BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER	)	
Petitioners,	)	
v.	)	PCB 2015-189 (Third Party NPDES Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC	)	
Respondents.	)	

NOTICE OF ELECTRONIC FILING

To: **Attached Service List**

PLEASE TAKE NOTICE that on January 21, 2016, I electronically filed with the Clerk of the Pollution Control Board of the State of Illinois *Motion for Summary Judgment* on behalf of Sierra Club, Natural Resources Defense Council, Prairie Rivers Network, and Environmental Law & Policy Center, copies of which are served upon you along with this notice.

Respectfully Submitted,

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January 21, 2016

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PETITIONERS' REPLY AND RESPONSE

Petitioners Sierra Club, Natural Resources Defense Council, Prairie Rivers Network and Environmental Law and & Policy Center (collectively "Petitioners") respectfully submit this brief replying to the response briefs filed on December 10, 2015 by Respondents Illinois Environmental Protection Agency ("IEPA" or "the Agency") and Midwest Generation, LLC ("Midwest Generation"), which are also captioned as Respondents' own motions for summary judgment.

Petitioners challenge IEPA's renewal of the NPDES permit for Midwest Generation's Waukegan Station ("Permit" or "Final Permit") on March 25, 2015 because IEPA did not comply with applicable law regarding the facility's thermal discharges or cooling water intake structures.

With respect to thermal limits, IEPA has "renewed" a nearly-40-year-old variance without either legal authority to do so, or the necessary information to support that determination.

With respect to the cooling water intake structure, IEPA deemed the existing structures to be the "best technology available" to minimize adverse environmental impact from impingement and entrainment, with no more than a cursory review of the structures that are in place. IEPA's finding is not based on necessary information regarding the impacts of these structures on aquatic life or available controls to minimize those impacts, because IEPA did not require Midwest Generation to submit that required information before it issued the 2015 Final Permit.

In both instances, IEPA is requiring Midwest Generation to submit the missing information in time for the next permit renewal, essentially giving Midwest Generation a pass from associated legal requirements for at least another five years. But IEPA does not comply with the law now by preparing to issue a legally-valid permit in the future. Thus, IEPA's issuance of the permit was not supported by substantial evidence, and was arbitrary, capricious, and not in accordance with law.

IEPA permitting decisions must be supported by substantial evidence. *IEPA v. IPCB*, 896 N.E.2d 479, 486 (Ill. App. Ct. 3d 2008). The petitioners in a permit appeal can carry their burden of proof by showing that the record shows that the IEPA failed to comply with one or more of the regulations governing the issuance of permits. *Id*. at 487.

Petitioners therefore ask the Board to grant their motion for summary judgment, invalidate Special Condition 4 and Special Condition 7 in the 2015 Final Permit, and remand the permit to IEPA with instructions to establish thermal effluent limitations and require the best technology available to control impacts from the cooling water intake structure.

I. Petitioners Have Standing Under 415 ILCS 5/40(e)(2)(A)

Illinois law provides standing to any affected member of the public to challenge issuance of an environmental permit within 35 days, so long as the petitioner can demonstrate that it

raised the issues on appeal during the comment period, and that it is "affected by the permitted facility." 415 ILCS 5/40(e) (2015). Respondents do not contest whether the Petitioner organizations are affected by the Waukegan facility—and they clearly are, see Solon Aff. (Ex. 1), Shellum-Allenson Aff. (Ex. 2), Bland Aff. (Ex. 3), Tuchman Aff. (Ex. 4)—but assert that Petitioners did not sufficiently preserve their arguments so as to fulfill the first prong of the test. They argue that because Petitioners did not raise the issues relating to thermal discharges, the Board's new Subpart K rules, and Clean Water Act Section 316(b) requirements during the public comment period, Petitioners have failed to preserve those issues and/or exhaust their administrative remedies, and are therefore precluded from relying on this section to support their standing to bring this appeal. (MWG Resp. 21-22; IEPA Resp. 18-19.) However, Respondents gloss over the fact that in this situation, the specific legal theories in the Petition that Respondents complain were not raised during the comment period *could not* have been raised then, because they had not yet emerged. The issues themselves were nonetheless the central focus of Petitioners' comments, and were raised sufficiently to meet the requirements of 415 ILCS 5/40(e)(2)(A).

Petitioners submitted three formal written comment letters to IEPA within the public comment period on draft permits for Waukegan station (R. 1132-46 (Jan. 13, 2012 comment letter[1]); R. 0472-0507 (Mar. 11, 2013 comment letter and attachments); R. 0995-1114 (Aug. 30, 2013 comment letter and attachments)) in addition to numerous comments made at the public hearing. (R. 0705-0872.)

Regarding thermal issues, Respondents make much of their observation that Petitioners' objection to the lack of thermal effluent limits was raised "for the first time" in 2013. (IEPA Resp. 7; MWG Resp. 18.) But the 2011 draft permit included thermal limits based on Lake

[1] The letter in the record was mistakenly dated Jan. 13, 2011, but was in fact submitted in 2012.

Michigan water quality standards and did not mention any thermal variance. (R.0177, 0185.) Raising an objection to a problem that did not exist in the draft permit would have been nonsensical. Nonetheless, Petitioners specifically noted their interest in the thermal issue by explicitly supporting IEPA's decision to include water quality-based thermal effluent limits in the draft permit. (R. 1137.) When IEPA removed those thermal limits from the 2013 draft permit, Petitioners objected extensively (R. 0473-80; 0996-97), arguing that the 1978 variance had expired (R.0474, 0996), that IEPA had no authority to renew the variance (R. 0475, 0996), that Midwest Generation had failed to request a thermal variance (R. 0996) and that IEPA did not have adequate basis to support a Section 316(a) thermal variance (R. 0474-75, 0996-97). Thus, of the arguments presented here, only the legal theories related to the Board's Subpart K procedures were not raised during the comment period, because those rules did not exist until nearly six months after IEPA closed the public comment period on the Waukegan permit.

Regarding impingement and entrainment issues, Respondents complain that Environmental Groups' comments amount to "unspecified skepticism" about whether the draft permit complied with Section 316(b) requirements. (IEPA Resp. 7; MWGen Resp. 19.) The draft permit IEPA released for comment in 2011 was devoid of any best professional judgment determination as required by Section 316(b). (R. 0185.) Petitioners objected, submitting several pages of detailed comments regarding the legal requirements of Section 316(b), the impacts of impingement and entrainment on Lake Michigan, the shortcomings of IEPA's draft special condition, and examples of findings elsewhere that the best technology available to minimize adverse environmental impacts is closed cycle cooling. (R. 1133-36.) Petitioners' comments in 2013 explicitly reaffirmed Petitioners' earlier comments (R. 0473, 0996), noting that the 2013 draft permit still did not contain the required Best Professional Judgment determination and that

the earlier-articulated problem had not been resolved. (R 0473, 0997-98.) Thus, the issue of Section 316(b) compliance was raised and reiterated throughout the public comment process. Legal theories related specifically to the final Phase II rules issued by U.S. EPA in 2014, including the argument regarding 40 C.F.R. § 125.98(b)(6) Midwest Generation insists was waived,[2] were not included because those rules were not yet adopted when IEPA closed the public comment period on the draft permit.

Thus, Petitioners adequately raised the issues in the petition during the public notice period, in compliance with 415 ILCS 5/40(e)(2)(A). Midwest Generation's reliance upon *American Bottom Conservancy v. IEPA*, PCB 06-171 (Sept. 21, 2006) to argue that the Board precludes *any* argument in a third-party appeal not raised during the public comment process is misplaced, because *American Bottom* addressed a situation where petitioners sought to raise issues on appeal that could have been raised during the public comment period. No such opportunity existed for the Petitioners in this case with regard to the changes in law that occurred after the close of the comment period; Petitioners nevertheless thoroughly raised the issues on appeal prior to the completion of the NPDES permitting process. Penalizing members of the public for not commenting on changes in law that could not have been known to them at the time of the public comment period would run counter to the purpose of 415 ILCS 5/40(e)(2)(A), which is to provide an opportunity for IEPA to act on information provided by third-party members of the public. IEPA is nonetheless bound to comply with the law in force at the time of its final agency action. Where Petitioners have adequately raised substantive issues during the comment period but are not afforded by IEPA an opportunity to comment on changes in law

[2] Despite the fact that Petitioners did not specifically reference 40 C.F.R. § 125.98(b)(6) in their permit comments because that section did not yet exist, the substantive argument was in fact made. 40 C.F.R. § 125.98(b)(6) merely extends the "best professional judgment" requirement that existed prior to the adoption of the new rules to certain facilities that meet the exemption. Petitioners discussed IEPA's failure to exercise its best professional judgment at length.

related to those issues that occur between the close of the comment period and IEPA's issuance of a final permit, Petitioners should not be barred from bringing those legal claims.

II. In the Alternative, Petitioners Have Standing Under Article XI Of The Illinois Constitution

As Petitioners have explained in their Motion for Summary Judgment, Article XI, § 2 of the Illinois Constitution grants standing to members of the public to bring an environmental action. Article XI, § 2 (noting that all persons have "the right to a healthful environment" and that they may enforce that right against "any party, governmental or private . . . subject to reasonable limitation and regulation as the General Assembly may provide by law").

Respondent Midwest Generation argues that this provision does not apply here, because the Illinois Supreme Court has interpreted § 2 to not apply to a NPDES permit appeal in the past (MWG Resp. 22.); and further argues that even if Article XI, § 2 can apply to NPDES permit appeals, it does not apply here because the issues in this appeal do not impact individuals' right to a "healthful environment." (MWG Resp. 22-23.) Neither argument is persuasive. Standing is available to citizens under Article XI, § 2 in situations where standing is not conveyed by statute, and where, as here, harms to the Lake Michigan fishery degrade citizens' right to a healthful environment.

A. Article XI, § 2 can apply to an appeal of a NPDES permit

Petitioners' reliance on the Article XI, § 2 is only as a backstop if the Board agrees with Respondents that Petitioners may not bring certain claims under 415 ILCS 5/40(e). And it is exactly this role as a backstop that Article XI, § 2 was designed to fill. If a situation arises where there is no other way to challenge a state action that would impact the environment, Article XI, § 2 ensures that such a challenge remains possible. Midwest Generation relies on a 1978 Illinois

Supreme Court case, *Landfill, Inc. v. PCB*, to argue that Article XI, § 2 does not apply to third-party permit appeals (MWG Resp. 22), but misunderstands the core purpose of that decision.

The Court in *Landfill* held that Article XI, § 2 does not grant standing to third parties "in light of the ***statutorily established mechanism*** for persons not directly involved in the permit-application process to protect their interests." *Landfill, Inc. v. PCB*, 74 Ill. 2d 541, 559 (1978) (emphasis added). Inherent to the Court's reasoning, however, is the understanding that the party seeking standing via Article XI, § 2 could have participated in the process through a statutory process.

As explained above, in this case, there was no way for Petitioners to raise some of the nuanced legal arguments in this appeal during the public comment period and/or during a public hearing, because those arguments are based on regulations that were adopted and became effective in the time between the close of the public comment period and the final agency action. If the Board interprets 415 ILCS 5/40(e)(2)(A) so strictly that it will not allow Petitioners to participate under that provision, then Article XI, § 2 supplies standing because in that situation there is no statutory provision that grants participation under the facts of this proceeding.

B. The issues in this appeal directly affect the ability of Petitioners to have a healthful environment

Respondent Midwest Generation also argues that Article XI, § 2 does not apply in this case because "Purely ecological harms are not a legally cognizable basis for standing because they do not directly affect public health." (MWG Resp. 22 (citing *Glisson v. City of Marion*, 720 N.E.2d 1034, 1044 (Ill. 1999).) The Court in *Glisson* had to decide whether to apply Article XI, § 2 to a case involving impacts on two endangered species. The Court held that scope of "healthful environment" could not be expanded "to include the preservation of endangered and threatened species." *Glisson*, 720 N.E.2d at 1044. In so doing the Court determined that a

"healthful environment" related to the issue of "environmental pollution and its effect on human health." *Glisson*, 720 N.E.2d at 1044.

This case is distinguishable from *Glisson* because here the impacts are not merely on two endangered species, but instead impact the entire fishery of Lake Michigan. While the pollution at issue in this appeal does not directly impact humans by way of ingestion, inhalation or the like, it very much directly impacts the health of individuals by impacting an extremely important fishery. Humans are dependent on the integrity of the food web in Lake Michigan, and "humans will pay the price when the Lake no longer produces fish." (Tuchman Aff. (Ex. 4) ¶7-9.) Because the issues in this appeal will have a direct impact on the ability of individuals to have a healthful environment, Petitioners have standing under Article XI, § 2.

III. COUNT ONE: The Purported Grant of a Thermal Variance in the Final Permit Was Not Valid

The Final Permit issued by IEPA in 2015 removed water quality-based effluent limitations for thermal discharges to Lake Michigan from the Waukegan Station that had been included in an earlier draft of the permit. IEPA's claimed basis for removing those limits on heat discharges is a thermal variance that was issued by the Board in 1978 pursuant to Section 316(a) of the Clean Water Act. However, IEPA's purported renewal of the 1978 thermal variance when it issued the 2015 permit was arbitrary, capricious and not in accordance with law for several reasons. First, a Section 316(a) thermal variance expires along with the NPDES permit with which it is associated. Since the 1978 variance expired many years ago and was never properly renewed in the interim, there was no legitimate variance for IEPA to renew in 2015. Second, until the Board adopted new procedural rules governing Section 316(a) variances in 2014, 35 Ill. Adm. Code §§ 106.1100–106.1180 ("Subpart K rules"), IEPA had no authority whatsoever to issue or renew a thermal variance. The Subpart K rules did grant IEPA limited authority to

renew thermal variances, but only those that the Board issues pursuant to Subpart K. The 1978 variance does not qualify. Third, Midwest Generation is not eligible for a renewed thermal variance because it did not request such a renewal prior to the expiration of its NPDES permit. Information submitted seven years later still did not satisfy those application requirements. Finally, because Midwest Generation failed to present IEPA with the demonstrations required to qualify for a thermal variance under Section 316(a) of the Clean Water Act and Subpart K of the Board's rules, IEPA had no substantial evidence in the record to make the findings necessary to grant a thermal variance to the Waukegan Station.

A. Rules Governing Thermal Variances

Petitioners' Motion for Summary Judgment sets forth the applicable federal and state law that governs thermal variances. (Pet'r Mot. 18-22.) Respondents do not contest that statement of law for the most part, but do raise four arguments regarding applicable law that need to be addressed at the outset. First, Midwest Generation argues, contrary to Clean Water Act definitions, that a Section 316(a) thermal variance is a water quality standard that IEPA was compelled to include in the NPDES permit. Second, Midwest Generation argues that it is not required to renew its Section 316(a) thermal variance. This argument runs counter to the applicable regulations and U.S. EPA's guidance interpreting those regulations, which is entitled to deference. Third, Respondents wrongly argue that U.S. EPA's failure to object to the permit should be construed as U.S. EPA's affirmative endorsement of the permit conditions therein. Finally, Midwest Generation offers alternate interpretations of the applicable regulations requiring renewal of Section 316(a) thermal variances. Those interpretations are without basis and contradict established U.S. EPA interpretations.

B. A Section 316(a) variance is not a water quality standard

In an argument not joined by the Agency, Midwest Generation mischaracterizes the alternative effluent limitations a discharger may seek under Section 316(a) of the Clean Water Act and 35 Ill. Adm. Code 106 Subpart K as "water quality standards." (MWG Resp. 8, 23 ("The AELs were water quality standards created by the Board; the Agency was required to base NPDES permits on those standards.")) There is, however, an important distinction between effluent limitations and water quality standards in the context of the Clean Water Act.

Under the Clean Water Act, regulating agencies establish water quality standards for lakes, rivers and streams by identifying designated uses of those water bodies, and then establish criteria that protect those uses. 33 USCS § 1313 (c)(2). Effluent limitations are the quantities, rates and concentrations of pollutants that can be discharged pursuant to a NPDES permit. 33 USCS § 1362 (11). In other words, water quality standards prescribe the quality of the lake water and effluent limitations prescribe the quality of the pollution discharges into that lake.

Water quality standards and effluent limitations are related, in that permit writers are required to include effluent limitations in NPDES permits as necessary to protect water quality standards. 35 Ill. Adm. Code § 309.143. But not all effluent limitations are based on water quality standards – for example there are also technology-based effluent limitations that apply categorically across industries. So it cannot be assumed that an effluent limit is the same thing as a water quality standard, or even that it has any relationship whatsoever to a water quality standard.

Thermal variances issued pursuant to Section 316(a) of the Clean Water Act are commonly referred to as "alternative effluent limitations." *E.g.*, 40 C.F.R. § 125.71(a); *In re Dominion Energy Brayton Point, L.L.C.*, 2006 EPA App. LEXIS 9 (E.P.A. 2006). This is for

good reason: a thermal variance provides an *alternative* to the *effluent limitations* that are ordinarily required in order to meet water quality standards. An alternative effluent limitation is therefore not a water quality standard, but a pollution allowance that could cause a *violation* of a water quality standard that is tolerated under the Clean Water Act if the right circumstances are met on a case-by-case basis. Midwest Generation's argument that the Board and the Agency are bound to the decades-old alternative thermal effluent limitation as if it were a duly-promulgated water quality standard is thus baseless.

C. A Section 316(a) variance must be renewed with each NPDES permit renewal.

Midwest Generation also argues that the regulations do not require that a Section 316(a) variance be renewed each time an NPDES permit is renewed.[3] (MWG Resp. 23-25.) The Agency does not join this argument, and in fact presented the opposite interpretation to the Board in a proceeding that led to the Board's new Subpart K rules:

> [A]lternate thermal standards granted under Section 316(a) are tied to the NPDES [National Pollutant Discharge Elimination System] Permit for the facility, and, therefore, the alternative thermal standards are subject to review and renewal with each NPDES for the facility, and therefore, the alternative thermal standards are subject to review and renewal with each NPDES permit renewal.

In re Petition of Exelon Generation, IPCB AS 13-1, slip op. at 3 (Oct. 18, 2012).

The federal Section 316(a) regulations establish that thermal variances must be renewed,[4] and that "[a]t the expiration of the permit, any discharger holding a section 316(a) variance should be prepared to support the continuation of the variance with studies based on the

[3] Midwest Generation also makes a related argument that because 35 Ill Adm Code § 304.141(c) does not explicitly require renewals, no renewals are required. (MWG Resp. 30.) However, to the extent IEPA expects to use this provision to meet requirements of Section 316(a) and 40 CFR § 125.72, the renewal requirement must be met.

[4] Thermal variance renewal is assumed in Section 40 C.F.R. § 125.72 (c), which states "Any application for the renewal of a section 316(a) variance shall include only such information described in paragraphs (a) and (b) of this section as the Director requests within 60 days after receipt of the permit application."

discharger's actual operation experience." 40 C.F.R. § 125.72. U.S. EPA Guidance confirms this commonsense interpretation of the regulations:

> A 316(a) thermal variance is an NPDES permit condition. It therefore expires along with the permit. A permittee may request a renewal of its 316(a) thermal variance prior to the expiration of the permit. Any discharger holding a 316(a) variance should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience.

(R. 0489 (U.S. EPA 316(a) Guidance, Oct. 28, 2008).)

Both Midwest Generation and IEPA downplay the import of this 2008 U.S. EPA Guidance document.[5] (MWG Resp. 9, IEPA Resp. 10, 12.) Midwest Generation cites to caselaw holding that "interpretive rules do not have the force and effect of law." (MWG Resp. 9, fn6 (citing *Perez v. Mortgage Bankers Ass'n*, No. 13-1041, slip op. at 6 (U.S. Mar. 9, 2015)).) But this claim ignores the fact that the regulations themselves have the force of law, and that U.S. EPA's interpretation of its own regulations is entitled to deference.[6] *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842–843 (1984) (Courts must defer to U.S. EPA's reasonable interpretation of the statutes it administers). Even the Justice Scalia concurrence to

[5] Respondents have also ostensibly presented a 1992 U.S. EPA study of states' thermal variance procedures as "guidance" that renders defensible IEPA's failure to require a renewed 316(a) demonstration in this case. (IEPA Resp. 21, MWG Resp. 8-9 (citing USEPA, Review of Water Quality Standards, Permit Limitations and Variance for Thermal Discharges at Power Plants, EPA Doc. 831-R92001, at 25 (Oct. 1992) (IEPA Resp. Ex. B, MWGen Resp. Ex. C.)). However, that document cannot fairly be characterized as guidance. It is explicitly a review documenting the shortcomings of states' implementation of Section 316(a) that was meant to provide a basis for U.S. EPA to later develop guidance. (IEPA Resp. Ex. B at 18-19 (Promising draft guidance in October 1993 and finding that "The lack of final guidance on Section 316(a) variances from EPA Headquarters has contributed to inconsistencies in permit requirements and the process by which variances are issued.")) The language cited by IEPA regarding the information supporting reissuance of a thermal variance (IEPA Resp. at 21) is a statement of then-current practice taken out of context (IEPA Resp. Ex. B at 15), not a statement of information U.S. EPA found to be sufficient under the law. In any event, even if this document were legitimate guidance, an agency may issue subsequent guidance rendering a new interpretation of the agency's regulations, *Perez v. Mortgage Bankers Ass'n*, No. 13-1041, slip op. at 8 (U.S. Mar. 9, 2015) ("Because an agency is not required to use notice-and-comment procedures to issue an initial interpretive rule, it is also not required to use those procedures when it amends or repeals that interpretive rule."), and the 1992 document has since been superseded by the 2008 U.S. EPA 316(a) guidance document.

[6] By contrast, such decisions by IEPA are afforded no special deference by the Board. *Des Plaines River Watershed Alliance v. IEPA*, PCB 04-88 slip op. at 12 (April 19, 2007) (aff'd sub nom. *IEPA v. IPCB*, 896 N.E.2d 479).

the *Perez* case cited by Midwest Generation runs counter to Midwest Generation's suggestion that U.S. EPA's Guidance on thermal variances should be disregarded:

> So long as the agency does not stray beyond the ambiguity in the text being interpreted, deference compels the reviewing court to "decide" that the text means what the agency says. … Of course an interpretive rule must meet certain conditions before it gets deference—the interpretation must, for instance, be reasonable—but once it does so it is every bit as binding as a substantive rule.

Perez, No 13-1041, slip op. (U.S. Mar. 9, 2015) (Scalia, J., concurring at 3). Given the added fact that the regulations at issue in this case explicitly require that U.S. EPA Guidance be considered, 40 C.F.R. § 125.72(e), Respondents must overcome a heavy burden to override EPA's interpretation of the 316(a) rule in its 2008 Guidance document. Merely arguing that the 2008 Guidance is not binding does not meet this burden, so the Board must treat the Guidance as "every bit as binding as a substantive rule." *Perez*, No 13-1041, slip op. (U.S. Mar. 9, 2015) (Scalia, J., concurring at 3).

D. U.S. EPA's failure to object is irrelevant to this analysis

Respondents next argue that the Board should ascribe great meaning to the fact that U.S. EPA declined to formally file an objection to Waukegan's NPDES permit. But U.S. EPA's non-use of its discretion in deciding what permits to overrule has no bearing on the legitimacy of any given permit, and does not even warrant the Board's consideration in this proceeding.

Respondents have seized on (MWG Resp. 2, 9, 20-21;IEPA Resp. 10,12) U.S. EPA's statement that it "would not object" to the Waukegan permit (R. 621), meaning that it would not take the exceedingly rare action of actually blocking a state-issued permit at the federal level. But Respondents have presented no basis in law for construing a federal agency's decision not to call on its full administrative power to overturn a state decision as an endorsement of that decision.

Respondents' attempt to ascribe legal motivations to EPA's failure to object overlooks the fact that such failure could just as easily reflect a lack of review, an unintentional oversight, prudential considerations, agency inertia, or political or staffing considerations that have nothing to do with whether the permit is legal or not. The "legislative history of the Clean Water Act makes very clear that Congress intended [U.S.] EPA to retain discretion to decline to veto a permit even after the agency found some violation of applicable guidelines." *Save the Bay, Inc. v. U.S. EPA*, 556 F.2d 1282, 1294 (5th Cir. 1977). Because U.S. EPA can decline to object to a permit for reasons that have nothing to do with whether the permit complies with the Clean Water Act, it has been held that no inference should be drawn from the failure of U.S. EPA to object to a permit. *Mingo Logan Coal Co. v. U.S. EPA*, 70 F. Supp. 3d 151, 167 (D.D.C. 2014).

Without any further reason, IEPA treats the Section 316(a) requirements as though U.S. EPA had determined them to be optional, and admits it routinely issues permits that do not comply with Section 316 (a) as interpreted in 2008 U.S. EPA guidance. (IEPA Resp. 10.) However, when it *has* specifically addressed the matter, U.S. EPA emphasized to IEPA after reviewing the draft Waukegan Station permit the mandatory nature of a Clean Water Act § 316(a) demonstration, stressing that such a demonstration "must be renewed with each permit issuance." (R. 622.) Nowhere does U.S. EPA suggest that IEPA can renew alternate effluent limits under Section 316(a) without an adequate demonstration by the permittee.

Midwest Generation also makes a similar—but even more far-fetched—argument regarding U.S. EPA's failure thus far to withdraw Illinois' delegated NPDES program authority. (MWG Resp. 7-8, 9-10, 23.) Essentially, it argues that because U.S. EPA has not withdrawn Illinois EPA's authority to implement the Clean Water Act, the Agency is impliedly sanctioning *all* of IEPA's actions.

At issue in this argument is the fact that Illinois had adopted 35 Ill Adm. Code § 302.211(f) prior to establishment of the federal Section 316(a) rules and delegation of NPDES permitting authority to the state. 35 Ill Adm. Code § 302.211(f) was Illinois's early system for regulation of thermal discharges, requiring each discharger to demonstrate to the Board "that discharges from that source have not caused and cannot be reasonably expected to cause significant ecological damage to the receiving waters." This is the standard that was applied in the Board's 1978 thermal variance for Waukegan station.[7] (R. 1115). It should be noted that § 302.211(f) has nothing to do with "alternative effluent limitations" for thermal discharges, and it was a demonstration that was required of all thermal dischargers.[8]

Respondents then argue that because U.S. EPA knew that Illinois intended to use demonstrations under 35 Ill. Adm. Code § 302.211(f) to satisfy federal Section 316(a) requirements, U.S. EPA's failure to deny or threaten the State's entire regulatory program signifies U.S. EPA's explicit approval of that procedure. This is simply implausible. Given that it is irrational to infer specific findings from U.S. EPA's failure to object to an individual NPDES permit, as described above, it is yet more preposterous to infer that U.S. EPA affirmatively approves of every aspect of the Illinois NPDES program simply because it has declined to exercise the "nuclear option" under the Clean Water Act of revoking Illinois' authority to administer the program altogether.

Furthermore, U.S. EPA has not been silent regarding whether § 302.211(f) insulates Illinois from having to adhere to the requirements of Section 316(a). In fact, in the context of reviewing this very permit, U.S. EPA stated:

[7] Respondents acknowledge that "Section 302.211(f) was originally numbered as Water Pollution Rule 203(i)(5)," which is referenced in the Board's 1978 Opinion and Order. (MWG Resp. 5, fn 1, IEPA Resp. 3, fn 2.)
[8] It is also worth noting that § 302.211(f) applies to Illinois' "General Use" waters. Lake Michigan discharges are governed by separate water quality standards established within Subpart E of the Board's regulations. 35 Ill Adm. Code § 302.101(e)

> In the comments received from Midwest Generation, it was clear that there may be a misunderstanding on how the thermal demonstration for alternate limits under Section 316(a) of the Clean Water Act and the thermal demonstration required under Illinois regulation at 302.211(f) are used in the permit development process. These demonstrations are not equivalent, or for the same purpose, although the information submitted may be similar. EPA believes it is important to ensure that the fact sheet clearly explains the difference between the one time demonstration under 302.211(f) and Clean Water Act § 316(a) demonstration that must be renewed with each permit reissuance.

(R.622.) Again, Respondents have no legal or factual basis supporting an argument that anything whatsoever should be inferred from U.S. EPA's failure to correct IEPA's permit writing failures.

E. Midwest Generation's interpretation of 40 C.F.R. § 125.72 is incorrect and without basis

In a last-ditch attempt to avoid the application of Section 316(a) thermal variance renewal requirements, Midwest Generation offers two novel interpretations of one of the federal implementing regulations. Both are meritless.

First, Midwest Generation argues that the requirement in 40 C.F.R. § 125.72 that a discharger be prepared to renew its thermal variance each time its NPDES permit is renewed "is directed at permittees who used predictive studies to satisfy CWA § 316(a)'s demonstration requirement—typically planned facilities that cannot conduct a study 'based on the discharger's actual operation experience' because they are not yet operational." (MWG Resp. 24.) But nothing in the regulation itself hints at such a limitation.[9] To the contrary, the regulation requires that "At the expiration of the permit, ***any discharger holding a section 316(a) variance*** should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience." 40 C.F.R. § 125.72 (emphasis added). As a "discharger holding a

[9] Indeed, because a "discharger's actual operation experience" changes over time, exempting that broad category of dischargers from the 316(a) demonstration requirement would not be consistent with the purposes of the Clean Water Act.

316(a) variance," Midwest Generation was plainly subject to this provision. That reading is further confirmed by U.S. EPA's reasonable interpretation of the rule in its 2008 316(a) Guidance, which contains no such exception. (R. 487-90.)

Finally, Midwest Generation argues that the regulatory language of 40 C.F.R. § 125.72 is "advisory" and can be disregarded because the promulgated language includes the word "note." (MWG Resp. 24.) But unlike supplemental advisory comments that are sometimes published alongside regulations or court rules, this "note" is promulgated within § 125.72 itself. [10] Midwest Generation provides no authority for its proposition that this duly-promulgated regulation should not be afforded the full force of law.

IV. The 1978 IPCB Variance Expired in 2000, at the Latest

Petitioners' Motion for Summary Judgment argues that because IEPA lacked authority to renew a Section 316(a) variance in prior NPDES permit renewals, the Board's 1978 variance had long since expired and was therefore not eligible for "renewal" under federal or state law in 2015. Respondents each present an argument on this issue that warrants further explanation.

IEPA misunderstands the point, claiming that:

> Petitioners' entire argument rests on a mistaken premise . . . the July 2000 renewal of the Facility's NPDES permit was not, as they assert, the first since 1978. In fact, that permit was reissued on no less than four occasions during that timeframe: in 1979, 1985, 1990 and 1995.

(IEPA Resp. 15.) The apparent thrust of IEPA's argument appears to be that Petitioners' argument is premised on 22 years having elapsed prior to the 2000 renewal of the variance. But Petitioners' argument does *not* rest on that fact: to the contrary, *any* renewal (including those in 1985, 1990, and 1995) is just as invalid as the one from 2000.

[10] The promulgated language follows subsections (a)-(f) of 40 C.F.R. § 125.72 : "Note: At the expiration of the permit, any discharger holding a section 316(a) variance should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience."

Thus, IEPA's assertion in this regard only serves to further Petitioners' argument. The Board's 1978 thermal variance would have been incorporated into the Waukegan Station NPDES permit in 1979, but because a Section 316(a) thermal variance expires along with the NPDES permit with which it is associated (Pet'r Mot. 22), the Board's 1978 variance expired, at latest, in 1985. At that point in time, IEPA had no authority to renew or grant any kind of thermal variance; and had no such authority at any point until the Board adopted the Subpart K rules in 2014. Prior to promulgation of the Subpart K rules, only the Board was empowered to grant a thermal variance, under 35 Ill Adm. Code § 304.141 (c), and the Board has not since reissued a thermal variance to Waukegan Station.

Midwest Generation argues that despite the lack of explicit authority, IEPA has authority to issue thermal variances under the Agency's "general power to administer the Illinois NPDES program." (MWG Resp. 23, 29.) This argument is not joined by the Agency, and is precluded by the general administrative law principle that agencies have only those powers that are given to them by statute or regulation. *Gaffney v. Bd. of Tr. of the Orland Fire Prot. Dist.*, 969 N.E.2d 359, 368 (Ill. 2012) ("An administrative agency has no general or common law powers. … Rather, an agency's powers are limited to those granted by the legislature and any action must be specifically authorized by statute." (citing *Alvarado v. Industrial Comm'n*, 216 Ill. 2d 547, 553 (2005), citations omitted).) Where the Board explicitly holds authority to grant thermal variances, but the applicable law is silent as to IEPA's authority, it is not appropriate to imply that IEPA silently holds such authority.[11] *Bridgestone/Firestone, Inc. v. Aldridge*, 179 Ill. 2d 141, 151-152 (Ill. 1997) ("Where a statute lists the things to which it refers, there is an inference that all omissions should be understood as exclusions. This rule of statutory construction,

[11] IEPA's "longstanding practice" (IEPA Resp. 16) of acting outside of its authority by purporting to issue thermal variances similarly fails to generate that authority.

expressio unius est exclusio alterius, is based on logic and common sense. It expresses the learning of common experience that when people say one thing they do not mean something else.")

IEPA's purported renewal of the thermal variances without the authority to do so is void because "[a]ny action or decision taken by an administrative agency in excess of or contrary to its authority is void." *Delgado v. Bd. of Election Comm'rs of the City of Chicago*, 224 Ill. 2d 481, 485 (2007) (citing *Alvarado v. Industrial Comm'n*, 216 Ill.2d 547, 553-54 (2005)). With no legally-valid variance in force in 2015, there was simply nothing for IEPA to "renew" when it issued the final NPDES permit purporting to renew a Section 316(a) variance for Waukegan Station.

Finally, Midwest Generation characterizes Petitioners' observation that Waukegan Station had no legally-valid thermal variance to renew as some sort of collateral attack on the previous NPDES permit that was issued in 2000. (MWG Resp. 28-29.) Petitioners bring no such attack. Petitioners would gain nothing by retroactively changing the terms of permits that are no longer in force. However, that does not mean that the IEPA's purported reissuance of a Section 316(a) thermal variance in 2015 can properly be built upon the Agency's extra-authority actions in prior permit reissuances. The agency cannot "renew" an action that it didn't have authority to take in the first place.

V. The 2014 Board Rules Do Not Grant IEPA Authority to Renew the Board's 1978 316(a) Variance

Respondents next challenge Petitioners' argument that even the new Subpart K rules adopted by the Board in 2014 do not give IEPA authority to renew a thermal variance that was not granted by the Board "pursuant to this subpart" – *i.e.*, Subpart K. (Pet'r Mot. 24.)

Respondents present two arguments in an attempt to escape the plain language of 35 Ill. Admin. Code § 106.1180(a).

A. Applying the 2014 Subpart K Rules to the 2015 Agency Action is a Proper Prospective Application of Those Rules

First, Respondents make the bewildering argument that applying the Subpart K regulations to an agency action that occurred ***thirteen months after the rules became effective***[12] is a "retroactive" application of those rules. (IEPA Resp. 17-18; MWG Resp. 25-26.) As an initial matter, Respondents' argument is nonsensical, since Subpart K is IEPA's only source of authority to issue thermal variances of any kind. If the Board were to find that the Subpart K rules did not apply to IEPA's issuance of the final permit, the Board would simultaneously be compelled to invalidate the thermal variance as beyond IEPA's authority.

Even putting that aside, however, Respondents' arguments run contrary to well-settled law on retrospective application of new regulations. "A law is retrospective[13] if it 'changes the legal consequences of acts completed before its effective date.'" *Miller v. Florida*, 482 U.S. 423, 430 (1987) (quoting *Weaver v. Graham*, 450 U.S. 24, 31 (1981)). The problem with Respondents' argument is that under applicable law, no "acts" were "completed" until IEPA issued the final permit on March 25, 2015.

In the administrative law context, an agency action is not complete until the point the agency makes a final determination. *Taylor v. State Univs. Ret. Sys.*, 159 Ill. App. 3d 372, 376-77 (1987) (no final determination because agency procedure was not complete); *Jagielnik v. Bd. of Tr. of the Police Pension Fund*, 211 Ill. App. 3d 26 32-34 (1991) (interim ruling of agency was a procedural step in the process of arriving at its administrative decision, but not a final

[12] As Midwest Generation acknowledges, the Subpart K rules were adopted on February 20, 2014 and became effective six days later on February 26, 2014. (MWG Resp. 12.) The final agency action challenged here is the issuance of the NPDES permit on March 25, 2015. (R. 683.)

[13] "The terms 'retroactive' and 'retrospective' are synonymous in judicial usage." *Landgraf v. Usi Film Prods.*, 511 U.S. 244, 269 fn 23 (1994).

action). *See also,* 35 Ill. Adm. Code § 101.106 (Board review authority limited to Agency's final determinations); 735 ILCS 5/3-101 ("'Administrative decision' or 'decision' means any decision, order or determination of any administrative agency rendered in a particular case, which affects the legal rights, duties or privileges of parties and which terminates the proceedings before the administrative agency.") This policy is meant to preserve the agency's ability to deliberate internally, develop the factual record, and develop the agency's definitive position on an issue before completing an action from which legal consequences will flow. 2 Am. Jur 2d *Administrative Law* § 435.

The Board has upheld this view of when an agency action is complete in the context of permit appeals. For example, in *NACME Steel Processing v. IEPA*, the applicant attempted to bring an appeal to the Board based on internal emails indicating that IEPA intended to issue a permit, but before IEPA issued a final permit. IPCB 13-7 slip op. 7 (Nov. 15, 2012). The Board held that there is no final agency decision short of the IEPA actually granting or denying the permit request. *Id*.

Thus, the key to determining applicable law is the date of the final agency action, i.e. the date the final permit was issued. The Board holds IEPA to the regulations in effect on the date of the final agency action. *Peabody Coal Co. v. IEPA*, IPCB 78-296, slip op. 3 (Sept. 20, 1979). Even changes in law that occur subsequent to the final agency action may be considered, *Id*., but there is no support for Respondents' contention that the Board should ignore the law that was in force at the time the permit was issued.[14]

[14] Certainly, if applicable law had become more lenient since the first draft permits were circulated in 2007 or 2011, it seems unlikely that Respondents would argue that the stricter previous law should apply to the final permit.

Here, the preliminary steps that Respondents complain (IEPA Resp. 18; MWG Resp. 25-26) had taken place by the time the Subpart K rules were adopted were just that – preliminary.[15] Holding a public hearing and/or a public comment period does not bind the agency's final action to the law in effect at the time those preliminary events occur.

Applying the Subpart K requirements to a final action that takes place more than a year after those rules became effective is a proper, prospective application of the rule. Thus, the Board must evaluate the permit against the legal requirements that were in force on March 25, 2015 when IEPA's final action occurred.[16] Those requirements include the 2014 Subpart K rules. Because Respondents do not contest that they did not comply with Subpart K, the thermal variance contained in the final permit must be invalidated.

B. Under § 106.1180, IEPA Can Only Renew Thermal Variances Granted by the Board Pursuant to Subpart K

Midwest Generation also attacks the language of the rule itself, specifically the section that allows a permittee to renew a thermal variance if certain qualifications are met. The sentence at issue reads as follows: "The permittee may request continuation of an alternative thermal effluent limitation granted by the Board***, pursuant to this Subpart,*** as part of its NPDES permit renewal application." 35 Ill. Adm. Code § 106.1180 (a) (emphasis added). Petitioners argue that the inclusion of the clause "pursuant to this Subpart" means that availability of the

[15] Respondents both misstate that IEPA "granted" Midwest Generation thermal relief in a draft circulated to Midwest Generation in 2007. (IEPA Resp. 5; MWG Resp.16.) But as demonstrated here, no "grant" occurs until final agency action when the renewed permit is issued.

[16] The Board has established delayed compliance deadlines in other rulemakings, *see, e.g., Water Quality Standards and Effluent Limitations for the Chicago Area Waterway System and Lower Des Plaines River: Proposed Amendments to 35 Ill. Adm. Code 301, 302, 303 and 304*, IPCB R08-09D, slip op 3-4 (Aug. 20, 2015), but no such compliance delay was promulgated in the R13-20 rulemaking that established Subpart K. A delayed compliance deadline cannot now be implied. *Bridgestone/Firestone, Inc. v. Aldridge*, 179 Ill. 2d 141, 151-152 (Ill. 1997) (omissions in statutes should be understood as exclusions); 73 Am. Jur 2d *Statutes* § 118 ("[T]he court will presume that words excluded from a provision were excluded purposefully. For purposes of statutory construction, legislative silence, when it has authority to speak, may be considered as giving rise to an implication of legislative intent.")

more streamlined Agency renewal process is limited to those who have obtained a thermal effluent limitation under Subpart K, the first rules to establish specific Section 316(a) variance procedures for Illinois dischargers.

Midwest Generation, by contrast, argues that the "pursuant to this Subpart" clause should be read as modifying the word "request" (MWG Resp. 30-31) instead of "granted," which it claims would make the Subpart K renewal procedures available to any discharger holding a thermal variance. It provides no authority or explanation for such a reading, but does state that "The Environmental Groups' reading would only make sense if there was no comma in between 'Board' and 'pursuant.'" (MWG Resp. 30.)

Two rules of statutory interpretation[17] resolve the ambiguity in favor of Petitioners. First, there is the grammatical question regarding which part of the sentence the "pursuant to this Subpart" clause was meant to modify. The legal encyclopedia American Jurisprudence states the statutory interpretation principle as follows:

> Qualifying words, phrases, and clauses are ordinarily confined to the last antecedent or to the words and phrases immediately preceding. The last antecedent, within the meaning of this rule, has been regarded as the last word which can be made an antecedent without impairing the meaning of the sentence.

73 Am. Jur 2d *Statutes* § 129. *See also, People v. Phyllis B. (In re E.B.),* 231 Ill. 2d 459, 467 (2008) ("The last antecedent doctrine, a long-recognized grammatical canon of statutory construction, provides that relative or qualifying words, phrases, or clauses are applied to the words or phrases immediately preceding them and are not construed as extending to or including other words, phrases, or clauses more remote, unless the intent

[17] Rules of statutory interpretation also apply to the interpretation of regulatory language. *People ex rel. Madigan v. Ill. Commerce Comm'n*, 231 Ill. 2d 370, 380 (2008).

of the legislature, as disclosed by the context and reading of the entire statute, requires such an extension or inclusion.")

Midwest Generation's focus on the comma does not help its cause, as a comma suggests that "pursuant to this Subpart" is meant to modify *both* "granted" and "request." 73 Am. Jur 2d *Statutes* § 130 ("The presence of a comma separating a modifying clause in a statute from the clause immediately preceding it is an indication that the modifying clause was intended to modify all the preceding clauses and not only the last antecedent one.") Either way, the proper reading is that the scope of the renewal regulation is limited to thermal variances granted pursuant to Subpart K.

This reading intuitively makes sense. If the Board had intended "pursuant to this Subpart" to modify only the word "request," the sentence would have been more properly constructed to place the modifying clause closer to that word, e.g. "The permittee may request, pursuant to this Subpart, continuation of an alternative thermal effluent limitation granted by the Board …." But the sentence is not written that way, and for good reason. "Pursuant to this Subpart" adds no meaning to the regulatory text if it modifies only the word "request."

One of the most fundamental canons of statutory interpretation requires that effect be given to each section, paragraph, sentence, clause, or word of a statute, and that no part of a statute be rendered superfluous. 73 Am. Jur 2d *Statutes* § 156; *People v. Jones*, 223 Ill. 2d 569, 581 (2006) ("We construe statutes as a whole, so that no part is rendered meaningless or superfluous.") (citing *People v. Jones*, 214 Ill. 2d 187, 193 (2005); *Bonaguro v. County Officers Electoral Bd.*, 158 Ill. 2d 391, 397 (1994).) This principle further confirms that the correct

reading of the regulatory language is that "pursuant to this Subpart" modifies the word "granted."

"Pursuant to this Subpart" adds meaning when it modifies the word "granted"—as described above, it limits the thermal variances eligible for renewal under 35 Ill. Adm. Code § 106.1180 to those that were granted pursuant to Subpart K. By contrast, "pursuant to this Subpart" adds no meaning if it modifies the word "request." Read that way, the clause would only evidence a redundant and self-conscious acknowledgement that the regulation is contained in the subpart within which it is contained. Thus, all aids to interpretation lead to the conclusion that the Agency renewal option available under 35 Ill. Adm. Code § 106.1180 is limited to thermal variances that were granted by the Board pursuant to Subpart K.

VI. Midwest Generation Did Not Submit a Timely—or Any—Application to Renew a 316(a) Variance

Petitioners next asked the Board to invalidate the purported grant of a thermal variance in the 2015 permit because Midwest Generation failed to apply for such a variance in the manner required by federal or state law. Respondents ask the Board to imply an application from a number of actions, none of which amount to a legitimate application for a thermal variance.

A discharger that desires to continue a Section 316(a) variance beyond the term of its current permit may request a renewal prior to the expiration of its NPDES permit. (R. 0489 (2008 U.S. EPA 316(a) Guidance).) No such request was filed. Instead, IEPA and Midwest Generation argue that the request for the thermal variance should be implied in Midwest Generation's request for reduced thermal monitoring. (IEPA Resp. 4; MWG Resp. 27.) But at the same time Midwest Generation asked for reduced thermal monitoring, it also asked for reduced monitoring on at least six other parameters in the Permit. (R. 0027.) It would be absurd

to infer that Midwest Generation was applying for a variance for any parameter on that list, including thermal.

Midwest Generation even wants the Board to imply an application for a thermal variance from the utter lack of such an application in it is NPDES permit renewal application. (MWG Resp. 28.) It complains that there was no space to designate a request for a thermal variance on the standard permit renewal form (MWG Resp. 27), but that did not stop it from asking the Agency for other special treatment in its cover letter to the permit renewal application. (R. 0025-28.) None of these things cures Midwest Generation's failure to request renewal of the thermal variance prior to the expiration of its NPDES permit in 2005.

At best, Respondents claim that Midwest Generation's "application" for a thermal variance was a January 12, 2012 comment letter chastising the Agency for failing to include a thermal variance that Midwest Generation never previously requested. (MWG Resp. 28; IEPA Resp. 20.) For the reasons described below, even that untimely submission was deficient, as it does not include the information and demonstrations necessary to support reissuance of the thermal variance in 2015.

VII. Midwest Generation Has Not Made the Demonstrations Required to Grant a Section 316(a) Thermal Variance

Finally, all other shortcomings aside, Petitioners demonstrated that IEPA did not make the determinations it would have to make in order to renew a variance under its new 35 Ill. Adm. Code § 106.1180 authority. There are two key findings that IEPA must make: 1) that the nature of the thermal discharge has not changed and 2) that the variance has not caused appreciable harm to a balanced, indigenous population of fish, shellfish and wildlife. 35 Ill. Adm. Code §§

106.1180(c)-(d).[18] Midwest Generation has the burden of producing sufficient information to support such a demonstration with substantial evidence in the record. 35 Ill. Adm. Code § 106.1180(c) ("If the ***permittee demonstrates*** that the nature of the discharge has not changed and the alternative thermal effluent limitation granted by the Board has not caused appreciable harm … the Agency may include the alternative thermal effluent limitation in the permitee's renewed NPDES permit.") (emphasis added). *See also, In re: Dominion Energy Brayton Point, L.L.C.*, 2006 EPA App. LEXIS 9, *154 (EAB 2006). ("[T]he statute and the regulations clearly impose the burden of proving that the section 301 thermal effluent limitations are too stringent on the discharger seeking the variance, not on the Agency. The discharger likewise has the burden of demonstrating that its proposed alternate effluent limitations are sufficient to ensure protection and propagation of the BIP.")

With respect to the first finding, Respondents both admit that the nature of the thermal discharge has changed. (IEPA Resp. 22-23; MWG Resp. 17.) While each downplays the change in the Waukegan Station's thermal output as a decrease,[19] the regulatory language in § 106.1180 makes no such exemption. The Board is obligated to give effect to the plain and ordinary

[18] IEPA advances an alternate theory, that a discharger need only meet three "requirements" from a 1992 U.S. EPA document IEPA has characterized as "guidance." (IEPA Resp. 21, citing USEPA, Review of Water Quality Standards, Permit Limitations and Variance for Thermal Discharges at Power Plants, EPA Doc. 831-R92001, at 25 (Oct. 1992) (IEPA Resp. Ex. B).) But as discussed in fn 5 above, that document is not a guidance document but explicitly a review documenting the shortcomings of states' implementation of Section 316(a) that was meant to provide a basis for U.S. EPA to later develop guidance. (IEPA Resp. Ex. B at 18-19 (Promising draft guidance in October 1993 and finding that "The lack of final guidance on Section 316(a) variances from EPA Headquarters has contributed to inconsistencies in permit requirements and the process by which variances are issued.")) The language cited by IEPA regarding the information supporting reissuance of a thermal variance (IEPA Resp. 21) is a statement of then-current practice taken out of context (IEPA Resp. Ex. B at 15), not a statement of the information U.S. EPA found to be sufficient under the law. At any rate, because the unrefuted evidence in the record shows 1) that there have been changes to the thermal discharges and 2) there have been changes to the biotic community, the application does not even meet the "minimal threshold" of common practices observed in that document.

[19] Petitioners do not "concede" (MWG Resp. 26) that the decrease in thermal output referenced by the Agency is the "only" change to the discharge, nor do Petitioners take the position that the Waukegan Station is not discharging "enough" heat (MWG Resp. 27). But without the studies that Midwest Generation should have produced to support its requested thermal variance, the Agency cannot ascertain whether the operational changes have altered the flow of the discharge into Lake Michigan in a way that may be causing greater harm to aquatic life that inhabits sensitive near-shore communities.

meaning of the words of the regulation. *Gaffney v. Bd. of Tr. of the Orland Fire Prot. Dist.*, 969 N.E.2d 359, 372 (Ill. 2012). "Change" does not merely mean "increase;" the obligation to consider change runs both directions.

This change in the nature of the thermal discharge alone precludes Waukegan's eligibility for the streamlined renewal available in § 106.1180. Midwest Generation can attempt to make a new demonstration to the Board under the Subpart K rules, but until that time IEPA must deny the thermal variance and establish thermal effluent limitations that protect water quality. Midwest Generation only has itself to blame, as it has long been on notice that "[a]ny discharger holding a 316(a) variance should be prepared to support the continuation of the variance with studies based on the discharger's actual operation experience." 40 C.F.R. § 125.72; (R. 0489 (2008 U.S. EPA 316(a) Guidance).)

IEPA also lacks substantial evidence in the record to support the second finding required by § 106.1180: that the variance has not caused appreciable harm to a balanced, indigenous population of fish, shellfish and wildlife. Respondents do not contest that the thermal studies that supported the 1978 variance are not part of the administrative record. Therefore, IEPA cannot use those studies as a basis to support a thermal variance in the 2015 permit. There is no other information in the record that can establish "the nature of the aquatic life at the time the Board granted the alternative limit," which is information IEPA itself contends is necessary to make a finding of no appreciable harm to a balanced, indigenous population of fish, shellfish and wildlife. (IEPA Resp. 22.) The absence of this baseline information alone precludes the second finding necessary for IEPA to renew a thermal variance under § 106.1180.

But Respondents further concede that the Lake Michigan aquatic community has changed significantly since 1978, and that productivity has been declining. (IEPA Resp. 9; MWG Resp.

17-18, 20.) Because Midwest Generation has submitted no contemporary studies of thermal impacts on the balanced indigenous population of shellfish, fish, and wildlife ("BIP"), IEPA has no substantial evidence (indeed, no evidence at all) to support a finding that the thermal variance has not contributed to a decline in the BIP.[20] In fact, it is not established in the record that a BIP currently exists in the receiving waters, or even how the BIP is defined in these receiving waters.

To obtain a thermal variance, a discharger must ***affirmatively demonstrate*** that the requested alternative effluent limitations will not harm the BIP. 35 Ill. Adm. Code § 106.1180(c). Midwest Generation cannot rely on an absence of information about thermal impacts or a mere supposition that thermal impacts are not causing the documented declines.

Because there is no substantial evidence in the record to support either finding IEPA must make in order to renew a thermal variance under 35 Ill. Adm. Code § 106.1180 (IEPA's only authority related to thermal variances), the Board must invalidate the 316(a) variance that IEPA purported to renew in Special Condition 4 of the 2015 Final Permit and direct IEPA to establish water quality-based effluent limits to meet the Lake Michigan thermal standards.

VIII. COUNT TWO: Respondents Cannot Demonstrate Compliance with Their 316(b) Obligations

Respondents have failed to counter Petitioners' demonstration that the Waukegan permit does not comply with EPA's new guidelines for Cooling Water Intake Structures, 40 C.F.R. Parts 122 and 125, which went into effect on October 14, 2014. National Pollutant Discharge Elimination System--Final Regulations To Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities, 79 Fed. Reg.

[20] Thermal pollution not have to be the sole stressor impacting the BIP to preclude a requested Section 316(a) variance. *Brayton Point*, 2006 EPA App. LEXIS 9, *161 (EAB 2006). ("The Region therefore concluded that "the balanced indigenous population of fish has not been maintained in Mount Hope Bay and that the plant's thermal discharge is a significant contributor to this problem." … In other words, appreciable harm has resulted to the BIP, at least in part from Petitioner's existing thermal discharges; thus, Petitioner did not meet the first regulatory test.")

48,300 (Aug. 15, 2014) ("316b Rule"). Respondents argue that the permit was subject to an interim set of standards within the "existing structures" section of the 316(b) Rule, which allowed them to delay collection of the necessary studies for a NPDES permit. 40 C.F.R. Part 125, Subpart J (§§190-199). This argument is flawed: neither the applicant nor IEPA met the regulatory requirements that would enable this permit to be delayed.

Respondents then claim that IEPA complied with the alternative Best Professional Judgment (BPJ) standard laid out in 40 C.F.R. §§ 125.90(b) and 401.14. Even were Respondents correct that this secondary BPJ standard applied to the Waukegan Permit, the relevant information available about the Waukegan Plant's operational impact on aquatic communities is so scarce and out of date that there is no possible basis for an "interim" determination that a once-through cooling system, operated normally, represents the Best Technology Available (BTA) for preventing fish kills through impingement and entrainment.

A. Respondents Failed to Qualify This Permit for "Interim" Treatment

Respondents argue most forcefully that the permit was subject to a special set of regulations within the Cooling Intake Structures Rule that allow IEPA to delay application of the rule for permit applicants that were undergoing the permit renewal process when the rule was promulgated. What they fail to mention, however, is that qualification for this delay of the rules is not automatic: a permit applicant seeking an "alternate schedule" for the submission of reports examining the impacts of impingement and entrainment on surrounding areas must demonstrate "that it could not develop the required information by the applicable date for submission." 40 C.F.R. § 125.95(a)(2).

In accordance with Illinois procedural practice, this demonstration needed to be on the record of the proceeding. 415 ILCS § 5/40(e)(3); *IEPA v. IPCB*, 896 N.E.2d 479, 487 (Ill. App.

Ct. 3d 2008) (Review of agency decision based "solely on the evidence in the IEPA record"). The IEPA may not simply grant this alternative schedule, nor is it automatic under the rules. *Id.*; see 40 C.F.R. § 125.98(b)(5) (establishing that any alternate schedule may only be established "pursuant to 125.95(a)(2)). There is no evidence in the record in this proceeding, including in the final permit, that the applicant submitted any such demonstration. Nor did IEPA explicitly draw this conclusion on the record, or even cite in any way to the existence of such a demonstration submitted off the record.

Instead, IEPA simply granted the applicant four years to prepare studies while continuing to impinge and entrain millions of aquatic organisms. The regulations require a demonstration, not merely an unarticulated wish, and the Board needs to hold them to that standard.

Respondents attempt to explain away their unsupported request for an alternate compliance schedule by claiming that compliance with 316(b) will require "large amounts of lead time." (MWG Resp. 13.) This argument is neither relevant to the hard, legal standards laid out in the final rule, nor accurate.

As EPA made clear in the 316(b) Rule, "[t]he permit requirements in this final rule must be implemented upon the first issuance or reissuance of permits following promulgation." 316(b) Rule, 79 Fed. Reg. at 48380. EPA did allow for some flexibility in certain situations on a case-by-case basis, but the fact that this flexibility is not guaranteed (as explained above), and that it was only really intended for "ongoing proceedings", *Id.*, suggests that EPA anticipated that many permit applicants could comply immediately with the 316(b) Rule. Had EPA intended for every permit applicant to get an automatic delay of requirements, it could have given this delay automatically. For instance, it could have set the effective date of this regulation two years

after its promulgation. That EPA did not do so demonstrates that it anticipated as a default that the new rule would apply immediately to all permit proceedings after October 14, 2014.

B. IEPA Arbitrarily and Capriciously Failed to Properly Apply its Best Professional Judgment in Establishing Best Technology Available Standards for Waukegan

Respondents next argue that IEPA acted correctly in determining "that the operation of [Waukegan] meets the equivalent of [BTA]" for cooling intake structures. (R. 0696.) As an initial matter, it is clear that the record does not include the information required to conclude under the 316(b) Rule that Waukegan's cooling system constitutes the "best technology available." Petitioners' motion for summary judgment discussed what the 316(b) Rule requires of state agencies before issuing their BTA determinations. Several types of studies are required, and specific determinations need to be made, none of which are contained in IEPA's administrative record.

Respondents do not dispute that this Permit's BTA determination process falls far short of the main requirements in the rule. Petitioners thus turn instead to Respondents' claims relating to the standards listed in 40 C.F.R. §§ 125.3 and 125.90(b), which IEPA explicitly applied in making its BPA determination in Special Condition 7 of the Permit. (R. 0696.)

i. IEPA Properly Referred to Permit Standards under Section 125.3 in the Final Permit

Midwest Generation's first argument under Section 125.3 is that it does not apply to this permit. This is, to begin with, an uphill effort for them: as Midwest Generation recognizes, in the final permit, in which the relevant cooling intake structure requirements are laid out, IEPA specifically states that it is acting "in accordance with the Best Professional Judgment Provisions of 40 C.F.R 125.3." And Section 125.3 lays out technology-based treatment requirements for permits under the new rule, so there is no immediate reason to disregard applicability of that

section. Midwest Generation's claim here (notably not joined by IEPA in its own response) is that Section 125.3 is inapplicable to cooling intake structures because the section only regulates effluent discharges, and the water from a cooling system does not qualify as effluent.

Midwest Generation then accuses Petitioners of taking advantage of a "clerical error" in applying Section 125.3 standards to IEPA's BPJ determination. (MWGen Resp. 33-34.) That argument is unsupported by a comprehensive analysis of the regulations. Impingement and entrainment of aquatic organisms occurs when large amounts of water are pulled into the plant and subsequently discharged. This discharge may be distinguishable from facilities' dispersion of pollutants into nearby water bodies, but it still represents dispersion of altered water (newly devoid of living organisms). In fact, the alternative regulations Midwest Generation cites to that apply specifically to cooling intake structures, 40 C.F.R. § 401.14, are themselves located within Subchapter N of 40 C.F.R. Chapter I, which is entitled "Effluent Guidelines and Standards."[21]

Furthermore, there is no reason to infer that IEPA made a "clerical error," especially when the Agency itself admits no such error. Just as courts give effect to the plain language of a statute or regulation, the Board should assume that IEPA intended the words it chose to incorporate into a permit condition. IEPA has defensible support in the regulations for citing to Section 125.3, and the Board has no cause to disturb the Agency's findings here.

Respondents have chosen not to respond to Petitioners' substantive arguments detailing the numerous ways the permit fails to meet Section 125.3 standards, so there is no need to reiterate these points here.

[21] "The official heading or title of a statute can provide guidance in interpreting the provision if its meaning is unclear." *People v. Lamb*, 224 Ill. App. 3d 950, 953 (Ill. App. Ct. 2d Dist. 1992).

ii. Even Using a Case-By-Case Analysis Using Section 401.14, IEPA Failed to Use its Best Professional Judgment When It Established an Interim BTA for Waukegan

Even if the Court accepts that IEPA made an error in its Final Permit, incorrectly referring to permit standards in Section 125.3, IEPA's actions are no more compliant with Respondents' preferred regulations. Sections 125.98(b)(5) and (b)(6) both require that IEPA "establish interim BTA requirements in the permit on a site- specific basis based on the Director's best professional judgment in accordance with §125.90(b) and 40 CFR 401.14." 40 C.F.R.§§ 125.08(b)(5); (b)(6). Section 125.90 requires that cooling water intake structures "meet requirements under section 316(b) of the CWA established by the Director on a case-by-case, best professional judgment (BPJ) basis," and Section 401.14 requires that cooling water intake structures "reflect the best technology available for minimizing adverse environmental impact, in accordance with the provisions of part 402 of this chapter." Included in this set of regulations is the same requirement that an agency use its Best Professional Judgment to determine the Best Technology Available to control entrainment and impingement.

IEPA does not even pass this low bar. As Petitioners have detailed, and as IEPA confirms in its Response (IEPA Resp. 27-28), the Agency did not base its opinion on any relevant information regarding the impact Waukegan's cooling intake structure has ***on aquatic life***. Incredibly, instead of demonstrating that it relied on such information, IEPA questions why it needs any more information than the mechanical attributes of the cooling structures to make a BTA determination. (IEPA Resp. 28.)

The answer to IEPA's question is that there are at least three types of information that are necessary to support a BPJ determination: 1) studies regarding the impingement and entrainment impacts of the cooling water intake structures; 2) information regarding whether the facility has

minimized environmental impact; and 3) information regarding technologies available to reduce adverse environmental impact. National Pollutant Discharge Elimination System – Final Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities, 69 Fed. Reg. 41,576, 41,584 (July 9, 2004). (EPA requires that agencies "determine[] whether appropriate studies have been performed, whether a given facility has minimized adverse environmental impact, and what, if any, technologies may be applied.") Petitioners described these information gaps in their motion for summary judgment, but will briefly restate them for the Agency's benefit.

As to the need for studies on the cooling water intake structures' impacts on aquatic life, Midwest Generation claims the BPJ determination was "based on extensive impingement studies that had been relied on for decades." (MWG Resp. 35.) That is another way of saying that decades have passed since the last significant study of impingement and entrainment impacts from the Waukegan Station. Midwest Generation itself has stated those studies "may no longer be entirely representative of current conditions" (R. 0004.) Furthermore, although IEPA claims it reviewed those old studies from 1975-76 (R. 0666), those studies are not included in the administrative record and therefore cannot be used as a basis for IEPA's BPJ determination. *Des Plaines River Watershed Alliance v. IEPA*, PCB 04-88 slip op. at 12 (April 19, 2007) (aff'd sub nom. *IEPA v. IPCB*, 896 N.E.2d 479). ("The Board does not affirm the IEPA's decision on the permit unless the record supports the decision.")

Current studies on impacts are equally lacking. Respondents cling to one preliminary value from a 2005 study that was apparently never completed. (IEPA Resp. 5; MWG Resp. 16, 35.) Taking limited preliminary data out of context from what was designed to be a longer-term study, and without the benefit of quality control procedures, is not scientifically defensible. And

even if it were, that lone value does not give the Agency an adequate basis to judge the aquatic life impacts of the cooling water intake structures.

As to the second type of information, the record remains undisputed that neither Midwest Generation nor IEPA is aware of any way in which the existing intake structures minimize environmental impact. (Pet'r Mot. 36.)

Finally, the record contains no indication that IEPA considered any technologies available to reduce impingement and entrainment impacts. Examples of such technologies include the seven proven technologies identified in the new EPA rule and any number of other operational controls or control structures. (*See, e.g.*, Pet'r Mot. 8, 34-35.) By limiting itself to understanding some of the technical details of Waukegan's existing cooling water intake system, IEPA impermissibly considered only one option: maintaining the status quo. The Agency thereby has no claim that it adequately and impartially applied its Best Professional Judgment to determine an appropriate BTA for the Waukegan Station, or that it has substantial evidence in the record to support its finding.

CONCLUSION

Petitioners are entitled to summary judgment on both counts of their Petition. First, as a matter of law, IEPA did not have authority to continue the Board's 1978 316(a) variance, regardless of the facts in the record. Further, there is no dispute that Midwest Generation did not submit the application or studies required to support either an extended thermal variance or IEPA's determination that the existing cooling water intake structure represents the best technology available to minimize adverse environmental impact. Accordingly, IEPA's decisions to extend the Board's 1978 316(a) variance and "best professional judgment" determination regarding impingement and entrainment are not supported by substantial evidence. Furthermore,

neither action complies with applicable law. Therefore, Petitioners ask the Board to grant this motion for summary judgment, invalidate Special Condition 4 and Special Condition 7 in the 2015 Final Permit, and remand the permit to IEPA with instructions to establish thermal effluent limitations and require the best technology available to control impacts from the cooling water intake structure.

Respectfully Submitted,

Jessica Dexter
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CERTIFICATE OF SERVICE

I, Jessica Dexter, hereby certify that I have filed the attached *Notice of Filing* and *Motion for Summary Judgment* upon the service list below by depositing said documents in the United States Mail, postage prepaid in Chicago, Illinois on January 21, 2016.

Respectfully submitted,

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January 21, 2016

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Exhibit 1

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER	)	
Petitioners,	)	
v.	)	PCB 15-189 (Third Party NPDES Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC	)	
Respondents.	)	

STATE OF INDIANA, COUNTY OF LAKE

Thomas R. Solon, being duly sworn, deposes and says:

1. I reside at 500 Teibel Drive, Schererville, Indiana. I am currently a member of the Natural Resources Defense Council (NRDC), and have been since 1997. I joined NRDC because I view it as a way to help protect the Earth. I love outdoor activities, especially fishing, and I know NRDC helps protect the waters I fish in.

2. I am an avid angler, and I fish in Lake Michigan all year round, generally for trout, salmon, and perch. I go out fishing on the Lake at about two dozen times per year, generally year-round. This past winter I have been out four times already, departing from a slip at 87th Street in Chicago. I have often take charter fishing boats out on the Lake as well, sometimes out of Waukegan.

3. I am concerned with the potential impact of the Waukegan power plant on the Lake Michigan fishery. I have a general understanding that the cooling system used by the plant

has the potential to harm both juvenile and adult fish, and that NRDC has challenged the most recent permit issued to the plant as insufficiently protective of aquatic life. I am particularly concerned about the plant's potential impacts given that I observed a steep decline this year in the number of salmon in the Lake and its tributaries. I do not know what factors may be causing this decline, and do not believe anyone knows for sure, but I believe it is important to minimize any adverse impacts on the salmon population to make sure that it recovers.

I declare to the best of my knowledge that this information is true and accurate.

Thomas R. Solon

Thomas R. Solon

NOTARY ACKNOWLEDGEMENT

On January 13th, 2016 (date), before me,

Derek D. Soderquist (notary),

personally appeared,

Thomas R. Solon (signer),

proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity.

WITNESS my hand and official seal

(notary signature)

My Commission Expires: 02/18/2023

Exhibit 2

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER	)	
Petitioners,	)	
v.	)	PCB 15-189 (Third Party NPDES Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC	)	
Respondents.	)	

STATE OF ILLINOIS, COUNTY OF COOK

Kris Shellum-Allenson, being duly sworn, deposes and says:

1. I reside at 512 Dundee Ave. in Barrington, Illinois. I am currently a member of the Natural Resources Defense Council (NRDC), and have been since 2004. I joined NRDC because of my strong interest in protecting our natural world and the creatures that inhabit it.

2. I am concerned with the potential impact of the Waukegan power plant, and its cooling system, on the fish of Lake Michigan. My understanding is that the cooling system can be destructive to the fish, eggs, and smaller microorganisms that are so important to the food chain in the Lake. I am aware that there are many stresses right now on the Lake's ecosystem, and for that reason I think it is doubly important that every company and every government agency be doing what they can to limit adverse impacts on the Lake. The Lake draws a lot of economic benefit from fishing and boating, but people are not going to come and fish in a dead lake.

3. This issue is personal to me. My husband, son and I frequently enjoy fishing on the Lake, and it is important to me that fish there remain healthy and plentiful. The three of us go out on the Lake to fish, for salmon and sometimes walleye, roughly ten to twelve times per year with friends and extended family. All of us have a lot of fun on these trips.

4. I tend to be somewhat less interested in fishing when fish are scarce or not biting; and I would fish more than I currently do if there were more fish to catch. I am thus particularly concerned that this year, the walleye seemed almost non-existent in the Lake – there were far fewer of them than I've seen in previous years, and many people I have spoken with have commented on that. I do not know the cause of this year's decline, and I have reason one way or the other to believe it is specifically connected to power plants. However, it is important to me that every factor harming fish populations, including power plant cooling systems, be limited as much as possible.

I declare to the best of my knowledge that this information is true and accurate.

Kris Shellum-Allenson

NOTARY ACKNOWLEDGEMENT

On January 15, 2016 (date), before me,

CHERYL PASPIRGELIS (notary),

personally appeared,

KRIS SHELLUM-ALLENSON,
(signer)

proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity.

WITNESS my hand and official seal

OFFICIAL SEAL
CHERYL PASPIRGELIS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:12/17/17

Cheryl Paspirgelis
(notary signature)

My Commission Expires: 12/17/2017

Exhibit 3

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER Petitioners, v. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC Respondents.	)	PCB 15-189 (Third Party NPDES Appeal)

DECLARATION OF James K. Bland

I, James Bland, declare as follows:

1. My name is James Bland, and I am of legal age and competent to give this declaration. All information herein is based on my own personal knowledge unless otherwise indicated.

2. I live 23 N. Lake Ave, Third Lake, Illinois 60030. I have lived at that address since 1981.

3. I am a member of the Sierra Club, in particular as part of its Illinois Chapter. I joined the Sierra Club over ten years ago. I joined the Sierra Club to help bring awareness to environmental problems and to share my expertise as a water quality specialist.

4. The Sierra Club is a nationwide non-profit environmental membership organization, which has its purpose to explore, enjoy, and protect the wild places of the earth; to practice and

promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

5. During my time as a Sierra Club member, I have been involved in efforts to prevent pollution from the Waukegan Coal Plant, have helped to define effluent issues from regional sewage treatment plants, and have been active in assessing the ecological condition of regional lakes. I have several concerns arising from operation of the Waukegan Plant, including: (1) its air pollution; (2) its coal ash pollution (3) its emission of greenhouse gases; (4) its heated water discharge, which has the potential to impact Lake Michigan near-shore ecosystems; and (5) its impingement and entrainment of fish and other aquatic organisms, which also impacts local aquatic systems.

6. I am also a member of Prairie Rivers Network. I joined Prairie Rivers Network in 2011 and my membership was renewed most recently in 2016. I joined Prairie Rivers Network to help bring awareness to environmental problems and to share my expertise as a water quality specialist.

7. Prairie Rivers Network is a nonprofit organization and the state affiliate of the National Wildlife Federation, striving to protect the rivers, streams and lakes of Illinois and to promote the lasting health and beauty of watershed communities. Prairie Rivers Network has a membership of over 900 in Illinois.

8. During my time as a Prairie Rivers Network member, I have participated in water quality workshops focused on sediment impacts. I have also been involved in efforts to prevent pollution from the Waukegan Coal Plant.

9. I am an aquatic biologist, and have spent much of my career studying and managing regional inland lakes. I have written three books dealing with aquatic ecology and water management. They are: A *Field Guide to the Freshwater Mussels of the Chicago Wilderness, Aquatic Macroinvertebrates of Illinois, and A Resource Manager's Guide to Bioassessment*. In my retirement I continue to do research on local area aquatic ecosystems and am a member of the DesPlaines River Watershed Workgroup (DRWW). It is the DRWW's task to plan and implement a major water quality monitoring and biological assessment program for the DesPlaines River drainage.

10. I also currently volunteer at the Shedd Aquarium in Chicago. As a volunteer there I help other fishery specialists seine for near shore Lake Michigan fish and look to interpret the lake ecology for school groups. Shedd fishery biologists also use GoPro cameras to document the fish species in Burnham Harbor. This volunteer work contributes significantly to my satisfaction and enjoyment of the Lake Michigan shorefront Additionally I do inland lake and stream research surveys which profiles the ecological status of regional aquatic communities.

11. Furthermore, I have gone on salmon fishing charters along Illinois's Lake Michigan shoreline, including near Waukegan, and I anticipate that I will continue going on trips like this periodically. I enjoy these trips both for the salmon catch, which I can take home and cook, and for the camaraderie of spending time with friends doing a fun activity. I also remain concerned about the fish consumption advisories, which grade how much Lake Michigan fish we should consume weekly, monthly or not at all. Lake Trout for example are graded as "do not eat".

12. My concerns also include that the Waukegan plant's once-through cooling system and in-lake infrastructure has impinged and entrained millions of aquatic organisms (cf. Illinois EPA

public hearing response), killing off large numbers of fish and other species. At this point in time, because we have so little data, it is difficult to determine its wider impact on the functional performance of the Lake Michigan near shore fishery. Records going back to the 1970's indicate that 30 separate species, 4 million adult fish, 19 million fish fry and 800 million eggs per year were taken as part of the Waukegan plants functional performance. The IEPA responsiveness summary indicates that over a million fish per month were taken at the plant. Based on this, it is at least possible that continued impingement and entrainment of aquatic species will impact my enjoyment of the Lake Michigan near-shore area, both for scientific study and for fishing.

13. We are given to believe that no one at the plant has done any sort of assessment of the entrainment and impingement phenomena over the intervening years. The character of the lake fishery has changed dramatically since the 1970's. This lack of knowledge about the Waukegan Plant's impingement and entrainment activities, which could be determined by comprehensive study, itself impacts the scientific community's ability to properly measure, evaluate, and assess Lake Michigan shoreline aquatic communities.

14. My enjoyment and appreciation of Lake Michigan is also affected by significant other pollution coming from the Waukegan coal plant, including from mercury air emissions that settle into the water, and from various coal ash emissions that leech into the lake and nearby surface waters, including for several of the reasons listed above. I do not go into more detail on these impacts here, but can do so as may be helpful.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: Jan. 21, 2016

James K. Bland

James Bland

Exhibit 4

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER	)	
Petitioners,	)	PCB 15-189
v.	)	(Third Party NPDES Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC	)	
Respondents.	)	

DECLARATION OF Nancy C. Tuchman

I, Nancy C. Tuchman, declare as follows:

1. My name is Nancy Tuchman, and I am of legal age and competent to give this declaration. All information herein is based on my own personal knowledge unless otherwise indicated.

2. I reside at 752 Marion Ave, Highland Park, Illinois 60035.

3. I am a Professor and the Founding Director of the Institute of Environmental Sustainability at Loyola University Chicago. The Institute aims to educate students on the Earth's limited natural resources with the goal of encouraging sustainable practices and behavior, and developing sustainable policy.

4. I am currently a member of the Environmental Law & Policy Center (ELPC). I became involved with ELPC because I identify strongly with its mission to improve environmental quality and protect our natural resources.

5. I am also in my third year of serving on ELPC's Science Advisory Council where I advise the organization on the issues in which I specialize.

6. I am a limnologist by training and as such, I study lake and stream ecosystems. My research focuses on the general health of the Great Lakes, the loss of biodiversity in the Great Lakes, invasive species in the Great Lakes, coastal wetlands of the Great Lakes, and biogeochemical cycling. I have studied the Great Lakes for 25 consecutive years. The fish community has greatly changed over the course of those 25 years.

7. I have spent my entire life living on the shores of Lake Michigan, as a child in Ludington, Michigan and as an adult in Chicago. I enjoy sailing on Lake Michigan and am constantly interacting with the Lake to take samples and measurements. Negative impacts to the Lake Michigan fishery would adversely impact my research and my enjoyment of these activities.

8. I have an interest in a healthy Lake Michigan fishery because fish constitute a major component of the lake's food web, which in turn is integral to the Lake Michigan ecosystem. Fish are at the top of the food web, so any impact to fish will have a cascading impact down the entire food web. There have been many insults to Lake Michigan's food web, including invasive species, climate change and industrial pollution. All of these threats have made Lake Michigan's ecosystem increasingly vulnerable. As the ecosystem becomes increasingly compromised, it loses its resilience. Some of these threats, such as climate change, are more complicated to resolve. This is all the more reason for threats stemming from industrial dischargers, which can easily be pinpointed, to be eliminated.

9. I am concerned about humans continuing to use Lake Michigan as a free resource from which they can turn an immense profit. If the food web in the Great Lakes collapses because we

continue to treat the lakes as if they are a commodity or a waste dump, the Lake will not be able to support life and the humans will pay the price when the Lake no longer produces fish for consumption. In order for the Lake Michigan ecosystem to be healthy, there has to be a natural balance between all of the different fish populations and all other forms of aquatic life. All of these different species must be healthy and preserved, and the requirements of their habitat must be maintained.

10. I am concerned with the potential impact of the Waukegan power plant, and its cooling system, on the fish and other aquatic life of Lake Michigan. My general understanding is that the cooling system can be destructive to the fish, eggs, and smaller invertebrates and microorganisms that are so important to the food web in the Lake. It is my understanding that no one knows the exact impact that the Waukegan plant is having on fish and other organisms in Lake Michigan. However, because Waukegan is an identifiable threat to the fish and ecosystem in Lake Michigan, it is important that we do everything possible to minimize this threat.

I declare to the best of my knowledge that this information is true and accurate.

Nancy C. Tuchman

Nancy C. Tuchman

NOTARY ACKNOWLEDGEMENT

On Jan 21, 2016 (date), before me,

Amaury Perez (notary),

personally appeared,

Nancy C. Tuchman,
(signer)

proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity.

WITNESS my hand and official seal

(notary signature)

OFFICIAL SEAL
AMAURY PEREZ
Notary Public - State of Illinois
My Commission Expires Oct 15, 2016

My Commission Expires: 10-15-2016