting the Agency's motion for summary judgment, the Board will encourage the

expeditious disposition of the permit appeal that has no legal basis. Therefore, the Illinois PCB should GRANT the Agency's motion for summary judgment.

I. Summary Judgment is Appropriate as No Genuine Issue of Material Fact Exists And the Agency is Entitled to the Judgment as a Matter of Law

SIUE's arguments can be grouped into the following two issues:

- Whether an NPDES permit is required for SIUE's discharge of noncontact cooling water into Tower Lake; and
- Whether the effluent standards and monitoring requirements in the SIUE's
 NPDES, as issued, are based on the applicable law.

If the Board determines that the an NPDES permit was required for the SIUE's discharge, and that the permit conditions are as per the applicable law, the Board must grant the Agency's summary judgment. In support of its position, the Agency states as follows:

A. NPDES Permit Is Required For SIUE's Discharge Of Non-Contact Cooling Water Into Tower Lake

Section 39(a) of the Illinois Environmental Protection Act ("Act") states that, "[w]hen the Board has by regulation required a permit for the construction, installation, or operation of any type of facility ... the <u>applicant shall apply to the Agency for such permit</u> and it shall be the duty of the Agency to issue such a permit upon proof by the applicant that the facility ... <u>will not cause a violation of this Act or of regulations</u> thereunder." 415 ILCS 5/39(a) (2004) (emphasis added).

Under the Clean Water Act as well as the Act, a National Pollution Discharge Elimination System ("NPDES") permit is required for a discharge of a pollutant from a point source into the waters of the state.

The Board regulations require that, "the discharge of any contaminant or pollutant by any person into the waters of the state from a point source or into a well shall be unlawful." 35 Ill. Adm. Code 309.102(a). Thus, pursuant to Section 309.102, an NPDES permit is required if SIUE is discharging a pollutant from a point source into the waters of the state.

Pollutant is defined by Section 301.340 of the Board regulations as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, <u>heat</u>, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." 35 Ill. Adm. Code 301.340. Thus, discharge of heat from SIUE's Heating & Refrigeration plant clearly falls within the definition of "pollutant".

Point source means: any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. 40 CFR 122.2. The discharge of non-contact water by a submerged discharge line or by a flume is a discharge of pollutant from a point source.

Section 301.440 defines "waters" as:

all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially

mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable. 35 Ill. Adm. Code 301.440.

The definition of waters in the Board regulations is more limited than the statutory definition. Citizens For A Better Environment v. Illinois Environmental Protection Agency, PCB 73-245; PCB 73-248, July 18, 1974. The Board has consistently maintained that it will decide the "waters" cases on a case-by-case basis. The Board's definition of "waters" includes both public and private waters. However, the Board excludes "treatment works" from the definition of "waters" in the Act. This exemption was placed in the Rules at the suggestion of Dr. Wesley Pipes' testimony. (R71-14). At that rulemaking proceeding, Dr. Pipes testified that the statutory definition would tend to include water in wastewater treatment facilities, including cooling ponds, oxidation ponds, tertiary treatment lagoons, and farm ponds. To exclude these waters, the Board provided for the two exemptions- the treatment works; and industrial ditch.

The net effect of providing the two exceptions is that: 1) it allows setting the downstream limit for application of the effluent standard; and 2) it determines the point of application of the water quality standards. *Revere Copper And Brass Corp. v. Illinois Environmental Protection Agency*, PCB 80-117, September 23, 1983.

The underlying issue here is where Tower Lake is an "artificial cooling lake" or a "perched lake and/or treatment works." If the Board determines that Tower Lake is an artificial cooling lake, it is subject to the temperature standards of Section 302.211, and therefore, SIUE must comply with the temperature limits in its permit. On the other hand, if the Board determines that Tower Lake is a treatment work or a perched lake it is

exempt from the water quality standards, and therefore, SIUE is not subject to the temperature standard of Section 302.211. See *Environmental Protection Agency v*. *Central Illinois Light Company*, 54 Ill. App. 3d 155, 156, 369 N.E.2d 389 (3rd Dist. 1977).

The Board defines artificial cooling lake as "any manmade lake, reservoir or other impoundment, constructed by damming the flow of a stream, which is used to cool the water discharged from the condenser of a stream-electric generating plant for recirculation in substantial part to the condenser." 35 Ill. Adm. Code 301.225. For determining whether a waterbody is a perched lake, the Board provides the following criteria:

[t]he distinction, in summary, is based upon the way a cooling-water impoundment is constructed. Where artificial diking is erected, and water to fill the resulting enclosure is largely obtained by withdrawing from a nearby natural body of water such as a lake or river, the enclosure constitutes a treatment works. Commonly known as "perched" or "side-channel" lakes, these bodies of water are, as treatment works, exempt from the Board's water quality standards, and discharges into them are not subject to the thermal effluent standards. In the Matter of Water Quality & Effluent Standards Amendments, Cooling Lakes, Docket No. R75-2, pg. 3 (September 29, 1975)

The Board criteria lists the following elements in identifying perched lakes: 1) the purpose of the waterbody is to cool the waters discharged from the condensers; 2) the impoundment is constructed by artificial diking; and 3) the water to fill the impoundment is largely obtained by withdrawing from a nearby natural waterbody.

Tower Lake is not a perched lake as it fails to satisfy the requirements identified by the Board in *In the Matter of Water Quality & Effluent Standards Amendments, Cooling Lakes*, Docket No. R75-2, pg. 3 (September 29, 1975).

According to SIUE, Tower Lake² was built to provide cooling water for its

Heating and Refrigeration Plant. However, as Tower Lake was not constructed
by artificial diking, and the water to fill Tower Lake is not obtained by

withdrawing from a nearby natural waterbody, Tower Lake is not a perched lake.

In sum, Tower Lake falls within the definition of the waters of the state. As SIUE is discharging a pollutant from a point source into the waters of the state, an NPDES permit is warranted pursuant to Section 309.102.

B. Effluent Standard For Temperature and Monitoring Requirements In SIUE's NPDES Permit Are Required By the Board Regulations

As the discharge of non-contact cooling water from the SIUE's Heating & Refrigeration plant must be regulated by an NPDES permit, pursuant to Section 39(a), the Agency must ensure that the permitted discharge "will not cause a violation of this Act or regulations thereunder." Also, Section 304.105 of the Board regulations requires that, "no effluent shall alone or in combination with other sources, cause a violation of any applicable water quality standard." 35 Ill. Adm. Code 304.105.

Tower Lake falls within the general use water category. The Board regulations provide that the general use water quality standards must be met in waters of the State for which there is no specific designation. 35 Ill. Adm. Code 302.201. Further, the general use standards are designed to protect the "State's water for aquatic life." 35 Ill. Adm. Code 302.202.

² SIUE's claim ignores the fact that its Sewage Treatment Plant discharges into the same Tower Lake.

Section 302.211 contains temperature standard that is applicable to the general use waters. To comply with the Section 39(a) mandate, the Agency issued SIUE an NPDES permit that is consistent with the temperature standard provided in Section 302.211. Special Condition 2A is identical to Section 302.211(d) language. And Special Condition 2B is identical to Section 302.211(e) language.

The NPDES permit requires SIUE to meet the Section 302.211 temperature standard at the end of pipe because no mixing zone is granted in the permit. The Board regulations on mixing zones provide that "an opportunity shall be allowed for compliance with 35 Ill. Adm. Code 304.105 by mixing of effluent with its receiving waters, provided the discharger has made every effort to comply with the requirements of 35 Ill. Adm. Code 304.102³." 35 Ill. Adm. Code 302.102 (emphasis added). The Board regulations clearly provide that mixing zones are to be granted only in cases where the discharger has made every effort to provide the best degree of treatment possible. SIUE has made no effort to find alternatives to lower the temperature of the lake. In fact, this is the first time that SIUE has applied for an NPDES permit for the discharge of non-contact cooling water. Based on the temperature conditions of the lake, the Agency concluded that since there is not much difference between the surface temperatures and the temperatures at four meter depth, the aquatic life in the lake is being subjected to very high temperatures. The Agency further concluded that giving any kind of mixing zone in this case would only impair the existing aquatic life use of the lake. Therefore, the Agency concluded that SIUE must meet the water quality based effluent limit for temperature standard. As

³ a) Dilution of the effluent from a treatment works or from any wastewater source is not acceptable as a method of treatment of wastes in order to meet the standards set forth in this Part. Rather, it shall be the obligation of any person discharging contaminants of any kind to the waters of the state to provide the best

the Board regulations demand, SIUE must make every effort to find alternatives to reduce the lake temperatures. For example, the Agency believes that SIUE can lower the lake temperatures by lowering the condenser inlet and also by discharging in the hypolimnion⁴ part of the lake. The Board regulations do not allow the Agency to grant mixing zones in cases where the whole lake is subjected to high temperatures and the applicant has not even attempted to find alternatives to lower the lake temperatures. Under Section 39(a) of the Act, it is the Agency's duty to ensure that the permit as issued is consistent with the Act and the Board regulations. Therefore, the Agency cannot grant a mixing zone to SIUE's discharge of non-contact cooling water into Tower Lake.

The phrase "mixing zone" appears in Special Condition 2 because the permit writer used standard template to write this permit. To clarify the meaning of Special Condition 2 and to address the concerns raised by SIUE in its August 24, 2001 letter, the Agency specifically mentioned in the cover letter that, "temperature monitoring will be required at a point representative of the discharge(s) but prior to entry into Tower Lake." The plain meaning of Special Condition 2 was conveyed to SIUE during a meeting held between the Agency and SIUE representatives. Also, during the discovery phase, the Agency made another attempt to clarify the meaning of the Special Condition 2. After all the dialogue on the meaning of Special Condition 2, now, SIUE can not claim that the permit language is so confusing that it impairs SIUE's ability to properly understand the meaning and application of Special Condition 2. Simply, SIUE knows what it needs to do to comply with the Special Condition 2 requires.

degree of treatment of wastewater consistent with technological feasibility, economic reasonableness and sound engineering judgment....

⁴ The layer of water in a thermally stratified lake that lies below the thermocline, is noncirculating, and remains perpetually cold.

The general use waters contain both rivers and streams. Therefore, Section 302.211 applies to all general use waters, whether the waterbody is a stream or a lake. Though the Section 302.211 language makes references to streams, it was not the Board's intent to limit the application of the temperature standard of 302.211 to streams only. Thus, permit condition referencing to rivers simply means that the condition applies to the general use water, which in this case is Tower Lake.

Further, as the permit only requires a single reading per month, SIUE only needs to report the single reading under the headings, "monthly average", "daily maximum", and "monthly maximum value".

CONCLUSION

For the reasons and arguments provided above, the Agency respectfully requests that the Board **GRANT** the Agency's motion for summary judgment.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

 $\mathbf{R}\mathbf{v}$

Sanjay K. Sofat

Special Assistant Attorney General

1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 (217) 782-5544

STATE OF ILLINOIS)	
)	SS
COUNTY OF SANGAMON)	

PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached the <u>AGENCY'S</u> <u>MOTION FOR AND MEMORANDUM OF LAW IN SUPPORT OF SUMMARY JUDGMENT</u> upon the persons to whom it is directed, by placing a copy in an envelope addressed to:

Dorothy Gunn, Clerk Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, IL 60601

Carol Sudman Hearing Officer Illinois Pollution Control Board 1021 N. Grand Ave. East P.O. Box 19274 Springfield, IL 62792-9274 Joel A. Benoit MOHAN, ALEWELT, PRILLAMAN & ADAMI First of America Center 1 N. Old Capitol Plaza, Ste. 325 Springfield, IL 62701

Kim L. Kirn Southern Illinois University Edwardsville Office of the General Counsel Rendleman Hall, Room 3311 Edwardsville, IL 62026-1019

Melinda ABrans

and mailing it from Springfield, Illinois on April 25, 2005, by U.S. Mail with sufficient postage affixed.

SUBSCRIBED AND SWORN BEFORE ME THIS 25th DAY OF APRIL, 2005.

Brenda Boehner

OFFICIAL SEAL
BRENDA BOEHNER
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 11-14-2005