

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF:	)	
	)	
WATER QUALITY STANDARDS AND	)	
EFFLUENT LIMITATIONS FOR THE	)	R08-09
CHICAGO AREA WATERWAY SYSTEM	)	(Rulemaking – Water)
AND THE LOWER DES PLAINES RIVER:	)	Subdocket D
PROPOSED AMENDMENTS TO 35 Ill.	)	
Adm. Code Parts 301, 302, 303 and 304	)	

**NOTICE OF FILING**

To: John Therriault, Clerk  
 Marie Tipsord, Hearing Officer  
 James R. Thompson Center  
 Illinois Pollution Control Board  
 100 West Randolph Street, Suite 11-500  
 Chicago, Illinois 60601  
 (VIA electronic mail and First Class Mail)

**SEE ATTACHED SERVICE LIST**

PLEASE TAKE NOTICE that I have filed electronically today with the hearing officer ILLINOIS EPA'S RESPONSE TO THE COMMENTS FILED BY THE ENVIRONMENTAL GROUPS AND MIDWEST GENERATION, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL  
 PROTECTION AGENCY

By:/s/Stefanie N. Diers  
 Stefanie N. Diers  
 Assistant Counsel

Dated: May 14, 2014  
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**THIS FILING IS SUBMITTED ON RECYCLED PAPER**

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF: )  
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WATER QUALITY STANDARDS AND )  
EFFLUENT LIMITATIONS FOR THE ) R08-09 (D)  
CHICAGO AREA WATERWAY SYSTEM ) (Rulemaking – Water)  
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PROPOSED AMENDMENTS TO 35 Ill. )  
Adm. Code Parts 301, 302, 303 and 304 )  
 )

**ILLINOIS EPA'S RESPONSES TO THE ENVIRONMENTAL GROUPS AND  
MIDWEST GENERATION'S COMMENTS**

The Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by and through its attorneys, hereby submits its responses to comments filed by the Environmental Groups and Midwest Generation pursuant to the Hearing Officer's Order of March 26, 2014 in the above-captioned rulemaking proceeding.

The Agency thanks the Board for allowing responses to be filed before proceeding to First Notice. The Environmental Groups nor Midwest Generation provided testimony in Subdocket D. The proposals they are now asking the Board to consider were never testified to nor were parties given an opportunity to cross examine witnesses with respect to these proposals. Subdocket D was specifically created to address the issues dealing with water quality standards and criteria, which is necessary to meet the aquatic life use designations. (See, March 18, 2010, Opinion and Order, P. 1). The Agency intentionally did not ask water quality standard questions from Midwest Generation witnesses, since at the time the witnesses testified, we were not in Subdocket D. The Agency did not even anticipate a proposal from either group since no testimony was provided in Subdocket D. Therefore, the

Agency would ask that the proposals provided by the Environmental Groups and Midwest Generation not be considered by the Board.

Should the Board decided to go ahead and consider the proposals presented, the Agency would make the following comments:

### **Environmental Groups**

With respect to the Environmental groups proposal, they are proposing to remove the excursion hours because they believe that the excursion allowance of 3.6 °F for 2% of the time was not protective. (See, P. 8, of their April 30, 2014 Comments). However, in Chris Yoder's prefiled testimony he indicated that exceedances of well-developed thermal criteria are inevitable and may not necessary result in a biologically impaired use and recommended against setting the criteria so high that they would not be exceeded. (See, Hearing Exhibit 13). Mr. Yoder stated: "In conclusion, I would like to stress that as with other naturally occurring physical and chemical constituents, occasional exceedances of well-developed thermal criteria are inevitable and may not necessarily result in a biologically impaired use. A conclusion that I have reached is that temperature excursions should be evaluated with direct biological measures in a receiving water body that is representative of reference or least impacted conditions. Conversely, setting criteria to avoid the potential regulatory inconveniences of such exceedances can have potentially adverse biological consequences." (Id.)

Additionally, in the cross examination of Chris Yoder on Jan. 31, 2008, Page 162 of the hearing transcript, Ms. Franzetti asked Mr. Yoder if fish could detect high temperatures and avoid them. Mr. Yoder answered that they could, provided that they have somewhere to go.

BY MS. FRANZETTI:

Q. Do you agree that in a waterway fish can detect high temperatures and will avoid them, providing there's thermal refuge available?

A. Yes, provided they have somewhere to go.

Under further questioning on page 163 of the hearing transcript, Ms. Franzetti asked Mr. Yoder about the derivation process and thermal avoidance behavior in fish. Mr. Yoder indicated that long-term survival is avoidance. Mr. Yoder also indicated that short-term survival is something they can withstand for short periods of time. Mr. Yoder continued and mentioned the concept of long-term and short-term survival principles. Id.

There is a difference between short-term and long-term avoidance. Long-term avoidance would be where a thermally sensitive fish avoids a segment of the river because it is too hot. In this case, the fish is deprived of the habitat in this section of the river on a permanent or semi-permanent basis. Short-term avoidance is avoiding a segment of the river for a short period of time, such as during the excursion hours. In this instance, fish will find refuge, either downstream or in deeper waters, where the temperature is not as hot and the fish will move back when the temperatures cool.

On page 4 of the environmental groups' post hearing comments they acknowledge that Mr. Yoder used a downward adjustment of 2 °C to the CTM temperature. Then on page 8 of their comments, they suggest adjusting the UILT downward again by 2 °C. The Agency is concerned that this methodology is being proposed without any expert testimony and may be applying the same safety factor,

after it has already been applied. The Agency's thermal expert (Chris Yoder) determined that an additional safety factor was not necessary in the methodology used. (See, Hearing Exhibits 15 &16).

In the CAWS A and CAWS B Brandon Pool waters, the environmental groups' thermal proposal adds an arbitrary 5 °F to the period average to determine the daily maximum temperature that would apply. This was done to insure that requiring cooling of sewage effluent is not required. The Agency has concerns that the arbitrary 5 °F is insufficient to ensure that the sewage treatment plants would meet the environmental groups proposed daily maximum. Additionally, they do not indicate whether the municipal dischargers in the UDIP will need this relief.

In the UDIP waters, the period average and maximum non-summer months that the environmental groups have proposed are based on the Geometric Mean and 98<sup>th</sup> percentile temperature data from the Rt. 83 Cal-Sag Channel station respectively. The environmental groups have proposed to remove the Agency's proposed exceedance hours of 2 percent. Ironically, the method that they choose to represent the daily maximum temperature, using 98<sup>th</sup> percentile, will exceed their proposed standard 2 percent of the time based on the historical data that was used. It is important to note, the background station will exceed the environmental groups' proposed maximum temperature 2 percent of the time. This is before any heat is added. Based on historical data at the background station (Cal-Sag Channel – Rt. 83), the period average of the historical data exceeds the environmental groups' proposed thermal standard 35 periods out of 117 periods in 9 years. The background station will exceed the environmental groups' proposed period average temperature

30 percent of the time. Once again, this is before any heat is added. This is why the Agency proposed using the 90<sup>th</sup> percentile of the historic data to represent the period average. Therefore, the approaches put forth by the Environmental Groups should not be considered by the Board.

### **Midwest Generation**

Midwest Generation has offered 3 proposals for the Board to consider. (See, Midwest Generation April 30, comments). The 2003 proposal by Midwest Generation was given to the Agency several years before the Agency filed its proposal with the Board. The Agency reviewed the 2003 proposal and determined the proposal was not consistent with how one would go about establishing water quality standards.

Therefore, this proposal was rejected by the Agency and it should be rejected by the Board now.

The 2007 proposal was discussed somewhat in other Subdockets, but not in Subdocket D. As stated above, the Agency did not question Midwest Generation witnesses on water quality standards since it was assumed such testimony would be addressed in Subdocket D. It is also unclear if USEPA has reviewed this proposal and would even approve the proposal now being submitted to the Board. There was no testimony or cross examination with respect to these proposed standards. Therefore, this proposal should be rejected since it was not presented in Subdocket D.

Finally, Midwest Generation asks that if their other two proposals are not adopted by the Board then the Board should keep the temperature standards adopted in AS 96-10. Midwest Generation has not put any information into the record concerning what has changed for the receiving stream or Midwest Generation in the

time since AS96-10 was granted by the IPCB. At a minimum, the Agency knows that helper cooling towers were installed at the Joliet 9 facility. Additionally, thermal limits that would apply at the I-55 Bridge are not water quality standards for the entire stretch of the Upper Dresden Island Pool. Therefore, the Agency would ask that this approach be rejected as well.

The Agency has testified to its temperature proposal, was subjected to cross examination and provided comments to the Board on why those standards should be adopted. Therefore, the Agency again asks the Board to propose for first notice the temperature standards as submitted to the Board by the Agency on April 30, 2014.

**Designation of the Lower CSSC and Brandon Pool**

On page 13, Section IV, the USEPA proposed in their April 2014 comments to delete 35 Ill. Adm. Code Section 303.227(b) and either designate the Lower CSSC and Brandon Pool for: (a) incidental contact use at 35 Ill. Adm. Code 303.225, or (b) reinstate the previous secondary contact use at 35 Ill. Adm. Code Section 303.441. The Illinois EPA would suggest to the Board these waters be designated for the Incidental Contact Use.

WHEREFORE, for the reasons stated above, the Agency asks the Board to reject the proposals now being submitted by the Environmental Groups and Midwest Generation and propose for first notice the standards proposed by Agency in their April 30, 2014 comments and consider designating the Lower CSSC and Brandon Pool for Incidental Contact Use.

Respectfully submitted,

By: /s/Stefanie N. Diers  
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Date: May 14, 2014

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**PROOF OF SERVICE**

I, the undersigned, on oath state that I have served the attached ILLINOIS EPA'S RESPONSES TO THE ENVIRONMENTAL GROUPS AND MIDWEST GENERATION COMMENTS upon the person to whom it is directed by electronic filing and placing it an envelope addressed to:

John Therriault, Clerk  
Marie Tipsord, Hearing Officer  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph Street, Suite 11-500  
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and by mailing the document to those listed above and on the attached Service List by First Class Mail from Springfield, Illinois on May 14, 2014, with sufficient postage.

/s/Stefanie N. Diers  
Stefanie N. Diers  
Assistant Counsel

**THIS FILING IS SUBMITTED ON RECYCELD PAPER**