

ILLINOIS POLLUTION CONTROL BOARD
December 18, 2014

PRAIRIE RIVERS NETWORK,)	
NATURAL RESOURCES DEFENSE)	
COUNCIL, SIERRA CLUB,)	
ENVIRONMENTAL LAW & POLICY)	
CENTER, FRIENDS OF THE CHICAGO)	
RIVER, and GULF RESTORATION)	PCB 14-106
NETWORK,)	(O'Brien)
)	PCB 14-107
Petitioners,)	(Calumet)
)	PCB 14-108
v.)	(Stickney)
)	(Third-Party NPDES Permit Appeals –
ILLINOIS ENVIRONMENTAL)	Water)
PROTECTION AGENCY and)	(Consolidated)
METROPOLITAN WATER RECLAMATION))	
DISTRICT OF GREATER CHICAGO,)	
)	
Respondents.)	

OPINION AND ORDER OF THE BOARD (by J.A. Burke):

The Illinois Environmental Protection Agency (Agency) issued to the Metropolitan Water Reclamation District of Greater Chicago (District) three National Pollutant Discharge Elimination System (NPDES) permits under the Clean Water Act (CWA). The Agency issued the permits for three separate District facilities in Cook County. NPDES Permit IL0028088 covers discharges from the Terrence J. O'Brien Water Reclamation Plant (O'Brien Plant). NPDES Permit IL0028061 covers discharges from the Calumet Water Reclamation Plant (Calumet Plant). NPDES Permit IL0028053 covers discharges from the Stickney Water Reclamation Plant (Stickney Plant).

Pursuant to Section 40(e)(1) of the Illinois Environmental Protection Act (Act) and Section 105.204(b) of the Board's regulations, Prairie Rivers Network, Natural Resources Defense Council, Sierra Club, Environmental Law & Policy Center, Friends of the Chicago River, and Gulf Restoration Network (collectively, Environmental Groups) ask the Board to review these three permits. *See* 415 ILCS 5/40(e)(1) (2012); 35 Ill. Adm. Code 105.204(b). Specifically, petitioners' challenge relates to phosphorus and nitrogen discharges, overflow from sanitary sewers, and the Agency's response to public comments.

The Environmental Groups move for summary judgment on all three petitions. The Agency and the District also move for summary judgment on each petition. The parties agree that there are no issues of material fact precluding the Board from issuing final judgment in these matters. The Board finds that summary judgment is appropriate at this time. For the reasons discussed below, the Board grants summary judgment in favor of the Agency and the District

and against the Environmental Groups. The Board dismisses these consolidated third party NPDES permit appeals.

PROCEDURAL BACKGROUND

On January 27, 2014, the Environmental Groups filed three petitions asking the Board to review three separate permits issued by the Agency on December 23, 2013. Each petition relates to the Agency's issuance of NPDES permits for one of three separate District facilities in Cook County: the O'Brien Plant (O'Brien Pet.); the Calumet Plant (Calumet Pet.); and the Stickney Plant (Stickney Pet.). The Board docketed the permit appeals as PCB 14-106 for the O'Brien Plant, PCB 14-107 for the Calumet Plant, and PCB 14-108 for the Stickney Plant. On March 26, 2014, the Agency filed a consolidated permit record (R.). The Board consolidated the dockets on April 3, 2014. On June 19, 2014, the Board granted a stay of the effectiveness of NDPEs permit Special Condition 18 for the Stickney plant, relating to phosphorous effluent limitation.

On July 11, 2014, the Environmental Groups filed a combined motion for summary judgment addressing each petition (Env. Mot.) along with a legal memorandum supporting their motion (Env. Br.). On August 22, 2014, the District filed its opposition to the motion and cross-motion for summary judgment on each petition (Dist. Resp.). Also on August 22, 2014, the Agency filed its opposition to the Environmental Groups' motion and a cross-motion for summary judgment (Ag. Resp.). On September 19, 2014, the Environmental Groups filed a reply in support of their motion (Env. Reply). The Agency filed a reply on October 3, 2014 (Ag. Reply) and the District filed a reply on October 10, 2014 (Dist. Reply).

PRELIMINARY PROCEDURAL MATTER

On June 23, 2014, the Board's hearing officer set a due date of September 19, 2014 for replies relating to motions for summary judgment. The Environmental Groups filed a reply on September 19, 2014.

Pursuant to Section 101.500(e) of the Board's regulations, the Agency filed a motion (Ag. Mot.) on October 3, 2014 seeking leave to file its reply to respond to the Environmental Groups' September 19, 2014 response to the Agency's motion for summary judgment. 35 Ill. Adm. Code 101.500(e). The Agency argues that the Environmental Groups "attempt to shift the burden of proof in this third party appeal, misapply precedent to this case . . . and attempt to describe a violation of the [Act] or Board regulations where none exists." Ag. Mot. at 2. The Agency states that it would be materially prejudiced if not allowed to file its reply. *Id.* The Agency also filed its reply on October 3, 2014.

On October 3, 2014, the District also filed a motion (Dist. Mot.) requesting leave to file a reply to respond to the Environmental Groups' September 19, 2014 filing. The District argues that it would be prejudiced if "it were not allowed to address [the Environmental Groups'] arguments relating to dissolved oxygen and narrative water quality standards." Dist. Mot. at 2. The District requested leave until October 10, 2014 to file its reply. *Id.* at 3. The District filed its reply on October 10, 2014.

The Environmental Groups object to the Agency's and the District's requests for leave to file replies. The Environmental Groups filed their objection on October 17, 2014 (Env. Obj.). The Environmental Groups argue that the Agency and the District should be held to the briefing schedule set by the hearing officer. Env. Obj. at 1-3. The Environmental Groups further argue that the Agency and District motions for leave to file replies do not meet the standard of material prejudice set forth in 35 Ill. Adm. Code 101.500(e). *Id.* at 3-4. The Environmental Groups then respond to the arguments raised in the Agency and District replies. *Id.* at 4-13.

Section 101.500(e) of the Board's procedural rules states a moving party will not have the right to reply "except as permitted by the Board or the hearing officer to prevent material prejudice." 35 Ill. Adm. Code 101.500(e). The Board finds that the Agency and the District may suffer material prejudice if not allowed to address the response filed by the Environmental Groups to their respective motions for summary judgment. The Agency and the District identify in their respective motions for leave to file replies the bases for how they would be prejudiced. Accordingly, the Board grants the Agency motion and the District motion for leave to file a reply. Further, the Board deems the argument found in Sections II and III of the Environmental Groups' objection to be a surreply to the Agency and District replies. Under these circumstances, the Board will consider the Environmental Groups' surreply together with the Agency and the District replies.

FACTS

The District primarily is located in Cook County and serves an area of 883 square miles including Chicago and suburban communities. Dist. Resp. at 3. The District operates seven water reclamation plants. *Id.* This consolidated docket relates to three of the seven plants: the O'Brien Plant, the Calumet Plant, and the Stickney Plant.

O'Brien Plant

The O'Brien Plant, formerly named the North Side Water Reclamation Plant, treats wastewater from parts of Chicago and north suburbs. The O'Brien Plant is located at 3500 West Howard Street, Skokie, and its main outfall discharges to the North Shore Channel. The specific receiving stream segment of the North Shore Channel is identified as HCCA-04. R. at 1333. In the Agency's Illinois Integrated Water Quality Report and CWA Section 303(d) List for 2012, this segment was designated as fully supporting indigenous aquatic life. *Id.* Further, this water was not identified as being impaired for phosphorus or nitrogen. *Id.*

On August 23, 2006, the District applied to the Agency for reissuance of the NPDES permit for the O'Brien Plant. R. at 2680-2801; Dist. Resp. at 3; Ag. Resp. at 3. As discussed in more detail below, the Agency issued a draft permit for public comment on November 9, 2009. R. at 3040-3063. The public comment period ran from November 12 through December 14, 2009. *Id.* at 3043. The Agency issued a final permit for the plant on December 23, 2013. *Id.* at 3308-3337.

Calumet Plant

The Calumet Plant treats wastewater from parts of Chicago and south suburbs. The Calumet Plant is located at 400 East 130th Street, Chicago, and its main outfall discharges to the Little Calumet River. Dist. Resp. at 3. The specific receiving stream segment of the Little Calumet River is identified as HA-04. R. at 1333. In the Illinois Integrated Water Quality Report and CWA Section 303(d) List for 2012, this water was designated as fully supporting indigenous aquatic life. *Id.* Further, this water was not identified as being impaired for phosphorus or nitrogen. *Id.*

On August 25, 2006, the District applied to the Agency for reissuance of the NPDES permit for the Calumet Plant. R. at 2182-2335; Dist. Resp. at 3; Ag. Resp. at 3. As discussed in more detail below, the Agency issued a draft permit for public comment on November 5, 2009. R. at 2471-2496. The public comment period ran from November 9 through December 9, 2009. *Id.* at 2475. The Agency issued a final permit for the plant on December 23, 2013. *Id.* at 2620-2624 (a complete copy of the final permit for the Calumet Plant is not contained in the record filed by the Agency but is found as Exhibit 1 to the Calumet Petition).

Stickney Plant

The Stickney Plant treats wastewater from parts of Chicago and its suburbs. The Stickney Plant is located at 6001 West Pershing Road, Cicero, and its main outfall discharges to the Chicago Sanitary and Ship Canal. R. at 1328; Dist. Resp. at 3-4. The specific receiving stream segment of the Chicago Sanitary and Ship Canal is identified as GI-03. R. at 1333. In the Illinois Integrated Water Quality Report and Section 303(d) List for 2012, this water was designated as impaired for indigenous aquatic life uses with potential causes from total phosphorus, dissolved oxygen, and ammonia. *Id.*

On August 28, 2006, the District applied to the Agency for reissuance of the NPDES permit for the Stickney Plant. R. at 1383-1843; Dist. Resp. at 3; Ag. Resp. at 3. As discussed in further detail below, the Agency issued a draft permit for public comment on November 10, 2009. R. at 2012-2038. The public comment period ran from November 11 through December 11, 2009. *Id.* at 2015. The Agency issued a final permit for the plant on December 23, 2013. *Id.* at 2134-2162.

Permit Process

Draft Permits

In November 2009, the Agency issued draft NPDES permits and fact sheets for the three plants. Dist. Resp. at 4; Ag. Resp. at 3. The draft permits did not include a numeric limit on phosphorus or nitrogen but required that “total nitrogen and total phosphorus concentration shall be reported on the [discharge monitoring report] as a weekly average for monitoring purposes only.” R. at 3536 (O’Brien Plant); R. at 3558 (Calumet Plant); R. at 3514 (Stickney Plant).

Public Comments and Public Hearing

The Environmental Groups submitted comments during the public comment period. Env. Br. at 4; Dist. Resp. at 4. For example, on December 11, 2009, the Environmental Law and Policy Center submitted comments relating to the permit for the Stickney Plant on behalf of Friends of the Chicago River, Alliance for the Great Lakes, Natural Resources Defense Council, Gulf Restoration Network, Prairie Rivers Network, and Sierra Club. R. at 2051-2062; *see also* R. at 2520-2526 (similar letter relating to Calumet Plant); R. at 3073-3080 (similar letter relating to the O'Brien Plant). As to phosphorus and nitrogen discharges, these commenters stated that the permit "should include limits on phosphorus and nitrogen that require removal of these pollutants and/or require systemic measures to reduce the plant's phosphorus discharges." R. at 2053. The commenters noted water quality problems in Illinois waters downstream of the plants, the Mississippi River Basin, and the Gulf of Mexico. *Id.* at 2053-2056.

On March 9, 2010, the Agency held a public hearing on the three draft NPDES permits for the three plants. Env. Br. at 4; Dist. Resp. at 4; Ag. Resp. at 3; R. at 1326-1327. Agency personnel and District personnel were present at the hearing. R. at 1327. Approximately thirty persons were present at the hearing including representatives of the United States Environmental Protection Agency (USEPA), Illinois Attorney General, Chicago Legal Clinic, Environmental Law and Policy Center, Natural Resources Defense Council, Alliance for the Great Lakes, Sierra Club, Prairie Rivers Network, and Southeast Environmental Task Force. *Id.* at 1327. A transcript of the hearing is available in the Agency record. *Id.* at 3348-3502. Approximately 120 additional post-hearing comments are included as exhibits to the hearing record. *Id.* at 3801-5544.

Representatives of the Environmental Groups participated in the hearing on March 9, 2010. Env. Br. at 4. For example, Environmental Law and Policy Center asked questions at the hearing. *Id.* at 3399-3410. Their questions for the Agency included questions on phosphorus impairment in receiving waters for the plants and permit conditions addressing phosphorus discharges. *Id.* at 3399-3401. Sierra Club asked questions regarding requiring phosphorus removal in the permit for the Stickney Plant. *Id.* at 3479. In addition, Natural Resources Defense Council commented on other issues in the draft permits such as the combined sewer overflow provisions. *Id.* at 3410-3425.

The Environmental Law and Policy Center, on behalf of Friends of the Chicago River, Alliance for the Great Lakes, Natural Resources Defense Council, Gulf Restoration Network, Prairie Rivers Network, and Sierra Club, submitted additional comments to the hearing officer on April 8, 2010. R. at 3817-3829. These commenters also submitted 35 documents attached to their comments. *Id.* at 3830-5377. These commenters asserted that "these three [plants], in combination with other sources, are causing violations of applicable narrative water quality standards, 35 Ill. Adm. Code 302.203, and 302.402." *Id.* at 3822. In addition, nitrogen and phosphorus discharges from the plants are causing downstream impairment of water uses. *Id.* These commenters stated:

Accordingly, limits on the discharge of phosphorus and nitrogen that will prevent such discharges from violating standards are necessary or at least a compliance plan must be developed pursuant to 40 CFR § 122.47. IEPA may not ignore

nitrogen and phosphorus pollution simply because it has not yet developed numeric standards for these pollutants. R. at 3822.

The Agency closed the hearing record on April 8, 2010. R. at 1327, 3354.

Post-Hearing

On April 8, 2010, USEPA sent a letter to the District requesting additional information on the permit applications, including sampling data on nutrients. R. at 463-464. The District responded to the request on April 14, 2010. *Id.* at 465-466. On June 30, 2010, USEPA provided additional comments to the Agency and stated, “we recommend that the [Agency] conduct its own reasonable potential analyses for . . . nutrients for the Calumet, Stickney, and [O’Brien] plants prior to finalizing the permits for those plants, and include in the final permits appropriate water quality based effluent limitations where reasonable potential exists.” *Id.* at 482-485.

On October 6, 2011, USEPA sent a letter to the Agency providing a draft plan for conducting a reasonable potential analysis for nutrient discharges from the three plants. R. at 1112-1157. USEPA stated that the agencies “have agreed to a joint goal of developing this [reasonable potential analysis and its associated quality assurance project plan] in order to determine if there is reasonable potential that nutrient discharges from the plants could cause or contribute to water quality impairments.” *Id.* at 1112.

On October 26, 2011, the District sent a letter to the Agency providing a proposed “schedule for implementation of enhanced biological phosphorus removal” for each of the three plants. R. at 1160. The District explained that the “guiding principle” of the schedule “is to remove and recover as much phosphorus as possible with existing infrastructure, assuming that new infrastructure will be constructed for sidestream [phosphorus] recovery.” *Id.* The District proposed implementation plans for each of the three facilities to achieve an effluent limit of 1.0 milligram per liter (mg/L) for phosphorus discharges. *Id.* at 1161-1165. The implementation plans gave the District a number of years to meet the 1.0 mg/L limit: ten years for the O’Brien Plant, six years for the Calumet Plant, and four years for the Stickney Plant. *Id.* The District sent an additional letter on these same issues on November 21, 2011. *Id.* at 1169-1176.

In May 2013, USEPA provided comments to the Agency on the draft permits including comment on nutrient monitoring. R. at 1303-1310. On October 29, 2013, the Agency submitted a revised draft permit to USEPA. *Id.* at 2618-2619. On November 21, 2013, USEPA provided comments to the Agency. *See id.* On December 19, 2013, USEPA informed the Agency that it did not object to issuing the permits. *Id.* at 1319-1320.

Responsiveness Summary

On December 23, 2013, the Agency issued a document titled “Responsiveness Summary Regarding March 9, 2010 Public Hearing.” R. at 1321-1365. The document describes the hearings held on March 9, 2010; lists the revisions made to the draft permits in the final permits; and responds to comments received during the public comment period. *Id.*

During the public comment period, as described above, the Agency received comments that the permits should include effluent limits on phosphorus and nitrogen. R. at 1332. These comments noted that phosphorus and nitrogen pollution “lead to myriad problems throughout the Mississippi River Basin,” cause a hypoxic zone in the Gulf of Mexico, prevent waters from achieving the CWA fishable and swimmable goal, threaten human health and wildlife, and impose costs on drinking water suppliers. *Id.* The Agency responded to these comments as follows:

The District’s permits require implementation of enhanced biological phosphorus removal at all three plants in order to achieve a monthly average Total Phosphorus limit of 1.0 mg/L. The permits include compliance schedules to provide the District necessary time to comply with the phosphorus limit. Semi-annual progress reports must be submitted to the Agency until the phosphorus limit has been achieved. Please note that, at present, there has not been a Total Maximum Daily Load (TMDL) completed for the Gulf hypoxic zone or the Mississippi River Basin for nutrients. R. at 1332.

The Agency also noted that phosphorus is not a cause of impairment in the stream segments directly receiving discharges from the O’Brien Plant and the Calumet Plant. R. at 1333. However, the receiving water for the Stickney Plant may be impaired due to phosphorus. *Id.* The Agency noted the 1.0 mg/L permit limit on phosphorous as responding to this concern. *Id.*

The Agency received comment asking whether the Agency monitors waters downstream of the three plants for “unnatural plant or algae growth.” R. at 1334. The Agency responded by identifying the monitoring locations downstream of the plants. *Id.* at 1334-1335. The Agency stated that “Agency biologists have not observed the presence of any unnatural plant or algal growth during the monitoring activities at these stations.” *Id.* at 1335.

Final Permits

On December 23, 2013, the Agency issued final NPDES permits for the three plants. R. at 3312-3337 (O’Brien Plant); Calumet Pet. Ex. 1 (Calumet Plant); R. at 2134-2162 (Stickney Plant); *see also* Env. Br. at 7; Dist. Resp. at 5; Ag. Resp. at 4.

The final permits included an effluent limit of 1.0 mg/L for phosphorus discharges. R. at 3313 (O’Brien Plant); Calumet Pet. Ex. 1 at 6 (Calumet Plant); R. at 2138 (Stickney Plant); *see also* Env. Br. at 7; Dist. Resp. at 5; Ag. Resp. at 8. Each of the final permits contains a compliance schedule giving the District a number of years to meet the phosphorus limit of 1.0 mg/L: ten years for the O’Brien Plant; six years, five months for the Calumet Plant; and four years, one month for the Stickney Plant. R. at 3330-3332 (O’Brien Plant, Special Condition 19); Calumet Pet. Ex. 1 at 26 (Calumet Plant, Special Condition 19); R. at 2157-2158 (Stickney Plant, Special Condition 18).

Each permit also includes a special condition allowing the District to:

work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. R. at 3329-3330 (O'Brien Plant, Special Condition 18); Calumet Pet. Ex. 1 at 25 (Calumet Plant, Special Condition 18); R. at 2157 (Stickney Plant, Special Condition 17).

The special condition further requires the District to develop, implement, and submit to the Agency a Capacity, Management, Operations, and Maintenance Plan and itemizes elements required to be included in the plan. *Id.*

LEGAL BACKGROUND AND BURDEN OF PROOF

The federal CWA makes it unlawful for any person to discharge a pollutant from a point source into waters of the United States without a permit. 33 U.S.C. § 1311(a). Similarly, Illinois statute prohibits discharge of any contaminant to surface waters in Illinois without a NPDES permit. 415 ILCS 5/12(f) (2012); *see also* 35 Ill. Adm. Code 309.102. In general, discharge limitations in a permit are technology-based or water quality-based. 33 U.S.C. § 1311(b).

Technology-based effluent limits generally are developed for an industry and reflect the “best available technology economically achievable.” 33 U.S.C. § 1311(b)(2)(A); *see, e.g.*, 40 C.F.R. Parts 405-471. The Board’s effluent standards are found at 35 Ill. Adm. Code Part 304. The Board has set an effluent standard for certain dischargers of phosphorus at 1.0 mg/L. 35 Ill. Adm. Code 304.123.

Water quality-based effluent limits ensure that water quality standards are met regardless of technology or economics considered in establishing technology-based limits. Water quality-based effluent limits are defined as “any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations . . . or any other Federal law or regulation, or required to implement any applicable water quality standard.” 33 U.S.C. § 1311(b)(1)(C). Accordingly, if a discharge from a point source interferes with attainment or maintenance of a water quality standard, an effluent limitation is established for that discharge notwithstanding any other technology-based standard. 33 U.S.C. §§ 1311(b)(1)(C), 1312(a); *see also* 35 Ill. Adm. Code 304.105.

Water quality standards are set under authority provided to the states in CWA Section 303. 33 U.S.C. § 1313. Illinois statute authorizes the Board to adopt such water quality standards. 415 ILCS 5/13 (2012). In setting a water quality standard, the Board must designate how the particular water is used and set standards based on the designated use. 33 U.S.C. § 1313(c)(2)(A). A standard may be a numeric concentration for the pollutant in the water or may be a narrative statement describing acceptable or unacceptable conditions in the water. The Board’s general use water quality standards are found at 35 Ill. Adm. Code Part 302. Certain water quality standards apply only to specially designated uses and those designations are found at 35 Ill. Adm. Code Part 303. The Board has not set numeric water quality standards for phosphorus or nitrogen in rivers. The Board has set a general use water quality standard of 0.05

mg/L for phosphorous in lakes with a surface area of 20 acres or more. 35 Ill. Adm. Code 302.205.

After a water quality standard is established, if stream segments do not meet the standard, those stream segments are assessed under CWA Section 303(d). 33 U.S.C. § 1313(d). CWA Section 303(d) requires Illinois to identify and list waters that do not meet applicable water quality standards or do not fully support their designated uses. *Id.* This list of impaired waters is known as the CWA Section 303(d) List. CWA Section 303(d) also requires states to set a total maximum daily load (TMDL) for each pollutant of an impaired water. 33 U.S.C. § 1313(d)(1)(C). A TMDL must consider all potential sources of pollutants, whether point or nonpoint. It also takes into account a margin of safety, which reflects scientific uncertainty, as well as the effects of seasonal variation. The Agency reports that TMDLs have not been set for phosphorus for the Mississippi River Basin or the Gulf of Mexico. R. at 1332.

The Act expressly provides that the Agency is the NPDES permitting authority in Illinois. 415 ILCS 5/39(b) (2012). The Act requires that the Agency issue permits to applicants upon proof that the facility will not cause a violation of the Act or Board regulations. 415 ILCS 5/39(a) (2012). Section 39(a) of the Act sets forth the standard concerning the Agency's authority to act upon permit applications:

When the Board has by regulation required a permit for the construction, installation, or operation of any type of facility, equipment, vehicle, vessel, or aircraft, the applicant shall apply to the Agency for such permit and it shall be the duty of the Agency to issue such a permit upon proof by the applicant that the facility, equipment, vehicle, vessel, or aircraft will not cause a violation of this Act or of regulations hereunder. *Id.*

NPDES permits must “contain those terms and conditions, including but not limited to schedules of compliance, which may be required to accomplish the purposes and provisions of the Act.” 415 ILCS 5/39(b) (2012); *see also* 35 Ill. Adm. Code 309.141. Section 309.143 of the Board’s regulations requires effluent limitations for all pollutants:

which the Agency determines are, or may be, discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. 35 Ill. Adm. Code 309.143(a).

When making this determination, the Agency must:

account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and, where appropriate, the dilution of the effluent in the receiving water. 35 Ill. Adm. Code 309.143(a).

If the Agency denies a permit or grants a permit with conditions, the permit applicant may appeal the Agency's determination to the Board. 415 ILCS 5/40(a)(1) (2012); 35 Ill. Adm. Code 105.204(a). A third party other than the applicant may also petition the Board to review the Agency's grant of a permit. 415 ILCS 5/40(e)(1) (2012). In a third party appeal of a NPDES permit, the third party has the burden of proof on appeal. 415 ILCS 5/40(e)(3)(ii) (2012). Accordingly, the third party must prove that the permit as issued violated the Act or the Board's regulations. IEPA v. PCB (New Lenox), 386 Ill. App. 3d 375, 382 (3rd Dist. 2008); Prairie Rivers Network v. PCB (Black Beauty), 335 Ill. App. 3d 391, 401 (4th Dist. 2002).

In reviewing a permit condition issued by the Agency, the Board must base its decision exclusively on the record before the Agency at the time the permit was issued. 415 ILCS 5/40(e)(3)(ii) (2012). Accordingly, the Board "must review the entire record relied upon by [the Agency] to determine whether the third party has shown that [the Agency] failed to comply with criteria set forth in the applicable statutes and regulations before issuing or denying the NPDES permit." New Lenox, 386 Ill. App. 3d at 383.

DISCUSSION

The Environmental Groups, the Agency, and the District each move for summary judgment on the three petitions consolidated in this proceeding. Summary judgment is appropriate when the record, including pleadings, show that there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. 35 Ill. Adm. Code 101.516(b). This is the same standard used in trial court proceedings in Illinois. New Lenox, 386 Ill. App. 3d at 391. In applying this standard to a third party appeal of a NPDES permit, the Board considers the pleadings and reviews the permit record to determine whether there exists a genuine issue as to any material fact. *See id.* Here, none of the parties have raised any contested issue of material fact presented in any of the three petitions. Env. Mot. at 2; Env. Br. at 1; Ag. Resp. at 6; Dist. Resp. at 6. The Board finds summary judgment appropriate at this time.

In their three petitions and their consolidated motion for summary judgment, the Environmental Groups contend that the Agency's issuance of the three permits violates the Act or Board regulations for four reasons: (1) the Agency failed to include permit conditions ensuring that discharges of phosphorus and nitrogen do not violate water quality standards; (2) the permitted compliance schedules for phosphorus discharges are not justified; (3) the permits fail to prohibit overflows from sanitary sewers; and (4) the Agency failed to respond to public comments on drafts of the permits. The Board addresses each of these four challenges below.

Effluent Limits for Phosphorus and Nitrogen

The Environmental Groups contend that the Agency failed to ensure that discharges of phosphorus and nitrogen from the three plants do not violate water quality standards. O'Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7; Env. Br. at 14. The final permits include an effluent limit of 1.0 mg/L for phosphorus discharges. R. at 3313 (O'Brien Plant); Calumet Pet. Ex. 1 at 6 (Calumet Plant); R. at 2138 (Stickney Plant); *see also* Env. Br. at 7; Dist. Resp. at 5; Ag. Resp. at 8. The permits do not include an effluent limit on nitrogen. The Environmental

Groups argue that imposing a 1.0 mg/L limit on phosphorus and omitting a limit on nitrogen violate the Act and Board regulations.

Environmental Groups' Argument

The Environmental Groups acknowledge that the final permits contain a phosphorus limit of 1.0 mg/L. O'Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7. The Environmental Groups contend that this limit is too lenient and "will not prevent [the District's] discharge from causing or contributing to impairment of receiving and downstream waters." *Id.* Further, the record does not provide the Agency's basis for imposing this limit. *Id.* In sum, the Agency has not demonstrated that the 1.0 mg/L effluent limit on phosphorus and the lack of a limit on nitrogen is sufficiently protective of the receiving waters.

The Environmental Groups point to several standards more stringent than the permit limit of 1.0 mg/L on phosphorus. For example, the Environmental Groups note that USEPA set "criteria for phosphorus for flowing waters in the ecoregion where the Plants are located" at 0.077 mg/L total phosphorus. Env. Br. at 16. USEPA Region 1 "has imposed effluent limits of 0.1 mg/L" for dischargers of phosphorus into effluent dominated waters. *Id.* Wisconsin has set a water quality criterion of 0.1 mg/L for rivers. *Id.*

The Environmental Groups argue that the Agency was required to perform an analysis to determine whether phosphorus and nitrogen discharges have reasonable potential to cause or contribute to violation of a water quality standard. O'Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7; Env. Br. at 15. The Environmental Groups claim that the record does not contain this analysis. Env. Br. at 15. The Environmental Groups further argue that the Agency did not make this determination. *Id.* at 17.

In their petitions, the Environmental Groups note that Board regulations set water quality standards for dissolved oxygen at 35 Ill. Adm. Code 302.206, 302.405; unnatural sludge at 35 Ill. Adm. Code 302.403; and offensive conditions at 35 Ill. Adm. Code 302.203. O'Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7. In their reply, the Environmental Groups explain that these standards are not being met in the receiving waters for the three plants and "there is a reasonable potential that phosphorus discharges from the plants are causing or contributing to violations of those water quality standards." Env. Reply at 2. They maintain that in the absence of a numeric water quality standard for phosphorus, the Agency "must on a case-by-case basis write numeric effluent permit limits for phosphorus that protect water quality with respect to existing standards affected by that pollutant." *Id.* at 4. Specifically, the standards affected by phosphorus are "dissolved oxygen and narrative offensive conditions standards." *Id.* The Environmental Groups charge that the 1.0 mg/L effluent limit on phosphorus in the final permits is arbitrary and "devoid of any analysis whatsoever as to whether this quite high number will achieve compliance with standards." *Id.* at 5.

The Environmental Groups request that the Board remand the permits to the Agency "to conduct a reasonable potential analysis for nitrogen and phosphorus." O'Brien Pet. at 8; Calumet Pet. at 8; Stickney Pet. at 7. Further, the Agency should "establish whatever water

quality-based effluent limits are necessary to protect the receiving water and downstream waters.” *Id.*

Agency’s Argument

The Agency addresses the Environmental Groups’ contention that the Agency failed to analyze whether discharges of phosphorus and nitrogen from the three plants have a reasonable potential to violate water quality standards. Ag. Resp. at 7. The Agency notes that neither the Act nor Board regulations provide numeric water quality standards for phosphorus or nitrogen. *Id.* According to the Agency, a reasonable potential analysis would require the existence of a numeric water quality standard. *Id.* at 8. Here, there are no applicable numeric water quality standards for phosphorus or nitrogen. *Id.* Accordingly, the permits do not violate the Act or Board regulations. *Id.* at 7.

The Agency notes that the 1.0 mg/L effluent limit on phosphorus in the permits is the same limit found in 35 Ill. Adm. Code 304.123(g). Ag. Resp. at 8. Section 304.123(g) of the Board’s regulations imposes a 1.0 mg/L monthly average effluent limit on phosphorus for new or expanded facilities with a design average flow of one million gallons per day or a total effluent phosphorus load of 25 pounds per day. *Id.* at 8-9. The Agency acknowledges that the plants are neither new nor expanding. *Id.* at 9. Rather, the 1.0 mg/L limit in the permits “represents a more stringent limitation on the discharge of phosphorus than any numeric standard currently applicable.” *Id.*

District’s Argument

As to nitrogen, the final permits do not provide an effluent limit. The District notes that the Board has not developed a numeric water quality standard for nitrogen. Dist. Resp. at 9. The District asserts that no applicable technology-based limit exists for nitrogen. *Id.* Additionally, nitrogen has not been identified as a cause of impairment for any Illinois waters. *Id.* Accordingly, “neither the Act nor the Board’s regulations provide any basis for a nitrogen effluent limitation.” *Id.*

As to phosphorus, the final permits contain an effluent limit of 1.0 mg/L. The Board has not developed a numeric water quality standard for phosphorus. Dist. Resp. at 9. The District asserts that no applicable technology-based limit exists for phosphorus. *Id.* Accordingly, neither the Act nor the Board’s regulations provide any basis for a phosphorus effluent limitation in the permits and the Agency could have decided not to impose a phosphorus limit. *Id.* The District argues that the condition limiting phosphorus discharges to 1.0 mg/L in the permits “not only complies with the Act and the Board’s regulations, but exceeds what is required by law.” *Id.* at 2.

The District notes that 35 Ill. Adm. Code 304.123(g) sets “an interim phosphorus effluent limit for wastewater treatment plants that will remain in effect until the Board adopts a numeric water quality standard.” Dist. Resp. at 10. Section 304.123(g) of the Board’s regulations imposes a 1.0 mg/L effluent limit on phosphorus on new or expanding wastewater treatment plants. *Id.* at 11. The District contends that this interim effluent limit does not apply because its

plants are not new or expanding. *Id.* However, the District is willing to comply with this limit. *Id.* The District claims that compliance with this limit will reduce the phosphorus discharge from the District's plant nearly fifty percent. *Id.*

The District also responds to the Environmental Groups' references to USEPA and Wisconsin standards for phosphorus. First, the District notes that USEPA's criterion is from its Nutrient Guidance Manual, which constitutes general guidelines that do not take into account local conditions. Dist. Resp. at 12. Further, the District argues that the Environmental Groups "cannot provide an in-state basis or precedent for imposing a more stringent phosphorus limit on the District" such as the Wisconsin standard. *Id.*

The District acknowledges that the Agency has designated certain Illinois waters as impaired for phosphorus. Dist. Resp. at 13. However, the District argues that this designation was not based on a Board-promulgated water quality standard for phosphorus. *Id.* Furthermore, the District claims that the Agency abandoned this approach in 2012. *Id.*

Board Analysis and Finding

It is well-established that dischargers may not violate water quality standards. 415 ILCS 5/12(a) (2012); 33 U.S.C. § 1311(a). If the Agency finds that a discharge would cause or is causing a violation of a water quality standard, the Agency must require the discharger to meet effluent limits necessary to ensure compliance with the water quality standard. 35 Ill. Adm. Code 304.105; 33 U.S.C. § 1312(a). Section 309.143(a) of the Board's regulations specifically requires that effluent limitations must control all pollutants which the Agency determines will cause or contribute, or have the reasonable potential to cause or contribute, to an excursion of a water quality standard, including narrative criteria for water quality. 35 Ill. Adm. Code 309.143(a); *see also* 35 Ill. Adm. Code 309.141(d)(1).

As the parties note, the Board has not promulgated numeric water quality standards for phosphorus or nitrogen in streams. Accordingly, the Agency is not required to establish effluent limits to ensure that the District plants meet a nonexistent numeric water quality standard.

Rather than numeric standards for phosphorus and nitrogen, the Environmental Groups contend that the water quality standards that may be affected by phosphorus and nitrogen discharges are the standards for dissolved oxygen at 35 Ill. Adm. Code 302.206, 302.405; unnatural sludge at 35 Ill. Adm. Code 302.403; and offensive conditions at 35 Ill. Adm. Code 302.203. O'Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7; Env. Reply at 10, 11.

As to dissolved oxygen, the Board has set two water quality standards. The general use standard applies to Illinois waters for which there is no specific use designation and is found at 35 Ill. Adm. Code 302.206. Section 302.206 currently, and on the date the permits issued, provides:

- (a) General use waters at all locations must maintain sufficient dissolved oxygen concentrations to prevent offensive conditions as required in Section 302.203 of this Part . . .

- (b) . . . the dissolved oxygen concentration in the main body of all streams . . . must not be less than the following:
- 1) During the period of March through July,
 - A) 5.0 mg/L at any time; and
 - B) 6.0 mg/L as a daily mean averaged over 7 days.
 - 2) During the period of August through February,
 - A) 3.5 mg/L at any time;
 - B) 4.0 mg/L as a daily minimum averaged over 7 days; and
 - C) 5.5 mg/L as a daily mean averaged over 30 days.

35 Ill. Adm. Code 302.206.

The Board also has set at 35 Ill. Adm. Code 302.405 dissolved oxygen water quality standards for waters previously designated for secondary contact use and capable of supporting indigenous aquatic life (“Secondary Contact and Indigenous Aquatic Life”). The above general use standard does not apply to these designated waters. 35 Ill. Adm. Code 302.401. Rather, Section 302.405 requires for these waters that:

Dissolved oxygen . . . shall not be less than 4.0 mg/l at any time 35 Ill. Adm. Code 302.405.

The Board also has promulgated narrative standards relating to plant and algal growth. Again, the Board has set such a standard for general use waters and waters previously designated for “Secondary Contact and Indigenous Aquatic Life” use. The general use narrative water quality standard provides:

Waters of the State shall be free from sludge or bottom deposits, floating debris, visible oil, odor, plant or algal growth, color or turbidity of other than natural origin. The allowed mixing provisions of Section 302.102 shall not be used to comply with the provisions of this Section. 35 Ill. Adm. Code 302.203.

The narrative water quality standard applying to “Secondary Contact and Indigenous Aquatic Life” use provides:

Waters subject to this subpart shall be free from unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algal growth, or unnatural color or turbidity. 35 Ill. Adm. Code 302.403.

As noted above, Sections 302.405 and 302.403 apply to waters designated for “Secondary Contact and Indigenous Aquatic Life” use. Now repealed Section 303.441 provided the list of waters designated for “Secondary Contact and Indigenous Aquatic Life” use. That list included the receiving waters for the District’s plants – namely, the North Shore Channel, the Little Calumet River, the Chicago Sanitary and Ship Canal. 35 Ill. Adm. Code 303.441(j) (repealed in Water Quality Standards and Effluent Limitations for the Chicago Area Waterways System and Lower Des Plaines River, R 08-9(A) (Aug. 18, 2011)). Subsequent to issuance of the District’s permits, the Board redesignated the uses of these receiving waters at 35 Ill. Adm. Code 303.230 and 303.235. Water Quality Standards and Effluent Limitations for the Chicago Area Waterways System and Lower Des Plaines River, R 08-9(C) (Feb. 6, 2014).

The final permits issued to the District require that dissolved oxygen shall not be less than 5 mg/L during 16 hours of any 24 hour period, nor less than 4 mg/L at any time. R. at 3313 (O’Brien Plant); Calumet Pet. Ex. 1 at 6 (Calumet Plant); R. at 2138 (Stickney Plant). It appears that this numeric minimum concentration requirement is based on former Section 303.441. In any event, it is consistent with Section 302.405 that requires “dissolved oxygen . . . shall not be less than 4.0 mg/l at any time.” 35 Ill. Adm. Code 302.405. Accordingly, the Agency’s issuance of the permits does not violate the Act or Board regulation as to the dissolved oxygen requirement. Neither the Environmental Groups nor the District contest this numeric dissolved oxygen minimum concentration requirement in the permits.

Despite this numeric requirement on dissolved oxygen in the permits, the Environmental Groups contend that phosphorus and nitrogen discharges may cause dissolved oxygen violations in the receiving waters and downstream waters. O’Brien Pet. at 7; Calumet Pet. at 7; Stickney Pet. at 7; Env. Reply at 5. The Environmental Groups also contend that phosphorus and nitrogen discharges need to be limited to prevent violations of narrative water quality criteria for unnatural sludge and offensive conditions. *Id.* The Environmental Groups focus most of their argument on the effects of phosphorus and contend that “phosphorus can cause excess plant and algal growth that in turn causes violations of dissolved oxygen standards and interference with aquatic life and recreational uses of waters.” Env. Reply at 13.

The final permits contain a phosphorus effluent limit of 1.0 mg/L. In their reply, the Environmental Groups argue that the Agency should have evaluated, but failed to evaluate, whether the 1.0 mg/L limit is sufficient to ensure compliance with the above-quoted water quality criteria. Env. Reply at 5. The Environmental Groups ask the Board to compare this 1.0 mg/L limit to more stringent numeric effluent limits on phosphorus used in other jurisdictions. *See, e.g.*, Env. Br. at 16.

However, the 1.0 mg/L limit is consistent with the following effluent standard for phosphorus adopted by the Board:

any new or expanded discharges into General Use waters from the following treatment works . . . are subject to monthly average permit limits for total phosphorus of 1 mg/L:

- (1) Treatment works with a Design Average Flow of 1.0 million gallons per day or more receiving primarily municipal or domestic wastewater; or
- (2) Any treatment works, other than those treating primarily municipal or domestic wastewater, with a total phosphorus effluent load of 25 pounds per day or more. 35 Ill. Adm. Code 304.123(g).

The Board adopted this 1.0 mg/L effluent limit on phosphorus based on a proposal from the Agency to set an interim effluent limit until the Board adopts numeric water quality standards. Proposed 35 Ill. Adm. Code 304.123(g)-(k), R 04-26, slip op. at 1 (Jan. 19, 2006). The purpose of the interim effluent limit was to limit concentrations of phosphorus that may result in detrimental levels of plant and algae growth. *Id.* The Board explained

phosphorus is generally considered to be the primary limiting nutrient in most freshwater environments. Thus, when nitrogen is present in sufficient amounts, an elevated level of phosphorus can result in eutrophic conditions, which can limit the use of a waterbody for swimming, boating, and water supply. Further, excessive algal growth can change the composition of the aquatic biota. However, a major concern with eutrophication is the effect on dissolved oxygen levels. Eutrophication can alter or lower dissolved oxygen concentration. Proposed 35 Ill. Adm. Code 304.123(g)-(k), R 04-26, slip op. at 17 (Apr. 7, 2005).

The Board found that “reducing phosphorus loading from new or expanded treatment works is one of the steps towards comprehensive nutrients control and minimizing the impact of nutrients on water quality.” *Id.*

This 1.0 mg/L effluent limit on phosphorus in Section 304.123(g) does not apply to these three District plants because the District plants are neither new nor expanding. However, the Agency included this limit in the permits and the District has not appealed the limit to the Board. The Board notes that the 1.0 mg/L effluent limit in Section 304.123(g) is a technology-based effluent limit and cannot be used to shield the District from a violation of an applicable water quality standard. If a discharge violates a water quality standard, an effluent limitation is established for that discharge notwithstanding any other technology-based standard. 33 U.S.C. §§ 1311(b)(1)(C), 1312(a); *see also* 35 Ill. Adm. Code 304.105.

The question then is whether discharges of phosphorus up to the 1.0 mg/L limit or unlimited discharges of nitrogen would violate the dissolved oxygen or narrative water quality standards quoted above. More precisely, the issue is whether this level of phosphorus or nitrogen impairs designated uses by causing unnatural plant or algal growth to deprive aquatic life of needed oxygen.

The Environmental Groups point to the Agency’s listing of the receiving waters for the plants – namely, the North Shore Channel, the Little Calumet River, the Chicago Sanitary and Ship Canal – as impaired under CWA Section 303(d). O’Brien Pet. at 5; Calumet Pet. at 5; Stickney Pet. at 5. Impairment designations are made under CWA Section 303(d), 33 U.S.C.

§ 1313(d). The Agency designates waters as impaired if the water does not meet applicable water quality standards. After designating a water as impaired, the Agency is required to set a total maximum daily load for each pollutant for which the water is impaired. According to the Environmental Groups, the Agency

did not even attempt to correlate the 1.0 mg/L limit with the identified impairment, or to assert, much less demonstrate through reasonable potential analysis, that this limit would prevent the [District] effluent from causing or contributing to the impairment or to the excursions of the dissolved oxygen, offensive conditions, or unnatural sludge water quality standards. Env. Br. at 15.

The Stickney Plant discharges to the Chicago Sanitary and Ship Canal and, according to the record, the Agency has designated the receiving stream segment as impaired for phosphorus and dissolved oxygen. R. at 1333. The O'Brien Plant discharges to the North Shore Channel and the Calumet Plant to the Little Calumet River. The Agency stated in its responsiveness summary that the direct receiving stream segments for the O'Brien Plant and the Calumet Plant have not been designated as impaired for phosphorus or nitrogen. *Id.* at 1333. The Environmental Groups claim that downstream and nearby upstream segments are listed as impaired by phosphorus including a segment of the North Shore Channel near the O'Brien Plant outfall, a segment of the Little Calumet River near the Calumet Plant outfall, the Chicago River, Lake Depue, and Lake Senachwine. Env. Mot. at 4.

The parties dispute the significance of these impairment designations. The Agency notes that the Environmental Groups "fail to offer any supporting evidence" that phosphorus and nitrogen discharges from the plants will contribute to impairments. Ag. Resp. at 9. The District argues that these impairment designations were not based on Board-promulgated numeric water quality standards for phosphorus. Dist. Resp. at 13. Furthermore, the District claims that the Agency abandoned this approach as to phosphorus in 2012. *Id.*

However, the Agency stated, and the record does not contradict, that unnatural plant or algal growth has not been observed in the receiving stream segments. In the record, the Agency responded to public comments identifying the monitoring locations downstream of the plants. R. at 1334-1335. The Agency stated that "Agency biologists have not observed the presence of any unnatural plant or algal growth during the monitoring activities at these stations." *Id.* at 1335.

The Board finds that the 1.0 mg/L effluent limit on phosphorus imposed by the Agency in the permits is consistent with the Act and Board regulations. The Board has not set a numeric water quality standard for phosphorus or nitrogen which means that the Agency cannot derive a water quality-based effluent limit from a nonexistent standard. As to dissolved oxygen, the permit includes a minimum concentration requirement of 4.0 mg/L. Further, there is no information in the record to conclude that the 1.0 mg/L effluent limit on phosphorus or omission of a nitrogen limit would violate the standards for dissolved oxygen at 35 Ill. Adm. Code 302.206 and 302.405; unnatural sludge at 35 Ill. Adm. Code 302.403; or offensive conditions at 35 Ill. Adm. Code 302.203 in the receiving waters for the plants. To the contrary, the Agency's inclusion of the 1.0 mg/L limit will require the District to implement phosphorus removal technology and reduce phosphorus in effluent from current levels.

The Board views the Agency's designation of the receiving segment of the Chicago Sanitary and Ship Canal as impaired for phosphorus and dissolved oxygen as a factor in assessing whether phosphorus and nitrogen discharges from the Stickney Plant may cause a violation of water quality standards for dissolved oxygen or unnatural plant or algal growth. However, the record does not reflect that unnatural plant or algal growth is present in the Chicago Sanitary and Ship Canal. Accordingly, the record supports the Agency's decision that the 1.0 mg/L effluent limit on phosphorus is sufficient to prevent a violation of the cited water quality standards in the receiving water.

Also, the Board notes that the Agency determination is based on information from the District that the 1.0 mg/L limit on phosphorus represents a nearly fifty percent reduction in phosphorus discharge from the plants. Ag. Resp. at 10, citing R. at 1276. The District's plants are not new or expanding, and are not increasing nutrient loading. As such, much of the argument presented by the Environmental Groups based on the Dynegy facility or New Lenox facility is not relevant here. See Natural Resources Defense Council v. IEPA and Dynegy Midwest Generation, Inc. (Dynegy), PCB 13-17, slip op. at 37 (June 5, 2014); Des Plaines River Watershed Alliance v. Village of New Lenox, PCB 04-88, slip op. at 15 (April 19, 2007). The 1.0 mg/L limit on phosphorus, therefore, represents a reduction in phosphorus discharge under circumstances where there is no evidence of unnatural plant or algal growth in the direct receiving waters of the plants.

Compliance Schedule for Phosphorus Effluent Limit

As discussed above, the permits limit phosphorus in effluent from the District's plants to 1.0 mg/L. Each of the final permits contains a compliance schedule giving the District a number of years to meet the phosphorus limit of 1.0 mg/L: ten years for the O'Brien Plant; six years, five months for the Calumet Plant; and four years, one month for the Stickney Plant. R. at 3330-3332 (O'Brien Plant, Special Condition 19); Calumet Pet. Ex. 1 at 26 (Calumet Plant, Special Condition 19); R. at 2157-2158 (Stickney Plant, Special Condition 18). The Environmental Groups contend that the compliance schedules for phosphorus discharges are not justified. O'Brien Pet. at 8; Calumet Pet. at 8; Stickney Pet. at 8; Env. Br. at 19.

Environmental Groups' Argument

The Environmental Groups concede that Section 39(b) of the Act, 415 ILCS 5/39(b) (2012), allows the Agency to include compliance schedules in NPDES permits. O'Brien Pet. at 8; Calumet Pet. at 8, Stickney Pet. at 8; Env. Br. at 18-19. However, the Environmental Groups argue that the Agency has "presented no evidence" that the compliance schedules are appropriate and achieve compliance as soon as possible. *Id.*; see also Env. Reply at 22-24. Absent this justification, these compliance schedules in the permits are arbitrary and capricious. Env. Br. at 19. Accordingly, the Environmental Groups request that the Board remand the permits to the Agency "to either eliminate the compliance schedule or establish a compliance schedule that requires compliance with permit requirements at the earliest reasonable date." O'Brien Pet. at 8; Calumet Pet. at 8, Stickney Pet. at 8.

Agency's Argument

The Agency notes that the 1.0 mg/L limit on phosphorus in the permits will require the District to “modify existing infrastructure, make significant operational changes, and install new control devices to reduce phosphorus discharges.” Ag. Resp. at 10. The activities at the plants “will result in a nearly 50% reduction from current phosphorus loads from the Facilities.” *Id.* The Agency concludes that because the 1.0 mg/L limit on phosphorus is not required by the Act or Board regulation, “it is reasonable to include a compliance schedule for the Facilities to meet the Permits’ parameters for phosphorus.” *Id.*

District's Argument

The District notes that Section 39(b) of the Act allows compliance schedules to be included in a NPDES permit. Dist. Resp. at 14, citing 415 ILCS 5/39(b) (2012). Compliance is required at the earliest reasonable date. Dist. Resp. at 14. The District argues that the Environmental Groups “fail to point to any facts in support of their claim that compliance schedules in this case are unreasonable.” *Id.* at 15. The District contends that the Environmental Groups do not meet their burden to show that the compliance schedules are unreasonable and rather simply assert that the Agency has not justified the compliance schedules.

The District asserts that the compliance schedules corresponding to the 1.0 mg/L limit on phosphorus impose significant and detailed milestones. Dist. Resp. at 2, 15. Implementing the phosphorus effluent limit is complex, and the compliance schedule allows time to complete associated public works projects. *Id.* The District contends that the Environmental Groups “fail to identify any provision in the Act or the Board’s regulations that prohibit the timeframes allotted for the District’s compliance schedules.” Dist. Resp. at 2.

Board Analysis and Finding

As the parties note, Section 39(b) of the Act expressly allows the Agency to include compliance schedules in NPDES permits. 415 ILCS 5/39(b) (2012). NPDES permits must

contain those terms and conditions, including but not limited to schedules of compliance, which may be required to accomplish the purposes and provisions of the Act. 415 ILCS 5/39(b) (2012).

Section 309.148 of the Board’s regulations sets forth how the Agency establishes compliance schedules in NPDES permits. 35 Ill. Adm. Code 309.148. Section 309.148(a) begins by stating

[w]ith respect to any discharge which is not in compliance with applicable effluent standards and limitations, applicable water quality standards or other legally applicable requirements, the permittee shall be required to take specific steps to achieve compliance therewith in the shortest reasonable period of time consistent with the guidelines and requirements of CWA and the Act. 35 Ill. Adm. Code 309.148(a).

Section 309.148(g) further requires the Agency to

include in its final determination a statement of the factual basis for such schedule. 35 Ill. Adm. Code 109.148(g).

In the responsiveness summary, the Agency notes that it included compliance schedules for achieving the phosphorus limit in each of the permits. R. at 1324. The Agency also stated that the permits “include compliance schedules to provide the District necessary time to comply with the phosphorus limit” and that the District must submit semi-annual progress reports “until the phosphorus limit has been achieved.” *Id.* at 1333.

Sections 309.148(b)-(d) require the Agency to set interim deadlines for longer term compliance schedules and provide for reporting and enforcement of these interim deadlines. 35 Ill. Adm. Code 309.148(b)-(d). The Agency has set such interim deadlines in these permits. Specifically, the Agency set twenty interim deadlines within the ten-year schedule for the O’Brien Plant; thirteen interim deadlines in the six-year schedule for the Calumet Plant; and nine interim deadlines in the four-year schedule for the Stickney Plant. R. at 3330-3332 (O’Brien Plant, Special Condition 19); Calumet Pet. Ex. 1 at 26 (Calumet Plant, Special Condition 19); R. at 2157-2158 (Stickney Plant, Special Condition 18). Each of the compliance schedules includes numerous milestones for installation and construction necessary for complying with the phosphorus effluent limit in the permits. *Id.* The Agency further required the District to submit reports for each item in each compliance schedule setting forth the date the item was completed or notifying the Agency that the item was not completed. *Id.*

The District proposed similar compliance schedules to the Agency detailing milestones to implement enhanced biological phosphorus removal. *See, e.g.*, R. at 1160-1166 (letter dated October 26, 2011 from the District to the Agency); R. at 2063-2070 (letter dated November 21, 2011 from the District to the Agency). The District explained that “the guiding principle for this implementation is to remove and recover as much phosphorus (P) as possible with existing infrastructure, assuming that new infrastructure will be constructed for sidestream P recovery.” R. at 2063. The District also explained its analysis of chemical removal of phosphorus. *Id.* The District described the public works projects and investments needed to complete these projects over the time periods ultimately included in the permit compliance schedules. The Agency notes that it “agreed with [the District] that the aggressive phosphorus limit of 1.0 mg/L will require the Facilities to modify existing infrastructure, make significant operational changes, and install new control devices to reduce phosphorus discharges.” Ag. Resp. at 9-10, citing R. at 1273-1276.

The Board finds that the compliance schedules imposed by the Agency in the permits are consistent with the Act and Board regulations. Section 39(b) of the Act expressly allows the Agency to impose compliance schedules in NPDES permits. In accordance with Section 309.148 of the Board’s regulations, the Agency has imposed interim deadlines on achieving compliance with the phosphorus limit of 1.0 mg/L and required reports to the Agency on the status of meeting the deadlines. The record includes various documents noted above detailing the extensive public works projects needed at each of the three plants to comply with

the phosphorus limit and supporting the Agency's decision that the schedules constitute the shortest reasonable period to achieve compliance.

Sanitary Sewer Overflows

Each permit includes a special condition allowing the District to "work towards the goals of achieving no discharges from sanitary sewer overflows." R. at 3329-3330 (O'Brien Plant, Special Condition 18); Calumet Pet. Ex. 1 at 25 (Calumet Plant, Special Condition 18); R. at 2157 (Stickney Plant, Special Condition 17). The Environmental Groups contend that this language in each of the permits violates the Act because rather than clearly prohibiting sanitary sewer overflows, the language "creates unnecessary ambiguity." Env. Reply at 20.

Environmental Groups' Argument

The Environmental Groups contend that the permits fail to prohibit overflows from sanitary sewers. O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9; Env. Br. at 19-20. Section 306.304 of Board regulations provides that "overflows from sanitary sewers are expressly prohibited." 35 Ill. Adm. Code 306.304. The Environmental Groups note that a condition of the permits allows the District to "work towards the goals of achieving no discharges" from sanitary sewer overflows. O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9. The Environmental Groups argue that by not prohibiting sanitary sewer overflows, the permits violate Section 306.304. *Id.*

The Environmental Groups acknowledge that the permits each contain a standard condition requiring the District to comply with all applicable provisions of 35 Ill. Adm. Code Subtitles C, D, and E, which would include 35 Ill. Adm. Code 306.304. Env. Br. at 20, fn. 13. However, in the case of a conflict, the permits also provide that the special conditions control. Env. Br. at 20.

The Environmental Groups request that the Board remand the permits to the Agency to revise the permit "to clearly prohibit sanitary sewer overflows." O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9; Env. Br. at 20.

Agency's Argument

The Agency responds to the Environmental Groups' contention that the permits fail to prohibit overflows from sanitary sewers by noting that is not a reasonable interpretation of the permits. Ag. Resp. at 12. Board regulations expressly prohibit sanitary sewer overflows. *Id.* The Agency notes long-standing Illinois law providing that the grant of a permit does not insulate violators of the Act. Ag. Resp. at 13, citing Landfill, Inc. v. PCB, 74 Ill.2d 541, 559 (1978). Therefore, the Agency concludes that the Environmental Groups' argument that the permits could be construed as allowing sanitary sewer overflows is without merit and contrary to controlling law. Ag. Resp. at 13.

District's Argument

The District responds to the Environmental Groups' contention that the permits fail to prohibit overflows from sanitary sewers by noting that "nothing in the District's permits exempts the District from compliance with the prohibition on [sanitary sewer overflows]." Dist. Resp. at 2. The special conditions noted by the Environmental Groups "provide a plan for response and notification in case of a violation." *Id.* at 3. The District acknowledges that "the grant of a permit does not insulate permittees from enforcement actions for violating the Act." Dist. Resp. at 16, citing Landfill, Inc. v. PCB, 74 Ill.2d at 549.

Board Analysis and Finding

Section 306.304 of Board regulations provides that "overflows from sanitary sewers are expressly prohibited." 35 Ill. Adm. Code 306.304. Each permit includes a standard condition requiring the District to

comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction. R. at 3337 (O'Brien Plant, Standard Condition 27); Calumet Pet. Ex. 1 at 31 (Calumet Plant, Standard Condition 27); R. at 2162 (Stickney Plant, Standard Condition 27).

Section 306.304 is found in 35 Ill. Adm. Code Subtitle C titled "Water Pollution." Accordingly, this standard condition is an explicit reminder that the District is required to comply with the Board's regulations.

Each permit also includes a special condition requiring the District to

work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. R. at 3329-3330 (O'Brien Plant, Special Condition 18); Calumet Pet. Ex. 1 at 25 (Calumet Plant, Special Condition 18); R. at 2157 (Stickney Plant, Special Condition 17).

The special condition further requires the District to develop, implement, and submit to the Agency a Capacity, Management, Operations, and Maintenance Plan and itemizes elements required to be included in the plan. *Id.* The special condition requires the District to "work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events." *Id.*

This special condition responded to comments received during the public comment period. For example, the record included correspondence from local governments regarding basement backups and sanitary sewer overflows. *See, e.g.*, R. at 525-526, 817-818. In addition, the responsiveness summary addressed these concerns. *Id.* at 1331-1332, 1342-1344. Specifically, the Agency stated

Dry weather overflows are prohibited by the permits. In order to accomplish this goal, a special condition has been added to the permits requiring the District to develop, implement and submit a Capacity, Management, Operations, and Maintenance (CMOM) Plan. R. at 1342.

The Board finds that the special condition relating to sanitary sewer overflows imposed by the Agency in the permits is consistent with the Act and Board regulations. Section 306.304 of the Board's regulations prohibits overflows from sanitary sewers. The special condition requires a District plan to notify affected communities of an overflow event and response actions by the District. *See* R. at 3329-3330 (O'Brien Plant, Special Condition 18); Calumet Pet. Ex. 1 at 25 (Calumet Plant, Special Condition 18); R. at 2157 (Stickney Plant, Special Condition 17). The special condition does not allow or excuse overflows from sanitary sewers. This special condition directly responds to concerns raised by affected communities during the permit review. The Board sees neither ambiguity in the special condition nor any conflict with the prohibition on sanitary sewer overflows in Section 306.304.

Agency Response to Comments on Draft Permits

The Environmental Groups contend that the Agency failed to respond to public comments on drafts of the permits. O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9; Env. Br. at 22. They point to deficiencies in the Agency's responsiveness summary and the Agency's failure to reopen the public comment period after changes to the draft permits.

Environmental Groups' Arguments

The Environmental Groups note that they provided comments to the Agency during the public comment period that the permits should include a limit on nitrogen. O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9; Env. Br. at 22. The Environmental Groups argue that the Agency's responsiveness summary "ignored the nitrogen portion" of comments submitted by the Environmental Groups on the draft permits. Env. Br. at 24; *see also* O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9. The Environmental Groups request that the Board remand the permits to the Agency to "address [the Environmental Groups'] objections about the lack of nitrogen effluent limits." O'Brien Pet. at 10; Calumet Pet. at 10; Stickney Pet. at 9; *see also* Env. Br. at 24-25.

They further argue that the Agency "failed to address at all Petitioners' request for studies to determine the appropriate level of both nitrogen and phosphorus discharge from the Plants in order to establish a [water quality based effluent limit]." Env. Br. at 24. The Environmental Groups request "further studies and monitoring regarding the effects of nitrogen and phosphorus on downstream waters." O'Brien Pet. at 10; Calumet Pet. at 10; Stickney Pet. at 9; *see also* Env. Br. at 24-25.

The Environmental Groups point to 35 Ill. Adm. Code 166.192(a)(5) as requiring that the Agency's responsiveness summary include specific responses to significant comments submitted during the public comment period. O'Brien Pet. at 9; Calumet Pet. at 9; Stickney Pet. at 9; Env.

Br. at 22. The Environmental Groups note that Section 166.192(a)(5) is a regulation promulgated by the Agency and not by the Board. Env. Br. at 22. The Environmental Groups assert that the Agency is obligated to comply with 35 Ill. Adm. Code 166.192 and cannot ignore the rule. *Id.* at 23.

The Environmental Groups further argue that the Board is authorized to enforce 35 Ill. Adm. Code 166.192. Env. Br. at 23. If the Agency is not required to comply with the rule, Illinois will not be in compliance with federal law, specifically 40 C.F.R. § 124.17(a)(2). *Id.* The Environmental Groups note the Board's decision in Dynegy, PCB 13-17, slip op. at 37, declining to review the sufficiency of an Agency responsiveness summary, but "urge the Board to require IEPA to comply with all of the regulations that have been enacted under the Illinois Environmental Protection Act." Env. Br. at 24.

The Environmental Groups add an argument in their motion for summary judgment that the Agency failed to allow additional comments after making significant changes to the final permits. Env. Br. at 20-22. The Environmental Groups contend that the Agency violated 35 Ill. Adm. Code 309.120 when it made significant changes in the final permits issued to the District without allowing public comment on those changes. *Id.* at 21. The Environmental Groups argue that adding a 1.0 mg/L phosphorus limit in the final permits was not a logical outgrowth of the draft permits that contained no limits on phosphorus. *Id.* Rather, they should have been allowed to comment on the 1.0 mg/L limit, specifically to address why the limit is not a water quality based effluent limit as well as to show that the 1.0 mg/L limit is not protective. *Id.* The Environmental Groups also argue that they should have been given the opportunity to comment on sanitary sewer overflow language in the permit. *Id.* at 22.

Agency's Argument

The Agency contends that it sufficiently addressed all significant comments in the responsiveness summary. Ag. Resp. at 14. The Agency first notes that 35 Ill. Adm. Code 166.192(a)(5) sets forth the contents of an Agency responsiveness summary and is a regulation promulgated by the Agency not the Board. *Id.* at 14-15. The Agency acknowledges that it is obligated to respond to significant comments on a draft permit. *Id.* at 15. The Agency maintains that the responsiveness summary relating to the District's permits addressed comments submitted by Environmental Groups on phosphorus and nitrogen conditions in the draft permits. *Id.*

The Agency also argues that it was not required to allow "additional public comments following the inclusion of the 1.0 mg/L phosphorus limit in the final versions [of the permits]." Ag. Resp. at 16. The Agency claims that it complied with 35 Ill. Adm. Code 309.120. The Agency received public comment from the Environmental Groups on their concerns related to nutrient discharge and the Agency then modified the draft permits to include the 1.0 mg/L limit on phosphorus. This revision to the draft permits "represented a logical outgrowth of the comments received, resulting in a more stringent effluent limitation for nutrients, specifically phosphorus, than currently required by the Act or the Board regulations." *Id.*

Board Analysis and Finding

In a third party permit appeal, the Board must base its decision on the record before the Agency to determine if the permit as issued violates the Act or Board regulations. *See* 415 ILCS 5/40(e)(3)(ii) (2012). The Board will not limit the review of the Agency’s decision to reasoning articulated in a single document such as the Agency’s responsiveness summary. Des Plaines River Watershed Alliance, PCB 04-88, slip op. at 15, *aff’d New Lenox*, 386 Ill. App. 3d at 382. Rather, as detailed above, the Board has reviewed the entire Agency record in addressing the Environmental Groups’ specific challenges to conditions in the permits.

Similar to Dynegy, the Environmental Groups ask the Board to review the Agency’s responsiveness summary document for completeness. *See* Dynegy, PCB 13-17, slip op. at 44. The Board has reviewed the responsiveness summary in analyzing the specific permit conditions challenged by the Environmental Groups and cited to the summary as appropriate. However, the Board again declines to conduct a review of whether the document complies with 35 Ill. Adm. Code 166.192 and the list of required elements for a responsiveness summary. The Board is required to review the entire Agency record in deciding these permit appeals and is not limited to the responsiveness summary when discerning the reasoning for the Agency’s determinations.

The Environmental Groups also contend that the Agency violated 35 Ill. Adm. Code 309.120 when it made changes in the final permits issued to the District without allowing public comment on those changes. Env. Br. at 21. Section 309.120 titled “Reopening the Record to Receive Additional Written Comment” provides:

- (a) The Agency shall order the public comment period reopened to receive additional written comments where the Agency significantly modifies the draft permit and the final permit is not a logical outgrowth of the proposed draft permit. In determining if the final permit is a logical outgrowth of the draft permit, the Agency shall consider the following:
 - (1) Whether the interested parties could not have reasonably anticipated the final permit from the draft permit;
 - (2) Whether a new round of notice and comment would provide interested parties the first opportunity to offer comments on the issue; or
 - (3) Whether the provisions in the final permit deviate sharply from the concepts included in the draft permit or suggested by the commenters. 35 Ill. Adm. Code 309.120.

The Board adopted 35 Ill. Adm. Code 309.120 in 2004. Public Participation Rules in 35 Ill. Adm. Code 309 NPDES Permits and Permitting Procedures, R 03-19 (May 6, 2004). The rule was proposed by Environmental Law and Policy Center, Sierra Club, and Prairie Rivers Network, among others, in response to the appellate court opinion in Prairie Rivers Network v. PCB, 335 Ill. App. 3d 391, 401 (4th Dist. 2002), upholding the Agency’s decision to finalize a

NPDES permit without reopening the public comment period to solicit comments on changes in the final permit. Public Participation Rules, R 03-19, slip op. at 5, 29 (September 4, 2003). The rule borrows from a federal NPDES rule found at 40 C.F.R. § 124.14. *Id.* The federal rule sets forth a procedure for reopening the public comment period on a draft NPDES permit. *See* 40 C.F.R. § 124.14.

The Environmental Groups argue that adding a 1.0 mg/L phosphorus limit in the final permits was not a logical outgrowth of the draft permits that contained no limit on phosphorus. Env. Br. at 21. They argue that they should have been allowed to comment on the 1.0 mg/L limit, as well as given the opportunity to comment on sanitary sewer overflow language in the permit. *Id.* at 21-22. However, both of these issues were raised during the public comment period and then addressed in the final permit as logical outgrowths of the draft permits.

For example, on December 11, 2009, the Environmental Law and Policy Center submitted comments relating to the permit for the Stickney Plant on behalf of Friends of the Chicago River, Alliance for the Great Lakes, Natural Resources Defense Council, Gulf Restoration Network, Prairie Rivers Network, and Sierra Club. R. at 2051-2062; *see also id.* at 2520-2526 (similar letter relating to Calumet Plant); R. at 3073-3080 (similar letter relating to the O'Brien Plant). As to phosphorus and nitrogen discharges, these commenters stated that the permit "should include limits on phosphorus and nitrogen that require removal of these pollutants and/or require systemic measures to reduce the plant's phosphorus discharges." R. at 2053. After the hearing, the Environmental Law and Policy Center, on behalf of Friends of the Chicago River, Alliance for the Great Lakes, Natural Resources Defense Council, Gulf Restoration Network, Prairie Rivers Network, and Sierra Club, submitted additional comments to the hearing officer on April 8, 2010. *Id.* at 3817-3829. These commenters stated:

Accordingly, limits on the discharge of phosphorus and nitrogen that will prevent such discharges from violating standards are necessary or at least a compliance plan must be developed pursuant to 40 CFR § 122.47. IEPA may not ignore nitrogen and phosphorus pollution simply because it has not yet developed numeric standards for these pollutants. R. at 3822.

As for overflows from sanitary sewers, this topic also was raised during the public comment period. The record included correspondence from local governments regarding basement backups and sanitary sewer overflows. *See, e.g.*, R. at 525-526, 817-818. In addition, the responsiveness summary addressed these concerns. *Id.* at 1331-1332, 1342-1344.

The final permits included an effluent limit of 1.0 mg/L for phosphorus discharges and related compliance schedules. R. at 3313, 3330-3332 (O'Brien Plant); Calumet Pet. Ex. 1 at 6, 25; R. at 2138, 2157 (Stickney Plant); *see also* Env. Br. at 7; Dist. Resp. at 5; Ag. Resp. at 8. Each permit also included a special condition relating to sanitary sewer overflows. R. at 3329-3330 (O'Brien Plant, Special Condition 18); Calumet Pet. Ex. 1 at 25 (Calumet Plant, Special Condition 18); R. at 2157 (Stickney Plant, Special Condition 17). Each of these conditions was a response by the Agency to the concerns raised by commenters on the draft permits. The commenting entities could reasonably anticipate that the Agency would address their concerns as found in the final permits. The Agency responded to the Environmental

Groups' comments by including an effluent limit on phosphorus and responded to municipalities by including a provision providing notice of sanitary sewer overflows. A new round of notice and comment would not provide the first opportunity to comment on these issues because, as explained above, commenters already commented on these issues.

CONCLUSION

The Board finds that summary judgment is appropriate. Based on this record, the Board finds that the Environmental Groups have not met their burden of proof of establishing that the challenged conditions in the permits issued by the Agency violated the Act or Board regulations. The Agency's condition to limit phosphorus discharges to 1.0 mg/L is consistent with the Board's interim effluent standard and acceptable to prevent a violation of dissolved oxygen standards as well as to prevent offensive or unnatural plant or algal growth in the receiving waters of the three District plants. The Board further finds that the Agency's imposition of compliance schedules to meet the phosphorus effluent limit is authorized by the Act and that the permits appropriately prohibit overflows from sanitary sewers. The Board also declines to review whether the Agency's responsiveness summary complies with 35 Ill. Adm. Code 166.192.

The Board finds that the permit conditions challenged in this proceeding do not violate the Act or Board regulations. The Board affirms the permits issued by the Agency for the District's plants. Nothing in the Board's opinion precludes enforcement against the District for violating any applicable water quality standard. Further, the Board encourages the Agency to continue its strategy to assess and reduce nutrient loss to Illinois waters and the Gulf of Mexico.

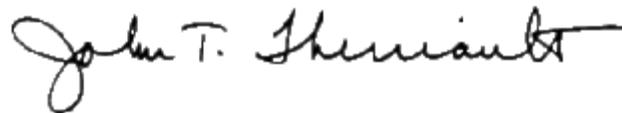
ORDER

The Board grants summary judgment to respondents and denies summary judgment to petitioners. The Board lifts the stay granted on June 19, 2014 and closes the docket.

IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2012); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on December 18, 2014, by a vote of 4-0.

A handwritten signature in black ink, reading "John T. Therriault". The signature is written in a cursive style with a long horizontal flourish extending to the right.

John T. Therriault, Clerk
Illinois Pollution Control Board