BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R13- 20
PROCEDURAL RULES FOR	)	(Rulemaking- Water)
ALTERNATIVE THERMAL EFFLUENT	)	
LIMITATIONS UNDER SECTION 316(a) OF	)	
THE CLEAN WATER ACT: PROPOSED	)	
NEW 35 ILL. ADM. CODE 106, SUBPART K	)	
AND AMENDED SECTION 304.141(c)	)	

NOTICE OF FILING

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board ILLINOIS EPA'S RESPONSE TO BOARD STAFF QUESTIONS FOR SECTION HEARING AND CARE COMMENTS, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/Joanne M. Olson
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ILLINOIS EPA'S RESPONSE TO BOARD STAFF QUESTIONS FOR SECTION HEARING AND CARE COMMENTS

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, (Illinois EPA or Agency) by and through its counsel, and hereby submits its response to Board staff questions for the second hearing and its response to public comments filed by Citizens Against Ruining the Environment (CARE) as directed by the Hearing Officer Order dated September 12, 2013. The Illinois EPA's responses are attached hereto as Exhibit A and Exhibit B, respectively.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
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ILLINOIS EPA'S RESPONSE TO
BOARD STAFF QUESTIONS FOR SECTION HEARING

Section 106.1160 Burden of Proof

1. Attachment C to the Illinois Environmental Protection Agency's Statement of Reasons (SR) refers to USEPA's 1977 "Interagency 316(a) Technical Guidance Manual And Guide For Thermal Effects Sections of Nuclear Facilities Environmental Impact Statements" (1977 USEPA Manual) as "valuable technical information on conducting 316(a) demonstrations, useful to both facilities and permitting authorities." SR Att. C at 2. The 1977 USEPA Manual was entered as Agency Exhibit 2 at the August 27, 2013 hearing. The first notice comments of Citizens Against Ruining the Environment (PCI) notes several factors from the 1977 USEPA Manual that should be addressed in a successful demonstration. PCI at 9-10.

   To assist petitioners in preparing demonstrations and the Board in its review, should the proposed language under Section 106.1160 include any additional language derived from the 1977 USEPA Manual?

   Agency Response: No. The Agency believes Section 106.1160 should track the language of the federal rule in 40 C.F.R. §125.73. Considering the age and draft nature of the 1977 USEPA Manual, the Agency believes its inclusion may exclude new guidance or additional information from being considered by the Board and the Agency. In addition, it is worth noting that the 1977 USEPA Manual was intended to provide guidance on the 1977 federal rules. The 1977 rules have been substantively changed since that time.

Section 106.1170 Opinion and Order

2. In its response to question 16 posed in the August 15, 2013 Hearing Officer Order (Agency Hearing Exhibit 1), the Agency stated that it "prefers that the 316(a) thermal relief be expressed in the NPDES permit as an end-of-pipe effluent limitation because of the ease of administration and compliance demonstration." Agency Hearing Exh. 1 at 12. The Agency also stated, "This demonstration is sufficient and accomplishes the same goals as mixing zone rules in Section 302.102. For these reasons, the Illinois EPA believes the petitioner should not be required to show that it is entitled to mixing zone pursuant to 35 111. Adm. Code 302.102 as part of its 316(a) demonstration." Agency Hearing Exh. 1 at 12.

   (a) For thermal relief that is expressed as an end-of-pipe effluent limitation, is there a provision in the proposed rule language that defines the point of compliance as the edge of a mixing zone for the generally applicable water quality standards in addition to the effluent limitation at the end of the pipe? If not, should additional language be proposed?

Agency Response: The Agency's proposal does not contain language prescribing how to express the alternative thermal effluent limitation or defining a point of compliance. The Agency believes the Board should consider, on a case-by-case basis, the relief sought and the burden of proof when making these determinations. The Agency will include the Board's determinations in the individual permit in a manner consistent with the relief granted by the Board.

(b) Should the proposed rule contain language specifically stating that the 316(a) demonstration is sufficient to cover the mixing zone rules in Section 302.102 such that the discharger does not need to make a separate demonstration under Section 302.102? If not, how is a discharger or other person to know?

Agency Response: Any relief granted should be expressed through the Board's order. To provide further clarity on the interplay of the mixing zone rules and a 316(a) demonstration, the Agency proposes adding a subsection (g) to proposed Section 106.1130.

Section 106.1130 Contents of Petition

A petition for an alternative thermal effluent limitation must include the following:

. . .

g) a statement of the requested relief, including:

1) the alternative thermal effluent limitation;

2) any relief from the mixing zone regulations in 35 Ill. Adm. Code 302.102, if applicable; and

3) any other relief sought.

Section 106.1180 Renewal of Alternative Thermal Effluent Limitations

3. In its Statement of Reasons, the Agency states, "[Section 106.1180] provides a process for streamlined renewal of alternative thermal effluent limitations granted pursuant to this Subpart. The Agency's proposal provides for a screening process where the Agency can evaluate whether conditions on which the prior relief was based have changed." SR at 10. As such, the proposed language requires dischargers requesting continuation of an alternative thermal effluent limitation to make a demonstration by providing "sufficient information for the Agency to compare the nature of the permittee's thermal discharge and the balanced, indigenous population" and "documentation based upon the discharger's actual operation experience." Proposed 106.1180(b).

In its response to question 17 posed in the August 15, 2013 Hearing Officer Order, the Agency stated that it "does not believe Section 316(c) of the Clean Water Act [CWA] has any implication on proposed Section 106.1180." Agency Hearing Exh. 1 at 13.

(a) Please describe why the Agency does not believe Section 316(c) of the CWA has any implication on proposed Section 106.1180.

Agency Response: Section 316(c) of the Clean Water Act applies to facilities that have been modified to meet applicable thermal effluent limitations; such facilities are not required to comply with more stringent thermal effluent limitations adopted by the permitting authority for a period of ten years following the modification or a period of depreciation or amortization. For example, a facility builds a cooling tower in 2000 to comply with the thermal effluent limitation in effect in 2000. In 2005, the permitting agency adopts a more stringent thermal effluent limitation. The facility is not required to meet the more stringent effluent limitation until 2010.

Section 316(a) provides relief which does not qualify for Section 316(c) protection because under Section 316(a), a facility is given a less stringent thermal effluent limitation and is not expected to meet the otherwise applicable thermal effluent limitation. Section 316(a) relief does not last for 10 years.

The Agency plans to consult with the United States Environmental Protection Agency Region 5 regarding the Board's question. If Region 5 provides a different interpretation of 316(c) than stated above, the Agency will provide further explanation in post-hearing comments.

(b) If a discharger is eligible for the 10-year period of protection under 316(c) of the CWA, does the proposed rule language recognize that the discharger is entitled to retain its alternative thermal effluent limitation or shall not be subject to any more stringent thermal effluent limitation during the 10-year period of protection?

Agency Response: See answer to question 3(a). A facility is not entitled to thermal relief under Section 316(a) for 10 years.

(c) If a discharger is eligible for the 10-year period of protection under 316(c) of the CWA, please explain why the discharger would need to make a demonstration as required by proposed section 106.1180(b) under the renewal process if the request to retain the alternative thermal effluent limitation does not extend beyond the 10-year period?

Agency Response: See answer to question 3(a). A facility is not entitled to thermal relief under Section 316(a) for 10 years.

(d) If a discharger is eligible for the 10-year period of protection under 316(c) of the CWA on Section 316(c) of the CWA, please explain if the Agency action under 106.1180(c) or (d) would be applicable.

Agency Response: See answer to question 3(a). A facility is not entitled to thermal relief under Section 316(a) for 10 years.

(e) Please propose language addressing the implication of Section 316(c) of the Act on proposed Section 106.1180.

Agency Response: See answer to question 3(a). A facility is not entitled to thermal relief under Section 316(a) for 10 years.

ILLINOIS EPA'S RESPONSE TO CARE COMMENTS

CARE'S COMMENT ONE:

In order to obtain an alternative thermal effluent limitation, an applicant should be required to meet the requirements to obtain a variance, including demonstrating that compliance with applicable thermal standards will be an arbitrary and unreasonable hardship.

AGENCY'S RESPONSE COMMENT:

Section 316(a) provides the owner or operator of a point source only needs to demonstrate

> any effluent limitation proposed for the control of the thermal component of any discharge from such source will require effluent limitations more stringent than necessary to assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on a body of water into which the discharge is to be made.

33 U.S.C §1326(a). Under the Illinois Environmental Protection Act ("Act"), the Board may grant variances from effluent limitations and water quality standards when compliance would impose an arbitrary or unreasonable hardship, but only to the extent consistent with the applicable provisions of the Clean Water Act and regulations. 415 ILCS 5/35.[1] The arbitrary or unreasonable hardship is not an acceptable basis for granting thermal relief under Section 316(a) of the CWA. Neither the CWA nor the federal regulations require a showing of arbitrary and unreasonable hardship to obtain thermal relief. Demonstrating compliance is a hardship is not required under the federal law, and should not be included in the Board's rule. To do so, would make Illinois's thermal relief inconsistent with the federal CWA.

The length of the relief granted under Section 316(a) differs from the length of variances under the Act. Under the federal regulations, the Section 316(a) relief is tied to a permit cycle. See 40 C.F.R. §125.72. An NPDES permit cycle is 5 years, and the permit and the 316(a) relief can be renewed for subsequent five year periods. Under Illinois' Act, a variance can be granted for a period of time not to exceed five years. Thereafter, the variance may be extended from year to year if the regulated entity shows progress toward compliance. The

[1] Section 35 of the Act provides:

> To the extent consistent with applicable provisions of the Federal Water Pollution Control Act, as now or hereafter amended, the Federal Safe Drinking Water Act (P.L. 93-523), as now or hereafter amended, the Clean Air Act as amended in 1977 (P.L. 95-95), and regulations pursuant thereto, and to the extent consistent with applicable provisions of the Federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580), and regulations pursuant thereto:
>
> (a) The Board may grant individual variances beyond the limitations prescribed in this Act, whenever order of the Board would impose an arbitrary or unreasonable hardship. However, the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and the costs of compliance are substantial and certain. In granting or denying a variance the Board shall file and publish a written opinion stating the facts and reasons leading to its decision.

difference in lengths of relief and ability to renew this relief makes Illinois existing variance procedures under the Act inconsistent with the CWA and 40 C.F.R. Part 125.

Those with a variance under Illinois' Act must show how they plan to return to compliance with the applicable standards. This is not a requirement for Section 316(a) relief under the CWA. Under the Board's rules, a facility seeking a variance must also include the cost of compliance alternatives in its petition. See 35 Ill. Adm. Code 125.72(d)-(f). Under Section 316(a), the cost of compliance is not a factor to be considered when granting relief.

The Illinois EPA does not believe a petitioner must meet the procedural and substantive variance requirements under Section 35 of the Act or 35 Ill. Adm. Code Part 104 because such requirements are not required under Section 316(a) of the CWA. Also, the Illinois EPA does not believe Section 510 of the CWA allows the Board to adopt thermal relief standards that are inconsistent with Section 316(a).

CARE'S COMMENT TWO:

A request for an alternative thermal effluent limitation can culminate in standards requiring additional thermal controls.

AGENCY'S RESPONSE COMMENT:

The type and amount of relief granted by the Board in a Section 316(a) proceeding will depend on case-by-case, site-specific factors. If a thermal demonstration fails to show that the relief sought will assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on a body of water into which the discharge is to be made, then the Board may not grant the requested relief. However, the thermal demonstration may show that a thermal limit more stringent than requested by the petitioner and less stringent than then what is otherwise applicable will be adequately protective; in cases such as these, the Board may grant an alternative thermal effluent limitation different from what the petitioner requested. See, *In re: Dominion Energy Brayton Point*, L.L.C., 12 E.A.D. 490, 2006 WL 3361084 (2006).[2] Whether this alternative thermal effluent limitation will culminate in additional thermal controls is a site-specific determination.

CARE'S COMMENT THREE:

In order to receive an alternative thermal effluent standard, applicants should be required, among other requirements, to conduct an analysis that includes all other contributing thermal sources over a range of conditions to assure adequate aquatic life and water quality protection

[2] The EAB in Brayton Point stated: "Thus, reading CWA sections 301 and 316(a) together, the statute and regulations in effect establish a three-(and sometimes four-) step framework for obtaining a variance: (1) the Agency must determine what the applicable technology and WQS-based limitations should be for a given permit; (2) the applicant must demonstrate that these otherwise applicable effluent limitations are more stringent than necessary to assure the protection and propagation of the BIP; (3) the applicant must demonstrate that its proposed variance will assure the protection and propagation of the BIP; and (4) in those cases where the applicant meets step 2 but not step 3, the Agency may impose a variance it concludes does assure the protection and propagation of the BIP."

AGENCY'S RESPONSE COMMENT:

Illinois EPA disagrees with CARE's interpretation that proposed Section 106.1160(d)(1)(B) does not require the petitioner to consider other pollutants or the additive effect of other thermal sources.

Proposed subsection 106.1160(d)(1)(B) derives directly from the federal regulation at 40 CFR §125.73(c)(1)(ii). This federal language has remained unchanged since the late 1970's when the alternative thermal effluent limitation regulations were first promulgated. See 40 C.F.R 122.9(b)(1) (1977); *In the Matter of: Public Service Company of Indiana, Inc. Wabash River Generating Station NPDES Permit No. IN0002810 Cayuga Generating Station NPDES Permit No. IN 002763*, I E.A.D. 590, 1979 WL 22675, (1979).

In *Public Service Company of Indiana*, the Environmental Appeals Board (EAB) interpreted the provisions CARE now contests. According to EAB, proposed Section 106.1160(d)(1)(A) [3] (hereinafter "Paragraph A") must be read together and in a mutually consistent manner with proposed section 106.1160(d)(1)(B) [4] (hereinafter "Paragraph B"). *Public Service Company of Indiana*, 1979 WL 22675, ¶ 17. Paragraph A "establishes a basic test: it sets a threshold for determining whether the harm, if any, resulting from the thermal discharges will assure a balanced, indigenous aquatic community." Id. at ¶ 13. In cases where the discharger shows no prior appreciable harm, the permitting authority may assume that a balanced aquatic community will be maintained in the future and further demonstrations are not necessary. Id. at ¶ 14-15. If, however, harm is shown, then:

> Paragraph (B) allows the discharger to demonstrate that the desired alternative thermal limitations "will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made." In other words, the regulatory scheme allows of the possibility that "what is past is not always prologue."

Id. at ¶ 15. The Agency agrees that Paragraphs A and B must be read together. In *Public Service Company of Indiana*, the EAB states:

> [C]ontinuation of past thermal discharge levels need not mean that the resulting level of harm will remain the same. Paragraph (B) contemplates such a situation. For example, past thermal discharges may have caused appreciable harm as a result of reactions with other sources of pollutants; however, if it can be demonstrated that other sources of pollutants have been significantly reduced following the period when the original harmful effects were observed, it is entirely possible that continuation of the same level of thermal discharges would no longer cause the threshold level of appreciable harm to be exceeded in the future. In this manner the past level of thermal discharges may continue unabated in the future and "nevertheless assure the protection and propagation of a balanced indigenous community" as provided in Paragraph.

[3] Identical to 40 C.F.R. §125.73(c)(1)(i)(2013) and 40 C.F.R. §122.9(b)(1)(A)(1977)
[4] Identical to 40 C.F.R. 125.73(c)(1)(ii)(2013) 40 C.F.R. §122.9(b)(1)(B)(1977).

> Section 316(a) expressly requires that the demonstration "take into account the interaction of such thermal discharge with other pollutants." Consequently, the threshold of appreciable harm established in paragraph (A) is preserved, and paragraph (B) does not sanction a continuation of prior appreciable harm in the future.

The EAB's rationale above includes consideration of other pollutants in a Paragraph B analysis. The Agency believes that under Paragraph B dischargers must consider other pollutants or the additive effect of other thermal sources. If the requested alternative thermal effluent limitation causes negative interactions with other pollutants or causes harm to the aquatic life in combination with other thermal sources, the discharger will be unable to show the requested relief assures protection and propagation of a balanced indigenous community.

While the Agency disagrees with CARE's Comment #3 that proposed Section 106.1160(d)(1)(B), as currently drafted, violates the Illinois Environmental Protection Act, the Agency believes proposed Section 106.1160 should be clarified. Illinois EPA proposes the following change:

d) Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies.

1) When the petitioner bases the alternative thermal effluent limitation demonstration upon the absence of prior appreciable harm, the demonstration must show:

A) That no appreciable harm has resulted from the thermal~~normal~~ component of the discharge, taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge has been made; or

B) That despite the occurrence of ~~such~~ previous harm from the thermal component of the discharge, the desired alternative thermal effluent limitation (or appropriate modifications thereof), taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources, will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made.

2) In determining whether or not prior appreciable harm has occurred, the Board shall consider the length of time during which the petitioner has been discharging and the nature of the discharge.

CARE'S COMMENT FOUR:

A successful §316(a) demonstration should include a broader range of factors than those in the proposed rule.

AGENCY'S RESPONSE COMMENT:

See Illinois EPA's response to Board Question 1, Exhibit A, p. 1.

CARE'S COMMENT FIVE:

The determination of BIP, RIS and other factors should include mandatory consultation with the Illinois Department of Natural Resources and the U.S. Fish and Wildlife Service.

AGENCY'S RESPONSE COMMENT:

The Agency does not believe the Board's rules should include mandatory consultation with Illinois Department of Natural Resources and the U.S. Fish and Wildlife Service during the early screening phase in proposed Section 106.1115 and detailed plan of study phase in proposed Section 106.1120. The Agency, however, believes, DNR should be notified when the alternative thermal effluent limitation petition is filed with the Board, and proposes the following change:

> **Section 106.1125 Initiation of Proceeding**
>
> After completion of the plan of study pursuant to Section 106.1120, the petitioner may file a petition for an alternative thermal effluent limitation with the Clerk of the Board and must serve one copy upon the Agency and one copy on the Illinois Department of Natural Resources.

CARE'S COMMENT SIX:

The Board should include detailed regulatory mandates addressing public notice requirements.

AGENCY'S RESPONSE COMMENT:

Illinois EPA plans to follow the notice requirements in Part 309 when issuing permits containing Section 316(a) thermal relief. When Illinois EPA issues the fact sheet, the Board will have already granted 316(a) relief, and Illinois EPA will be able to include a reference to the Board's opinion that contains the reasons why the alternative thermal effluent limitation is justified.

The public notice requirements in proposed Section 106.1135 require the petitioner to publish a notice in the paper that contains the name and address of the petitioner, the date the petition was filed, the docket number, the currently applicable regulatory standard, the requested

alternative thermal effluent standard, and the location of the facility. This notice requirement fulfills the requirements of 40 C.F.R. §124.57. The Agency does not believe it is necessary for the Board to add additional public notice requirements.

CERTIFICATE OF SERVICE

Joanne M. Olson, Assistant Counsel for the Illinois EPA, herein certifies that she has served a copy of the foregoing NOTICE OF FILING and ILLINOIS EPA'S RESPONSE TO BOARD STAFF QUESTIONS FOR SECTION HEARING AND CARE COMMENTS upon persons listed on the Service List by mailing, unless otherwise noted on the Service List, a true copy thereof in an envelope duly addressed bearing proper first class postage and deposited in the United States mail at Springfield, Illinois on October 11, 2013.

/s/Joanne M. Olson
Joanne M. Olson

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