BEFORE THE ILLINOIS POLLUTION CONTROL BOARD CLERK'S OFFICE

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY GOVERNING SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE,)))))))	APR 2 6 2005 STATE OF ILLINOIS Pollution Control Boal	s rc
Petitioner,) .	•	
v.) .)	PCB No. 02-105 (NPDES Permit Appeal)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)	(C-2-20 1 0.1.1.1.0 - P.P. 0.1.2)	
Respondent.)		

NOTICE OF FILING AND PROOF OF SERVICE

TO: Dorothy Gunn, Clerk, Illinois Pollution Control Board, 100 West Randolph Street, James R. Thompson Center, Suite 11-500, Chicago, IL 60601-3218;

Carol Web, Hearing Officer, Illinois Pollution Control Board, 1021 North Grand Avenue East, P.O. Box 19274, Springfield, IL 62794-9274

Sanjay K. Sofat, Illinois Environmental Protection Agency, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, IL 62794-9276

PLEASE TAKE NOTICE that on April 25, 2005, I filed with the Office of the Clerk of the Pollution Control Board an original and nine copies of Petitioner SIUE's Motion for Summary Judgment by U.S. Mail.

The undersigned hereby certifies that a true and correct copy of this Notice of Filing, together with a copy of the document described above, were today served upon the hearing officer and counsel of record of all parties to this cause by enclosing same in envelopes addressed to such attorneys at their business addresses as disclosed by the pleadings of record herein, with postage fully prepaid, and by depositing same in the U.S. Mail in Springfield, Illinois on the 25th day of April, 2005.

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THIS FILING SUBMITTED ON RECYCLED PAPER

RECEIVED CLERK'S OFFICE

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY GOVERNING	STATE OF ILLINOIS Pollution Control Board
SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE,)
Petitioner,	
v.) PCB No. 02-105) (NPDES Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,))
Respondent)

PETITIONER SIUE'S MOTION FOR SUMMARY JUDGMENT

NOW COMES Petitioner, Board of Trustees of Southern Illinois University Governing Southern Illinois University, by and through its attorneys, Mohan, Alewelt, Prillaman & Adami, and respectfully submits its Motion for Summary Judgment for the Illinois Pollution Control Board's consideration.

I. INTRODUCTION

The Illinois Environmental Protection Agency ("IEPA") issued Southern Illinois
University Edwardsville ("SIUE") an NPDES permit for the discharge of non-contact cooling
water into Tower Lake. Through this permit appeal, SIUE requests that the Board find that 35
Ill. Admin. Code 302.211(e) is not applicable to SIUE's discharge. Alternatively, if the Board
determines that Section 302.211(e) is applicable to SIUE's discharge, SIUE requests that the
Board strike that portion of the NPDES permit requiring SIUE to monitor for compliance with
Section 302.211(e) at a point representative of the discharge but prior to entry into Tower Lake;
instead, SIUE requests that the Board direct IEPA to modify the permit so that SIUE is required
to monitor for Section 302.211(e) compliance in Tower Lake.

II. STANDARD OF REVIEW FOR MOTIONS FOR SUMMARY JUDGMENT

Summary judgment is appropriate when the pleadings, depositions, admissions on file, and affidavits disclose that there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Dowd & Dowd, Ltd. v. Gleason, 181 Ill. 2d 460, 483 N.E.2d 358, 370 (1998). In ruling on a motion for summary judgment, the Board "must consider the pleadings, depositions, and affidavits strictly against the movant and in favor of the opposing party." Id. Summary judgment "is a drastic means of disposing of litigation," and therefore should be granted only when the movant's right to the relief "is clear and free from doubt." Id, citing Purtill v. Hess, 111 Ill.2d 299, 240, 489 N.E. 2d 867, 871 (1986). 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 (2d Dist. 1994).

Jersey Sanitation Corp. vs. IEPA, PCB No. 00-82, p. 5 (June 21, 2001)(Permit Appeal-Land).

III. BURDEN OF PROOF IN PERMIT APPEAL

The Illinois Environmental Protection Act

...states that when granting permits, the IEPA "may impose such conditions as may be necessary to accomplish the purposes of this Act, and as are not inconsistent with the regulations promulgated by the Board hereunder." 415 ILCS 5/39(a) (West 2000). To prevail on its claim, the petitioner must show the IEPA's imposed modifications "were not necessary to accomplish the purposes of the Act, or stated alternatively, [the petitioner] had to establish that its plan would not result in any future violation of the Act and the modifications, therefore, were arbitrary and unnecessary." Browning-Ferris, 179 Ill. App. 3d at 603, 534 N.E.2d at 620.

<u>IEPA v. Jersey Sanitation Corp.</u>, 336 Ill. App. 3d 582, 593 (4th Dist. 2003); <u>see also Noveon, Inc.</u> v. IEPA, 2004 Ill. ENV LEXIS 511 at *15 (PCB No. 91-17) (September 16, 2004).

IV. UNDISPUTED FACTS

This permit appeal concerns SIUE's discharge of non-contact cooling water into Tower Lake. Tower Lake is a man made lake located on SIUE's campus in Madison County, Illinois, which was constructed concurrently with SIUE's heating and refrigeration plant for the purpose of providing cooling water for condensers. (Record, p. 6 & 43; Response to Request to Admit #2). Tower Lake is not a source of drinking water, and SIUE allows no recreational boating or swimming in Tower Lake. (Response to Request to Admit #1; Record, p.6).

SIUE's heating and refrigeration plant provides SIUE's core campus with air conditioning services. (Record, p. 6). The heating and refrigeration plant draws water for condenser cooling purposes during periods of warm weather. (Record, p. 6). The water drawn from Tower Lake passes once through the condensers and is then returned to Tower Lake via either a submerged discharge line (Outfall 001) or a flume (Outfall 002). (Record, pp. 6 & 17). The flume is 1750 feet long, and at its end is an approximately 150 feet long rip-rapped slope that delivers the discharge water to Tower Lake. (Record, pp.6-10). SIUE uses the flume during the summer months, and the rip-rapped slope serves to further cool and aerate the water before it returns to Tower Lake. (Record, p. 6).

The temperature of the water drawn from Tower Lake for cooling purposes varies widely. (Record, p. 6). If air conditioning services are needed when the ambient air temperature is in the mid-fifties, very cold water may sometimes be drawn from beneath the lake's ice cover; in late summer, the intake water approaches ninety degrees Fahrenheit. (Record, pp. 6 & 17). Tower Lake's surface typically reaches its maximum temperature in August, and it does not appreciably cool until November. (Record, p. 44).

At the time SIUE submitted its permit application, heat gain from the water passing through the condensers varied from 2-10 degree Fahrenheit. (Record, p. 6). The maximum daily flow was19.5 MGD; the flow in 2000 was estimated to be 15MGD. (Record, pp. 4 & 6). Improvements to the plant since SIUE submitted its permit application are expected to reduce the total heat input to Tower Lake by fifty percent, (Record, p. 43), but even with these plant improvements, there is no assurance SIUE can meet that portion of Special Condition 2.B. of the NPDES permit derived from Section 302.211(e) if SIUE is required to monitor for compliance with Section 302.211(e) at the point of discharge. If SIUE is prevented from using Tower Lake as a source of cooling water from August through November when the lake is warmest, SIUE will be forced to close during this period, as the buildings will be too warm to inhabit. (Record, p. 43).

Per the IEPA cover letter accompanying the issued NPDES permit: "...the temperature limits in Special Condition 2, which are based on 35 Ill. Adm. Code 302.211, apply to the discharge(s) to Tower Lake. Also, for clarification purposes, temperature monitoring will be required at a point representative of the discharge(s) but prior to entry into Tower Lake."

(Record, p. 47). The NPDES permit issued to SIUE is included in the record. (Record, pp. 47-52).

V. ARGUMENT

A. SECTION 302.211(e) APPLIES ONLY TO "RIVERS"

Part 302 of the Board's regulations "...contains schedules of water quality standards which are applicable throughout the State as designated in 35 Ill. Adm. Code 303." 35 Ill. Adm. Code 302.101(a). Part 303 of the Board's regulations state: "Except as otherwise specifically

provided, all waters of the State must meet the general use standards of Subpart B of Part 302. 35 Ill. Adm. Code 303.201 (emphasis added).

Subpart B of Part 302 includes the regulation at issue here, Section 302.211, entitled "Temperature". In part, Section 302.211 provides:

- a) Temperature has STORET number (F) 00011 and (C) 00010.
- b) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- c) The normal daily and seasonal temperature fluctuations which existed before the addition of the heat due to other than natural causes shall be maintained.
- d) The maximum temperature rise above natural temperatures shall not exceed 2.8 C (5 F).
- e) In addition, the 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 time shall the water temperature at such locations exceed the maximum limits in the following table by more than 1.7 C (3 F).

	C	F		C	F
JAN	16	60	${ m JUL}$	32	90
FEB	16	60	AUG	32	90
MAR	16	60	SEPT	32	90
APR	32	90	OCT	32	90
MAY	32	90	NOV	32	90
JUNE	32	90	DEC	16	60

35 Ill. Adm. Code 302.211(a)-(e).

Section 302.211(e) temperature limits are commonly referred to as "monthly maxima".

See In re Mississippi Thermal Standards, PCB No. R70-16, 1971 Ill. ENV LEXIS 37 at *1

(November 23, 1971).

Section 302.104 provides: "Main river temperatures are temperatures of those portions of a river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river." 35 Ill. Adm. Code 302.104.

Section 302.211(e) is not a general use water quality standard applicable to all waters of the State. Section 302.211(e) is specifically directed toward rivers. Though this specific designation of applicability to rivers, Section 302.211(e) is inapplicable to all other waters of the State per the exclusionary language of Section 303.201: "Except as otherwise specifically provided, all waters of the State must meet the general use standards of Subpart B of Part 302.

35 Ill. Adm. Code 303.201 (emphasis added).

Section 302.211(e)'s focus on one type of body of water is not unique. Section 302.205, entitled "Phosphorus", is directed specifically toward "any reservoir or lake" of specified surface area and streams at the point where they enter the specified reservoirs or lakes. 35 Ill. Adm. Code 302.205. Section 302.205 cannot be interpreted as applying to other bodies of water; its applicability is limited by its own language to the bodies of water identified. Similarly, Section 302.211(e) is applicable only to rivers. Thus, a regulation's inclusion in Subpart B of Part 302 does not mean that it is automatically applicable to all waters of the State. See also 35 Ill. Adm. Code 302.211(j)(specific rules for "artificial cooling lakes").

Section 301.440 defines "waters" as follows:

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. Admin. Code 301.440. If the Board had intended Section 302.211(e) to apply to all waters of the State, it would not have used the word "river" repeatedly in the regulation. The Board knows how to enact regulations which apply to "Waters of the State". 35 Ill. Admin. Code 302.210 ("Waters of the State shall be free from any substance or combination of substances in concentrations toxic or harmful to human health, or to animal, plant or aquatic life.").

In the absence of a specific definition in the law in question, words used in legislation are interpreted as having their ordinary and popularly understood meaning. People v. Dednam, 55 Ill. 2d 565 (1973). The popularly understood meaning of "river" does not include lakes. A "river" is popularly understood to be "a natural stream of water of considerable volume". Webster's Seventh New Collegiate Dictionary 743 (1972). The popularly understood meaning of "stream" is "a body of running water (as a river or brook) flowing on the earth." Webster's Seventh New Collegiate Dictionary 868 (1972). In contrast, a "lake" is popularly understood to be "a considerable inland body of standing water". Webster's Seventh New Collegiate Dictionary 472 (1972). Section 302.211(e)'s use of the word "river" should be given its ordinary and popularly understood meaning, a meaning which excludes Tower Lake. At a minimum, Section 302.211(e) should not be held applicable to lakes or ponds, bodies of water which have characteristics different than rivers or streams (e.g., flow, turnover, etc).

Section 302.104's definition of "main river temperature", further defining the location in a river where water temperature is to be monitored, also requires that Section 302.211(e) be interpreted as not applying to discharges into Tower Lake. 35 Ill. Adm. Code 302.104 ("Main river temperatures are temperatures of those portions of a river essentially similar to and

following the same thermal regime as the temperatures of the main flow of the river."). It is not possible to apply Section 302.104's directive to lakes: there is no "portion of a river" in a lake; there is no "main river flow thermal regime" in a lake.

Not only is Section 302.211(e) limited in its applicability to rivers, it does not even apply to all parts of rivers. "The month maxima apply to the main river and not to shallow backwaters where natural temperatures are likely to exceed the prescribed limits on sunny days." <u>In re Mississippi Thermal Standards</u>, PCB No. R70-16, 1971 Ill. ENV LEXIS 37 at *17 (November 23, 1971); 35 Ill. Adm. Code 104. This limitation further establishes that Section 302.211(e) is not applicable to all waters of the state, as the definition of "water" includes even "parts" of any accumulation of water. 35 Ill. Admin. Code 301.440.

Because Section 302.211(e) is inapplicable to lakes, the IEPA's inclusion in the NPDES permit of a provision requiring compliance with Section 302.211(e) is not necessary to accomplish the purposes of the Act. Instead, the IEPA's action was arbitrary and unnecessary. Wherefore, SIUE prays that the Board strike all portions of the NPDES permit requiring SIUE's discharge to comply with Section 302.211(e).

B. EVEN IF SECTION 302.211(e) WERE APPLICABLE TO LAKES, SECTION 302.211(e) STATES THAT THE POINT TO MONITOR FOR COMPLIANCE IS IN THE RIVER ITSELF, NOT AT THE POINT OF DISCHARGE.

Even if the Board determines that Section 302.211(e) is applicable to SIUE's discharge into Tower Lake, SIUE should not be required to comply with the NPDES permit's requirement that monthly maxima be met at a point representative of the discharge. Section 302.211(e) plainly states that it is "water temperature at representative locations in the main river [that] shall

not exceed the maximum limits".

The primary rule of statutory construction is to ascertain and effectuate the legislature's intent. The initial source for determining legislative intent is the plain meaning of the language used, and where unambiguous, the plain meaning of the language controls. The courts must take the words found in a statute in their ordinary usual meaning and give them a sensible meaning consonant with the context in which they are used.

<u>Piatak v. Black Hawk College Dist.</u>, 269 Ill. App. 3d 1032, 1035 (3rd Dist. 1995)(internal citations omitted). The rules of construction applicable to statutes apply to administrative regulations. <u>Shell Oil Co. v. Pollution Control Board</u>, 37 Ill. App. 3d 264, 273 (5th Dist. 1976).

Section 302.211(e) is distinguishable from the majority of Subpart B general use water quality standards because, by its own terms, it specifies the location of concern, i.e., "representative locations in the main river". Section 302.104 provides: "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." By referring to "portions of the river" and "thermal regime" (phrases inapplicable to discharge points), Section 302.104 makes it clear that temperature is not to be monitored at the discharge point. That portion of the NPDES permit directing SIUE to satisfy the monthly maxima at the discharge point is at odds with these directives and makes no sense, because monitoring the temperature of the discharge provides no information as to the temperature of "representative locations in the main river". Based on the plain meaning of Section 302.211(e) and Section 302.104, SIUE requests that the Board remove those portions of the NPDES permit requiring SIUE to comply with Section 302.211(e) at a point representative of the discharge point.

Further support for SIUE's request is found in the Board's opinion concerning adopting thermal regulations for Lake Michigan. In the Matter of Thermal Standards, Lake Michigan,

PCB No. R70-2, 1971 Ill. ENV LEXIS 383 (June 9, 1971). There, the Board adopted monthly maxima for Lake Michigan, as follows:

- 1(a) All sources of heated effluents in existence as of January 1, 1971 shall meet the following restrictions outside of a mixing zone which shall be no greater than a circle with a radius of 1000 feet or an equal fixed area of simple form:
 - (i) There shall me no abnormal changes that may affect aquatic life.
 - (ii) The normal daily and seasonal temperature fluctuations that existed before the addition of heat shall be maintained.
 - (iii) The maximum temperature rise at any time above natural temperatures shall not exceed 3 degrees F. In addition, the water temperature shall not exceed the maximum limits (degrees F.) indicated in the following table:

[monthly maxima listed]

Id. at *62. (now codified at 35 Ill. Adm. Code 302.507). Comparing Section 1(a)(iii) and Section 302.211(e), both concerning monthly maxima provisions enacted in the year 1971, demonstrates that the Board chose specific monitoring locations for compliance with monthly maxima based on the body of water at issue. For rivers, the location chosen was representative locations in the main river. For Lake Michigan, the location chosen was outside a mixing zone with a radius no greater than 1000 feet. The Board chose the discharge point for neither.

Additional support for granting SIUE's requested relief may be found in Board opinions leading up to the codification of Section 302.211(e) in its present form. This regulatory history demonstrates that Section 302.211(e) is concerned with the temperature of the main river, not the temperature of at the discharge point.

Before the creation of the Illinois Pollution Control Board, the Illinois Sanitary Water
Board ("SWB") Rules and Regulations governed the discharge of heat into Illinois' waters. The
water quality criteria set forth in SWB-14 were "...applicable to all waters which [were] not
subject to the interstate water quality standards included in Rules and Regulations SWB-7
through 13 inclusive, and SWB-15). (SWB-14, Water Quality Standards, Intrastate Waters
Exclusive of Interstate Waters, p. 1 (1967, 1968). SWB-14 provided: "Temperature: Not to
exceed 90 deg. F. at any time during the months of April through November, and not to exceed
60 deg. F. at any time during the months of December to April." (SWB-14, Rule 1.05(c), p. 4).
These temperature standards were "applicable at any point in the stream except for areas
immediately adjacent to outfalls. In such areas cognizance will be given to opportunities for the
admixture of waste effluents with river water." (SWB-14, Rule 1.05, p. 3). SWB-14 also
provided: "Drastic or sudden temperature changes will not be permitted. The Board will insist
upon controlled changes in temperature not to exceed 2 deg. F. per hour, nor more than a 5 deg.
cumulative change from natural water temperature." (SWB-14, Rule 1.08, p. 5).

By way of example, SWB-10, applicable to the Ohio River and the Saline River, was one of the interstate water quality standards. (SWB-10, Water Quality Standards, Interstate Waters, Ohio River and Saline River (1966, 1968). As to temperature, SWB-10 provided: "Temperature: Not to exceed 90 deg. F at any time during the months of April through November, and not to exceed 60 deg. F. at any time during the months of December to April. (SWB-10, Rule 1.05(c), p. 3). All Rule 1.05 criteria, including the temperature criteria, were "applicable at any point in the stream except for areas immediately adjacent to outfalls. In such areas cognizance will be given to opportunities for the admixture of waste effluents with river water." (SWB-10, Rule

1.05, p. 3). Thus, in 1968, at least as to thermal regulations, SWB-14 and SWB-10 were identical.

The Sanitary Water Board Rules and Regulations remained in effect until superceded or altered by the Illinois Pollution Control Board. <u>In the Matter of Water Quality and Effluent Standards Amendments, Cooling Lakes</u>, 1975 Ill. ENV LEXIS 475 at *2, PCB No. R75-2 (September 29, 1975). The first changes to the SWB Rules and Regulations governing temperature occurred when the Illinois Pollution Control Board arrived at thermal standards for specific rivers, sections of rivers, and Lake Michigan.

Illustrative of this process was the Board's consideration of temperature criteria to set for the Ohio River. There, the Board stated:

How much heat is too much is of course a critical and much disputed question, bound up not only with the temperature of a heated discharge but also with the area of the stream affected, which in turn depends upon the relative volumes of the effluent and of the receiving body. And in determining what portions of a stream, if any, may be raised above temperatures desirable for the natural biota, the Board must under the statute consider the often considerable costs of providing alternatives to the use of stream water for cooling purposes in power generation and in industry generally.

In the Matter of Ohio-Wabash Thermal Standards, PCB # R71-12, p. 2-563 (September 30, 1971). The Board retained the Sanitary Water Board provision forbidding temperature rises above 5 degree F. above natural temperatures. The Board rejected a suggestion that no mixing zone be allowed, and instead adopted an interpretation of the Technical Secretary of the Sanitary Water Board previously issued which provided that the 5 degree F. standard must be met within no more than 600 feet from the discharge. <u>Id.</u> at 2-565-566. The Board set monthly maximum temperatures, and deemed it

...wise to permit monthly maximum temperatures to be exceeded by not more that 3 degrees, so long as the 5 degree rise limit is adhered to, for time periods too brief to have biological significance, and we have added a provision to that effect.

<u>Id.</u> at 2-567.

Immediately following this statement, and critically important for the present appeal, the Board stated:

We have also, for reasons given in the Mississippi case, added a provision specifying that the monthly maxima are to be met in the main part of the river, believing this will afford adequate protection against excessive temperatures in the naturally warmer shallow backwaters.

Id. at p. 2-567.

In the interest of a complete understanding of the thermal rules, it is important to review certain aspects of the Mississippi case, including the reasoning behind the rule that monthly maxima are to be met in the main part of the river. In re Mississippi Thermal Standards, PCB No. R70-16, 1971 III. ENV LEXIS 37 (November 23, 1971) is helpful in that it explains why the thermal regulations contain a 5 degree above natural temperature standard and a "monthly maxima" temperature.

The <u>Mississippi</u> opinion concerns a federal proposal to revise the temperature standards by inserting monthly maxima. <u>Id.</u> at *1.

The federal position is, as the federal agency has also argued as to the Ohio River and as to Lake Michigan (## R 71-12, R 70-2), that the present standard is inadequate to protect aquatic life against temperature extremes during various seasons of the year. Monthly maximum temperatures, it is argued, are necessary in order to avoid temperatures (which may be less than 5 degrees above natural) that are high enough to endanger the viability of any species (Jan. 20. p. 93). The maxima proposed are based upon the biological needs of the fish actually present in each section of the river and on actual high temperatures occasionally encountered, on the ground that these are the temperatures to which the local fish are adapted (id., pp. 37, 83). A single 90 degrees limit, a witness from the Bureau of Sport Fisheries and Wildlife explained, is inadequate, partly because there are much lower critical temperatures for fish reproduction during cooler times of the

year (Mar. 3. pp. 145 et seq.).

Id. At *7-*8.

The Board agreed with the federal position:

As in the Lake Michigan and Ohio River proceedings, ## R70-2 and R71-12, we find the federal argument in favor of monthly maxima highly persuasive, for the reasons given. If we were dealing with a small fraction of the river volume, we might be content with a limit of 5 degrees above natural temperatures at the edge of a mixing zone, anticipating that further dilution would rapidly reduce temperatures in the river as a whole to near normal levels. But the Quad-Cities evidence makes plain that that is not what is at stake here. At low flow this single plant will utilize one-fifth to one-fourth of the river for cooling purposes, and after complete mixing the entire volume of the river below the plant will be raised four to five degrees above intake temperature. Complete mixing will be achieved 600' downstream, but the temperature reached at the edge of this zone will persist for a considerable distance downstream, since there is no additional water for further dilution. Elevated temperatures across the entire river will therefore remain until relatively slow processes such as evaporation dissipate the excess heat to the atmosphere. Edison's witnesses could not say how far downstream temperatures would remain above normal (Permit hearing, 840); an Izaak Walton League witness, extrapolating from the experience of the upstream Genoa plant, estimated that recovery would take ten miles (Feb. 24, pp. 81, 88); a federal witness quoted a Commonwealth Edison study showing that two and a half miles would be required (Apr. 23, p. 77); Edison itself in oral argument June 21 estimated that at low water a 3 degrees rise over natural temperatures would persist for twelve miles.

While the evidence falls short of conclusive proof that serious harm could necessarily result if the present standard were retained, we think no such showing is required. The day is past when contamination of the environment will be allowed until gross injury occurs; we think it important to avoid substantial and unnecessary risks of harm, and therefore agree that monthly maxima should be adopted.

<u>Id.</u> at **10-13.

The Board explained the purpose and application of the new rule as follows:

The intent of the temperature regulations is to determine the "natural" highs by month and to permit, in general, 5 degrees F. above these highs, except when the resulting temperature would adversely affect aquatic life. The standard is then set

to not permit the full 5 degrees F. envelope to be used if damage will occur.

Obviously it is then of critical importance to know the "natural" high temperatures. The data analysis revealed that 88 degrees F. in July and August and 86 degrees F. in June and September were more realistic "natural highs" at Alton (the southern and warmest portion of its zone).

It is clear that what is to be feared is the warming of the river over a biologically significant period of time. An expert witness favoring the federal proposal testified that a 4 degrees rise above natural conditions for as much as a week on rare occasions would not injure even the sensitive northern pike (Permit hearing, p. 2114). No one testified to the contrary, and a federal spokesman suggested that provision might reasonably be made to allow the maxima to be exceeded for brief periods (March 3, pp. 221). We have so provided, by analogy to the existing provisions that require water quality standards generally to be met except during conditions of lowest flow. We believe on the present record that ample protection will be afforded during these short periods by requiring adherence to the 5 degrees-above natural limitation and by providing that the maxima themselves never be exceeded by more than 3 degrees.

Id. at *14-*15.

The Board then made the statements referenced in the Ohio river opinion as the "reasons" the monthly maxima applied in the main river.

The month maxima apply to the main river and not to shallow backwaters where natural temperatures are likely to exceed the prescribed limits on sunny days. The 5 degrees above-natural limit applies everywhere, and to meet the maxima in the main river should assure that temperatures in shallow areas, which are naturally higher, are not excessive.

<u>Id.</u> at *17.

The Board specifically rejected a proposal that the monthly maxima apply to the effluents discharged to rivers themselves, noting that even the proponents of such an effluent standard "...recognize that the addition of very small volumes of high-temperature water to a big river have no significant effect and that the costs of prohibiting such discharges would far exceed the observable benefits. Id. at *18-*19.

Through these opinions, the Board adopted regulations for the Ohio and Mississippi Rivers that restricted temperature rise to 5 degree F. at the edge of a 600 foot mixing zone and set monthly maxima river temperatures to be met in the main river. <u>In the Matter of Ohio-Wabash Thermal Standards</u>, PCB # R71-12, p. 2-569 (September 30, 1971); <u>In re Mississippi</u>

Thermal Standards, PCB No. R70-16, 1971 Ill. ENV LEXIS 37 at *23-*26 (November 23, 1971)

At the time of the publishing of the July, 1973, Water Pollution Regulations of Illinois, that portion of the thermal rules specifying a 600 foot mixing zone had been removed from the Board's water regulation governing temperature. (Rule 203(i), July, 1973). Instead, Rule 201(a) contained a mixing zone provision, stating that mixing zones would be applied on a case-by-case basis, and none would exceed the area of a circle with a radius of 600 feet. (Rule 201(a), July, 1973).

On August 20, 1981, the Board issued an order concerning revising the Chapter 3 Water Pollution regulations to conform with the codification regulations adopted by the Secretary of State. In re Matter of: Rulemaking for Codification of Chapter 3: Water Pollution, R81-3 (August 20, 1981). In explanation of the codification process, the Board stated:

The old rules specifying water quality standards in Part II have been made subparts of Part 302. Explanatory sections have been added to introduce subparts. Site specific rules and water use designations have been moved to Part 303. These have been grouped with the existing water use designations of Part III and arranged geographically by river basin. This is in anticipation of a pending proposal to adopt water quality standards by river basin throughout the state (R79-6).

The Secretary of State's Rules provide a method for codification of rules without substantive changes (1 Ill. Admin. Code Sec. 160.1103). The Board proposes to follow this abbreviated procedure.

Id.

After public notice, the Board made minor changes to its draft of the proposed codified rules, and its clerk was directed to file the text for publication in the Illinois register pursuant to the provisions for codification without substantive change. In re Matter of: Rulemaking for Codification of Chapter 3: Water Pollution, R81-3 (January 21, 1982). This codification resulted in the removal of monthly maxima for named rivers from Rule 203(i), which was codified as 35 Ill. Admin. Code 302.211(e) and printed in Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, August 1, 1982, in the same manner as it appears today.

As the <u>Mississippi</u> opinion makes clear, the Board determined that the 5 degree rule, measured in that instance at the edge of the mixing zone, was insufficient to protect the main river. The "monthly maxima" rule was adopted to provide additional protection to the main river. It prohibits dischargers, even those who meet the 5 degree above natural temperature rule, from raising the temperature of the main river itself above the allowed "monthly maxima", possibly resulting, as the Board stated, in not "...permit[ing] the full 5 degrees F. envelope to be used if damage will occur." <u>In re Mississippi Thermal Standards</u>, PCB No. R70-16, 1971 Ill. ENV LEXIS 37 at *14. Monitoring at the point of discharge, as required by the present NPDES permit, provides absolutely no information as to whether the "monthly maxima" regulation is being violated; monitoring at a representative location in the main river does provide the relevant information. The point being, the regulations require monitoring at the point of discharge or on the edge of any allowed mixing zone for compliance with the 5 degree rule (Section 302.211(d)) and further requires testing at representative locations in the main river to determine compliance with the monthly maxima (Section 302.211(e)). The NPDES permit issued to SIUE ignores this

distinction.

Under the terms of the NPDES permit as issued, if SIUE discharged one gallon of 94 degrees Fahrenheit water into Tower Lake in August when Tower Lake's natural temperature and main river temperature were both 89 degrees Fahrenheit, the 5 degree Fahrenheit above natural temperature permit requirement would not be violated, but the monthly maxima permit requirement would be, although no measurable increase in the temperature of Tower Lake would occur. A permit violation would occur, but a violation of Section 302.211(e) would not occur, as Section 302.211(e) allows main river temperatures, under the assumed facts, to be as high as 93 degrees Fahrenheit for brief periods of time. 35 Ill. Adm. Code 302.211(e)("Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more that 1.7 C (3 degrees F)."). The NPDES permit as issued, then, deprives SIUE of the use of the assimilative capacity of Tower Lake for heat which is specifically allowed by Section 302.211.

Board opinions concerning Section 302.211(e) also demonstrate that compliance with Section 302.211(e) is not determined by measuring water temperature at the point of discharge. In Illinois Power Company (Clinton Power Station), PCB No. 92-142, 1993 Ill. ENV LEXIS 855 (August 26, 1993), to demonstrate compliance with Sections 302.211(e) regarding water discharged from an artificial cooling lake into Salt Creek, IPC used "data collected from Salt Creek". Id. at *10. Based in part of this showing that Section 302.211(e)'s temperature limits were met in Salt Creek, the Board granted IPC specific thermal standards to be applied to IPC's discharge into Clinton Lake. Id. at *15-16.

In Deere and Company, John Deer Foundry v. IEPA, PCB No. 81-163, 1982 III. ENV LEXIS 63 (October 5, 1982), in addition to other relief sought, Deere requested a variance from Section 302.211(e) concerning cooling water it discharged into unnamed tributaries of Sugar Creek, which in turn flowed into the Mississippi River. As to the thermal component of the discharge, the Board noted that "data indicating maximum temperatures of 89.6 degrees F and 96.8 degrees F summer [] would cause violation of the 60/90 degrees F standards of Section 302.211(e) under low flow conditions." <u>Id.</u> at *5. This statement, limited to low flow conditions, recognizes that a violation of Section 302.211(e) does not automatically occur simply because the discharge temperature exceeded 90 degrees Fahrenheit if low flow conditions are not present because monitoring would occur at representative locations in the main river, not at the discharge point. That monitoring for compliance with Section 302.211(e) is not to occur at the point of discharge is also demonstrated by certain options under consideration, discussed in a related Board opinion, to avoid violations of Section 302.211(e) by Deere in the unnamed tributaries: piping the heated discharge under pressure directly into the Mississippi River; or discharging directly into Sugar Creek. <u>In re matter of: John Deer Thermal Discharge (East</u> Moline), PCB No. R81-26, 1983 Ill. ENV LEXIS 659 at *7 (November 18, 1983). If the concern of Section 302.211(e) were the temperature of Deere's discharge, diverting the thermal discharge to a different body of water would not reduce the likelihood of a violation of Section 302.211(e); the temperature of that discharge would be the same regardless of the body of water it was discharged into. It is because Section 302.211(e) is concerned with temperatures in the "main river" that these options were potentially viable (e.g., these bodies of water had greater assimilative capacities). See id. (Discussing the likelihood of violations of Section 302.211(e)

dependent upon whether Deere discharged into the ditches (i.e., the tributaries to Sugar Creek), Sugar Creek, or the Mississippi River).

Another opinion on point is <u>CIPS (Hutsonville Power Station) v. IEPA</u>, PCB No. 78-108, 1978 Ill. ENV LEXIS 582 (October 19, 1978). There, the Board stated:

The Board notes that the above table indicates that CIPS has the potential to cause a violation of Rule 203(i)(4) of Chapter 3. Thus it would be required to derate its Hutsonville Power Station whenever the thermal discharge would raise the Wabash River temperature above the permitted maximum temperatures.

<u>Id.</u> at **6-7 (emphasis added).. Rule 203(i)(4), now 35 Ill. Admin. Code 303.321, sets forth the monthly maxima "at representative locations in the main river of the Wabash River" using language substantially identical to Section 302.211(e). And, as demonstrated by the above-quoted language, monitoring for compliance with Rule 203(i)(4), like Section 302.211(e), requires monitoring at representative locations in the main river.

Thus, the plain language of Section 302.211(e), the history of the promulgation of Section 302.211(e) and the Part 303 regulations using substantially identical language to govern the temperature of named rivers, previous Board opinions, and, most importantly, the purpose of the monthly maxima rule, all demonstrate that the location to monitor for compliance with Section 302.211(e) is not the point of discharge, but instead is representative locations in the main river. Accordingly, the IEPA's inclusion of a monitoring requirement for compliance with Section 302.211(e) at a point representative of the discharge is arbitrary, unnecessary to accomplish the purposes of the Act, and should be stricken.

VI. CONCLUSION

Wherefore, Petitioner, Board of Trustees of Southern Illinois University Governing

Southern Illinois University, prays that the Board grant this Motion for Summary Judgment and
strike all requirements that SIUE comply with Section 302.211(e) from the NPDES permit.

Alternatively, if the Board determines that Section 302.211(e) is applicable to SIUE's discharge,
SIUE requests that the Board strike that portion of the NPDES permit requiring SIUE to monitor
for compliance with Section 302.211(e) at a point representative of the discharge but prior to
entry into Tower Lake; instead, SIUE requests that the Board direct IEPA to modify the permit
so that SIUE is required to monitor for Section 302.211(e) compliance in Tower Lake.

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY GOVERNING SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE, Petitioner,

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