

ILLINOIS POLLUTION CONTROL BOARD
December 15, 2011

IN THE MATTER OF:)
)
WATER QUALITY STANDARDS AND) R08-9 (Subdocket B)
EFFLUENT LIMITATIONS FOR THE) (Rulemaking - Water)
CHICAGO AREA WATERWAY SYSTEM)
AND LOWER DES PLAINES RIVER:)
PROPOSED AMENDMENTS TO 35 ILL.)
ADM. CODE 301, 302, 303, and 304)

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by D. Glosser):

SUMMARY OF TODAY'S ACTION

The Board proposes for second notice a rule establishing an effluent limit for fecal coliform colony forming units (CFU) during the months of March 1 through November 30 for effluent discharges to Primary Contact Recreation water segments of the Chicago Area Waterway System (CAWS) and Lower Des Plaines River (LDPR). Those segments are 1) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River; 2) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River; 3) Chicago River; 4) South Branch of the Chicago River; 5) Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and 6) Calumet-Sag Channel. The Board finds that the rule proposed is economically reasonable and technically feasible.

The Board declines at this time to establish an effluent limit for other segments of the CAWS and LDPR that are designated as Incidental Contact Recreation, Non-contact Recreation, and Non-Recreation waters.

The Board, in consideration of comments received, will adopt bacterial water quality standards for the CAWS and LDPR but only as to those waters designated as Primary Contact Recreation waters. The Board cannot propose bacterial standards at second notice in R08-9 Subdocket B as the sections of the rule that need to be amended to adopt bacterial standards (Sections 303.204 and 303.220) were not proposed in the *Illinois Register* for first notice. See 5 ILCS 100/5-40 (2010). Those sections will be amended in R08-9 Subdocket C to reflect the Board's findings on the bacterial water quality standards in this opinion and order.

The Board's opinion begins by relating the procedural background. The Board next summarizes the statutory background followed by a summary of the first notice opinion and order. The Board next summarizes the public comments received. Finally, the Board discusses its decision.

PROCEDURAL BACKGROUND

The procedural background for this proceeding pre-first notice will be summarized first. Next, the Board will provide the procedural background after first notice.

Pre-First Notice

On October 26, 2007, the Illinois Environmental Protection Agency (IEPA) filed a proposal under the general rulemaking provisions of Sections 27 and 28 of the Environmental Protection Act (Act) (415 ILCS 5/27, 28 (2010)). Generally, the proposal amends the Board's rules for Secondary Contact and Indigenous Aquatic Life Uses to update the designated uses and criteria necessary to protect the existing uses of the CAWS and the LDPR. On November 1, 2007, the Board accepted the proposal for hearing. On November 15, 2007, the Board granted a motion to hold hearings in Chicago and Joliet that accompanied the proposal.

On June 12, 2008, the Metropolitan Water Reclamation District of Greater Chicago (District) filed a motion to stay the rulemaking proceeding, which was supported by: 1) Midwest Generation, 2) Chemical Industry Council of Illinois (CICI), and 3) Stepan. On June 25, 2008, the Environmental Law and Policy Center, Friends of the Chicago River, Sierra Club Illinois Chapter, Natural Resources Defense Council and Openlands (Environmental Groups) filed a response in opposition to the motion. Joining in the opposition to the motion was Southeast Environmental Task Force (SETF), the People of the State of Illinois (People), and IEPA. On July 21, 2008, the Board denied the motion to stay and directed the parties to proceed with additional hearings already scheduled.

On March 18, 2010, the Board granted a motion filed by Citgo/PDV for an additional hearing on Asian Carp, but delayed that hearing until later in 2010. The Board also granted a motion filed by the Environmental Groups to sever the dockets. The Board severed the dockets as follows: 1) subdocket A deals with the issues related to recreational use designations, 2) subdocket B addresses issues relating to disinfection and whether or not disinfection may or may not be necessary to meet those use designations, 3) subdocket C addresses the issues involving proposed aquatic life uses, and 4) subdocket D addresses the issues dealing with water quality standards and criteria which are necessary to meet the aquatic life use designations.

The Board held 39 days of hearing as of March 18, 2010, when the docket was divided, and additional hearings proceeded in this docket and continue to proceed in the remaining subdockets. Hearings were held in Chicago: January 28, 2008 through February 1, 2008, June 16, 2008, September 8, 2008 through September 10, 2008, September 23, 2008 through September 25, 2008, February 17 and 18, 2009, March 3 and 4, 2009, April 15, 2009, May 5, 6, and 20, 2009, July 28 and 29, 2009, August 13 and 14, 2009, October 5, 2009, November 9 and 10, 2009, and January 13 and 14, 2010. Hearings were held in Joliet: March 10, 2008 through March 12, 2008, October 27 and 28, 2008 and November 17, 2008. Hearings were held in Des Plaines: April 23 and 24, 2008, and December 2 and 3, 2008.

In the March 18, 2010 order, the Board instructed the Hearing Officer to schedule a hearing in June on the Chicago Health Environmental Exposure and Recreation Study (CHEERS) being prepared by the District. The Board held additional hearings on the CHEERS report in Chicago on June 29 and 30, 2010.

On August 5, 2010, the Board ruled on a motion filed by the District to hold additional hearings in this subdocket concerning the final report on the CHEERS. IEPA, the People and Environmental Groups opposed the request for additional hearings. The Board granted the motion and directed the hearing officer to schedule hearings on the CHEERS final report and to schedule final comments in this matter expeditiously, but in no event to conclude later than December 31, 2010. The Board held additional hearings in Chicago on October 19 and 20, 2010.

On November 4, 2010, the Board denied the People's motion to bar the District from submitting a supplement to CHEERS. The Board noted that the Board would accept all relevant information in Subdocket B submitted by December 31, 2010, including any filings by the District.

On January 3, 2011, in response to a motion by the Environmental Groups and the resulting reply by the District, the Board allowed responses to final comments to be filed by January 31, 2011, and replies to be filed by February 15, 2011.

Not all the testimony received during the 43 days of hearing is relevant to this subdocket. Those whose testimony is relevant are the following:

Rob Sulski of IEPA (Exhibit 1)
Scott Twait of IEPA (Exhibit 2)
Richard Lanyon of the District (Exhibit 60)
Chris Petropoulou of the District (Exhibit 68)
Charles P. Gerba of the District (Exhibit 69)
Keith Tolson of the District (Exhibit 70)
Earnest R. Blatchley III on behalf of the District (Exhibit 93)
Susan O'Connell of the District (Exhibit 112)
Geeta Rijal of the District (Exhibit 113)
Adrienne D. Nemura on behalf of the District (Exhibit 116)
Stephen F. McGowan on behalf of the District (Exhibit 133)
Charles Haas on behalf of the District (Exhibit 144)
David R. Zenz on behalf of the District (Exhibit 146)
Thomas E. Kunetz of the District (Exhibit 153)
John Mastracchio on behalf of the District (Exhibit 159)
Peter Orris, M.D., M.P.H on behalf of the Environmental Groups (Exhibit 234)
Dr. William Van Bonn on behalf of the Environmental Groups (Exhibit 240)
Dr. Marylynn V. Yates on behalf of the Environmental Groups (Exhibit 249)
Margaret Frisbee of the Friends of the Chicago River (Exhibit 259)
Dr. Kevin J. Boyle on behalf of the People (Exhibit 286)
Carl E. Adams Jr. and Robin Garibay on behalf of Stepan Company (Exhibit 318)
Thomas Granato of the District

Sharon Bloyd-Peshkin on behalf of the Environmental Groups (Exhibit 419)
 Samuel Dorevitch on behalf of the District (Exhibit 100, 382, 398)
 Marc H. Gorelick on behalf of the Environmental Groups (Exhibit 233, 390, 415)

In addition to hearing testimony, the Board received over 419 exhibits and over 1000 public comments, prior to proceeding to first notice. Not all comments and exhibits are relevant to a determination of effluent disinfection, and therefore will not be listed. Further, many public comments consist of one page or less comments from numerous individuals. Those comments are: PC 307-483, 485-490, 492-494, 501-504, 506-551, 557-558 573-578, 585 -972, 974-993, 995-1002, 1004-1007, 1012-1056. Those comments all support disinfection of the effluent. The public comments from participants are:

IEPA PC 568, 1003
 The People PC 566
 The Environmental Groups PC 564, 579, 582, 973
 United States Environmental Protection Agency (USEPA) PC 561, 580, 584, 994
 The District PC 300, 300A, 484, 478, 556, 562, 565, 567, 581, 583, 1010

First Notice

On July 7, 2011, the Board proposed the rule for first notice. The proposed rule was published in the *Illinois Register* on July 29, 2011. See 31 Ill. Reg. 12634 (July 29, 2011). The Board held an additional hearing on October 27, 2011. The purpose of the hearing was solely to satisfy the requirements of Section 27(b) of the Act. Section 27(b) of the Act requires the Board to request the Department of Commerce and Economic Opportunity (DCEO) to conduct an economic impact study on certain proposed rules prior to adoption of those rules. The Board requested, by letter dated July 7, 2011, that DCEO conduct an economic impact study for the above-referenced rulemakings. The Board did not receive a response to that letter. No comments were made at the hearing regarding DCEO's decision.

In addition to the hearing, the Board received numerous additional public comments. Comments PC 1057 - 1151 and PC 1156-1213 supported disinfection with two exceptions. PC 1060 and PC 1120 offered suggestions on cleaning up the waterways. Participant filed the following comments:

IEPA PC 1152
 The Environmental Groups PC 1155
 The District PC 1153
 Joint Statement from IEPA, the Environmental Groups and the District PC 1154
 USPEA PC 1214

STATUTORY BACKGROUND

The IEPA's proposal was filed as a regulatory proposal of general applicability pursuant to Sections 27 and 28 of the Act (415 ILCS 5/27, 28 (2010)) and as a general rulemaking pursuant to Section 5-40 of the Illinois Administrative Procedure Act (5 ILCS 100/5-40 (2010)).

SR at 2. Pursuant to Section 27(a) of the Act (415 ILCS 5/27(a) (2010)), the Board is required to take into account “the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of the existing air quality or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.” 415 ILCS 5/27(a) (2010).

SUMMARY OF FIRST-NOTICE PROPOSAL

The Board will summarize the first-notice proposal by first describing the Board’s first-notice action on Primary Contact Recreation waters. The Board will next summarize the Board’s decision at first notice on Incidental Contact waters and Non-Contact and Non Recreation waters. The Board will conclude a summary of the first notice proposal by restating the Board’s findings on the economic reasonableness and technical feasibility of the proposed rule.

Primary Contact Recreation Waters

The major issue decided by the Board at first notice was whether or not either water quality standards or effluent limits for waterborne human pathogens are necessary to protect the recreational use designations made in Subdocket A. When drafting rules to protect the Primary Contact Recreation use designation, the Board looked to existing regulations for General Use waters of the State for guidance. *See e.g.* 35 Ill. Adm. Code 302.209, 304.121. The Board has established both water quality standards and effluent standards for General Use waters of the State and these waters are protected for primary human contact. Section 304.121 establishes an effluent standard of 400 fecal coliform (CFU) per 100 mL for discharges to General Use waters. 35 Ill. Adm. Code 304.121. Section 302.209 sets a water quality standard for fecal coliform that prohibits any exceedance of a geometric mean of 200 CFU per 100 mL. Not more than 10 percent of the samples during any 30 day period may exceed 400 CFU per 100 mL in protected waters. 35 Ill. Adm. Code 302.209. Protected waters include waters that presently support or have the physical characteristics to support primary contact. *Id.*

Given the uncertainty associated with the water quality criteria for primary contact recreation at the federal level, the Board declined to develop a water quality standard for human pathogens for the Primary Contact Recreation segments of the CAWS at first notice. The only statements in the record supporting a specific water quality standard are the comments of IEPA and USEPA urging the Board to adopt the water quality standard at Section 302.209 that applies to General Use waters. At first notice, IEPA and USEPA had not presented supporting evidence beyond their statement. The Board invited the participants to provide comments on whether the Board should adopt the existing water quality standard for CAWS and the LDPR before proceeding to second notice.

Most of the testimony and comment in the R08-9 rulemaking addressed the proposed effluent standard for discharges of fecal coliform into the CAWS and LDPR. The Agency proposed the fecal coliform effluent standard for Incidental Contact and Non-Contact Recreation waters. At first notice, the Board found that the IEPA’s proposed effluent limit may appropriately be considered for Primary Contact Recreation waters since that limit is based on

the effluent fecal coliform standard for General Use waters. The record addressing effluent standards, the present uncertainty in the scientific community regarding bacteria water quality standards, and USEPA's plan to issue guidance in 2012, led the Board to find that an effluent limit is the best method to protect the six segments of the CAWS designated for Primary Contact Recreation at first notice. The Board proposed the same effluent discharge limits of 400 colony forming units (fecal coliform) per 100 mL of water that is the current effluent discharge limit for General Use waters for those six segments designated as Primary Contact Recreation.

The Board next addressed the effective date of the proposed effluent limit for fecal coliform. In proceeding to first notice, the Board did not choose a compliance date. The Board expected the participants to update the record and clarify what compliance schedule is appropriate. The Board anticipated that a date between March 1, 2015 and March 1, 2020, would be appropriate.

After consideration of the record, the Board proposed for dischargers to Primary Contact Recreation waters, the following rule language:

Section 304.224 Effluent Bacteria Standards for Discharges to the Chicago Area Waterway System and Lower Des Plaines River

Effluent discharges to the Primary Contact Recreation waters listed in 35 Ill. Adm. Code 303.220 must not exceed 400 CFU fecal coliform per 100 ml from March 1 through November 30. All effluents in existence on or before the effective date of this Section must meet these standards. All new discharges must meet these standards upon initiation of discharge.

Incidental Contact Recreation

The record for establishing an effluent standard for Incidental Contact Recreation is not as convincing as for Primary Contact Recreation. Therefore, the Board did not require discharges into Incidental Contact waters to meet an effluent discharge limit for bacteria at first notice. The Board did indicate that when USEPA has provided guidance for drafting water quality standards in 2012, the Board invites the IEPA to propose bacteria water quality standards for the CAWS and LDPR that will be protective of Incidental Contact Recreation.

Non-Contact Recreation and Non-Recreation

The segments of the CAWS and LDPR designated for Non-Contact Recreation and Non-Recreation will have less human contact with the water than segments designated as Incidental Contact Recreation. Therefore, since the Board is not establishing an effluent limit for Incidental Contact waters, the Board declined to establish an effluent limit for Non-contact Recreation and Non-Recreation water segments in this rulemaking

Economic Reasonableness and Technical Feasibility

The Board found that compliance with the proposed bacterial effluent standard for the District's plants is technically feasible based on the record. Further, after a careful review of the economic information in this proceeding, the Board found that disinfection is economically reasonable for the District's effluent, particularly for the North Side and Calumet plants.

SUMMARY OF PUBLIC COMMENTS

As noted above the Board has received a substantial number of public comments supporting the proposed disinfection of the effluent discharged by the District. The Board is grateful to all those who took the time to file comments that express their support for the rulemaking. The Board will not individually note all the commenters, but rather will concentrate on the comments by the participants. The Board will first summarize the joint statement filed by the IEPA, the District, and the Environmental Groups (PC 1154) and then the IEPA's final comment (PC 1152). Next, the Board will summarize the District's final comment (PC 1153) and the Environmental Groups comment (PC 1155). The Board will conclude with the comment filed by USEPA (PC 1214)

Joint Statement (PC 1154)

The IEPA, the District, and the Environmental Groups jointly filed a statement indicating that they had reached agreement on certain areas that the Board had sought comment on at first notice. Those areas are: criteria for Primary Contact Recreation waters, technology-based effluent limitation for disinfection, schedule for commencement of disinfection, and the Stickney wastewater reclamation plant (WRP). PC 1154 at 1-3.

Bacterial Water Quality Standard for Primary Contact Recreation waters

The joint statement indicates that a bacterial water quality standard for Primary Contact Recreation waters should be established, consistent with the Board's General Use Water Quality Standard at 35 Ill. Adm. Code 302.209. PC 1154 at 2. That standard proposed is:

based on a minimum of five samples taken over not more than a 30 day period, fecal coliform (STORET number 31616) shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30 day period exceed 400 per 100 ml. PC 1154 at 2.

Technology Based Effluent Limitation for Disinfection

The joint statement proposes an effluent limit as follows:

If less than 10 samples are taken in a month, the standard should be 400 CFU/100 mL. If 10 or more samples are taken in a month, the standard should require compliance with a 30-day geometric mean not to exceed 200 CFU/100 mL fecal coliform, with no more than 10% of samples exceeding 400 CFU/100 mL in any

30- day period. This standard for facilities sampling 10 or more times per month, applicable at two of District’s three suburban water reclamation plants (WRPs), is intended to address occasional outlier effluent samples. The permits for the North Side and Calumet WRPs should require fecal coliform sampling 5 times per week. PC 1154 at 2.

Schedule for Commencement of Disinfection

The joint statement comments that the final rule should require disinfection to begin no later than the beginning of the 2016 recreational season. PC 1154 at 2. The joint statement clarifies that this deadline should be met unless:

delay is made necessary by circumstances beyond the discharger’s reasonable control, including but not limited to (i) Acts of God, (ii) wars or insurrections, or (iii) failure of the discharger’s suppliers, subcontractors, or carriers to meet contractual performance obligations. Dates by which performance obligations are scheduled to be met will be extended for a period of time equal to the time lost due to any delay, and the discharger shall take all reasonable steps to minimize the length of the delay. *Id.*

The joint statement requires the discharger to “promptly” inform the IEPA and the Environmental Groups of the reasons for the delays and specify a revised completion date. PC 1154 at 3. The joint statement requires these provisions be included in the North Side and Calumet WRP permits. *Id.*

Disinfection at the Stickney WRP

The joint statement indicates the parties’ agreement that effluent disinfection need not be required for the Stickney WRP at this time¹. PC 1154 at 3. Further, at this time, the statement does not recommend the adoption of any numeric water quality criteria for waters that are the subject of this rule and not designated by this rulemaking as Primary Contact Recreation waters. *Id.* The joint statement notes that the IEPA intends to revisit the need for disinfection at the Stickney WRP, and the need for numeric water quality criteria for Incidental Contact Recreation waters. *Id.*

IEPA Comment (PC 1152)

The IEPA identified four issues from the Board’s first-notice opinion and order. Those issues are:

- 1) whether the Board should adopt the existing General Use fecal coliform water quality standard for Primary Contact Recreation waters;

¹ Stickney WRP’s effluent is discharged into waters classified as Incidental Contact Recreational Use waters.

- 2) whether the Board should adopt an effluent disinfection limitation for Incidental Contact Recreation waters;
- 3) dates for the recreational season; and
- 4) justifying the effective date of compliance for effluent disinfection. PC 1152 at 3.

The Board will summarize the IEPA's comments on each of these four issues.

Adoption of the General Use Water Quality Standard for Primary Contact Recreation Waters

The IEPA urges the Board to adopt regulatory language applying the General Use fecal coliform bacteria water quality standard to Primary Contact waters. PC 1152 at 3. The IEPA states that the Federal Water Pollution Control Act (Clean Water Act or CWA) (33 U.S.C. § 1313) requires "some type of water quality standards for waterborne human pathogens." *Id.* The IEPA notes that the IEPA has "consistently taken the position that the current available scientific information is insufficient to determine the level of bacteria contamination that would be protective of incidental and non-contact recreational uses." *Id.* Absent a water quality standard, the IEPA proposed a technology-based effluent limit for dischargers to incidental and non-contact recreational waters. PC 1152 at 4. The IEPA points out that the Board noted the lack of a record for establishing a water quality standard; however, the IEPA notes that the Primary Contact Recreation designation recognizes the ability of six segments of the CAWS to achieve the CWA recreational use goal. *Id.*

The IEPA acknowledges that the existing numeric bacteria standard is out of date and will need to be updated in the "foreseeable future". PC 1152 at 4. The IEPA believes it is appropriate to delay adoption of water quality criteria for the CAWS and LDPR designated as Incidental Contact and Non-Contact Recreation until adequate science is available. *Id.* The IEPA also believes revision of the existing General Use water quality standard will be postponed until USEPA finalizes planned revisions. *Id.* However, the IEPA opines that given the designation of six segments of CAWS for Primary Contact, adoption of the General Use water quality standard is "necessary and appropriate". PC 1152 at 5.

To make the General Use water quality standards applicable, the IEPA recommends that the Board amend the existing regulatory language in Section 303.204 as follows:

The Chicago Area Waterway System and Lower Des Plaines River Waters are designated to protect for primary contact recreation, incidental contact or non-contact recreational uses (except where designated as non-recreational waters) and commercial activity (including navigation and industrial water supply uses) limited only by the physical condition of these waters and hydrologic modifications to these waters. These waters are required to meet the secondary contact and indigenous aquatic life standards contained in 35 Ill. Adm. Code 302. Subpart D, but are not required to meet the general use standards or the public and

food processing water supply standards of 35 Ill. Adm. Code 302.Subpart B and C, except that the waters designated as Primary Contact Recreation Waters in Section 303.220 must meet the numeric water quality standard for fecal coliform bacteria applicable to protected waters in 35 Ill. Adm. Code 302.209. Designated recreational uses for each segment of the Chicago Area Waterway System and Lower Des Plaines River are identified in this Subpart. PC 1152 at 5-6.

The IEPA also recommends that Section 303.220 be amended to read:

The following waters are designated as Primary Contact Recreation Waters and must be protected for Primary Contact Recreation uses as defined in 35 Ill. Adm. Code 301.323. These waters must meet the numeric water quality standard for fecal coliform bacteria applicable to protected waters in 35 Ill. Adm. Code 302.209.

- a) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River;
- b) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River;
- c) Chicago River;
- d) South Branch of the Chicago River;
- e) Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and
- f) Calumet-Sag Channel. PC 1152 at 6.

Disinfection Standards for Incidental Contact Recreation Waters

In the original IEPA proposal, IEPA proposed an effluent disinfection limit for discharges into the proposed Incidental Contact Recreation waters; however, the Board did not propose at first notice an effluent limit for dischargers to Incidental Contact Recreation waters. PC 1152 at 6-7. IEPA opines that one consequence of the Board's decision is that fewer dischargers will be required to disinfect. PC 1152 at 7. IEPA states that in order to narrow issues before the Board, certain participants have agreed that disinfection of the effluent from the District's Stickney WRP is not necessary "at this time". *Id.* However, IEPA notes that this may need to be reevaluated in the future based on recreational activity. *Id.* The IEPA still believes that Incidental Contact Recreation waters should be protected from waterborne human pathogens and plans to propose standards when more scientific information is available. *Id.*

Recreation Season Dates

The IEPA believes that the proposed dates for disinfection of discharges to the CAWS and LDPR of March through November are consistent with the General Use fecal coliform water quality standard proposed for Primary Contact Recreation waters. PC 1152 at 8. The IEPA acknowledges the Board's concern that there is an apparent discrepancy between the language proposed in the Board's first notice Section 303.224 and the dates in the General Use provisions at Section 302.209. PC 1152 at 9.

First, the IEPA notes that the record does contain evidence that recreation is occurring on waters designated for Primary Contact Recreation during the months of March through November, albeit incidental contact recreation. PC 1152 at 8. Further, the IEPA explains that the language parallel to the proposed Section 303.224 is found in Section 304.121(a) which provides: "[e]ffluents discharged to all general use waters shall not exceed 400 fecal coliform per 100 ml unless the Illinois Environmental Protection Agency determines that an alternative effluent standard is applicable pursuant to subsection (b)." PC 1152 at 9, 35 Ill. Adm. Code 304.121(a). The IEPA points out that subsection (b) establishes criteria for dischargers to obtain a seasonal or year round disinfection exemption. *Id.*

The IEPA states that while the water quality standard in Section 302.209 applies only to protected waters from May through October, dischargers to General Use waters must disinfect year round unless an exemption has been given. PC 1152 at 9. The IEPA opines that the Board's proposed language in Section 304.224 creates two types of disinfection exemptions in the CAWS and LDPR. The first is a year-round exemption "implicitly created for dischargers to" Incidental Contact Recreation, Non-Contact Recreation and Non-recreation waters. PC 1152 at 10. The second exemption is that dischargers to Primary Contact Recreation waters will not need to disinfect from December through February, while dischargers to General Use waters must apply to IEPA for an exemption based on Section 304.121(b). *Id.* IEPA "is confident" that the Use Attainability Analysis (UAA) process has included an analysis of the factors that would be addressed in a General Use exemption petition such that the seasonal disinfection exemption for the months December through February codified in Section 304.224 would be justified. *Id.*

The IEPA states that based on the evidence of recreation activity in March and November a longer recreation season is warranted. PC 1152 at 11. The IEPA believes that there "is not an inherent inconsistency in referencing the March through November dates for the purpose of providing necessary water quality protection for Primary Contact Recreation waters" and establishing a disinfection effluent standard tailored to the specific waters at issue. *Id.*

Effective Date of Compliance With Disinfection

The IEPA joins in the proposed compliance date of the 2016 recreational season. IEPA explains that in the original proposal a three year compliance deadline was proposed because that is a common timeframe in NPDES permits for compliance with water quality based effluent limits. PC 1152 at 11-12. The IEPA has concluded that a four year compliance period is justified because of the District's need for pilot testing and evaluation of issues followed by design and construction. PC 1152 at 12.

The IEPA notes that the District has provided a compliance schedule (PC 1152 at 12, Attach A) that allows for an investigation phase to be completed by March 2012. A design phase will be completed from April 2012 to March 2013 and construction from April 2013 to November 2015. *Id.* This would allow for disinfection to be commenced as early as December 2015. PC 1152 at 12. The IEPA anticipates including this schedule or one very similar in permits for the North Side and Calumet WRPs. To insure compliance with this date, the IEPA proposes:

Effluents discharged to the Primary Contact Recreation waters listed in 35 Ill. Adm. Code 303.220 must not exceed 400 fecal coliform per 100 mL from March 1 through November 30. All effluents in existence on or before the effective date of this Section must meet these standards no later than four years after the effective date of this Section. All new discharges must meet these standards upon the initiation of discharge. PC 1152 at 13.

District Comment (PC 1153)

The Board will summarize the District comment to explain its position on the unresolved issue regarding the months in which disinfection. The Board will then summarize the District additional comments on the issues discussed in the joint statement.

Disinfection Required for May through October

The District notes that there is agreement, reflected in the joint statement, that the numeric bacteria water quality standards that applies to General Use waters should also apply to Primary Contact Recreation waters. PC 1153 at 2. The District points out that those standards are set forth in Section 302.209, which requires that during the months of May through October the standards apply. *Id.*, 35 Ill. Adm. Code 302.209. The District states that the water quality standard of Section 302.209 will apply, but the joint statement is silent on the time period that the water quality standard will apply. PC 1153 at 3. The District opines that “it is both reasonable and consistent with relevant Illinois regulations” that the District only be required to disinfect the discharges from North Side and Calumet WRP in May through October. *Id.*

The District points out that the IEPA and the Environmental Groups assert that disinfection should occur March through November because recreational activities begin earlier and end later than the timeframe set forth in General Use waters. PC 1153 at 3. The District states: “[i]t is imperative to remember that the basis for disinfection in the first instance is the Primary Contact Recreation waters designation.” *Id.* The District offers that disinfection should therefore take place during the timeframe that the regulations have determined primary contact is occurring and there is no evidence that such activities occur in CAWS during March, April, and November. *Id.* The District opines that disinfection should not then be required during those months.

Joint Statement

Effective Date of Proposed Effluent Limit. The District has agreed to complete installation of equipment for disinfection at the North Side and Calumet facilities by December 31, 2015. The District has a four-phase plan for investigation, design, bidding, and construction. PC 1153 at Attach A. This would allow disinfection to begin in the 2016 recreation season. PC 1153 at 4. The District does request that a clause be included which would allow for adjustments to be made to the effective date of the proposed effluent limit in case of unforeseen circumstances resulting in a delay. PC 1153 at 4-5.

Disinfection at the Stickney WRP. The District notes that the participants have agreed that disinfection is not required at the Stickney WRP at this time. PC 1153 at 5. The District further notes that the Board concluded that establishing an effluent limit for discharges into waters designated for Incidental Contact Recreation and Non-contact recreation was not warranted at this time. *Id.* The District opines that the Board's conclusion was a reasonable conclusion and supported by scientific information that the District provided. *Id.* Specifically, the District states that it has provided scientific information on the health effects from recreating on and in the CAWS as well as evidence concerning the costs of disinfection at the Stickney WRP. *Id.* The District comments that based on the information provided, "it is logical to conclude" that disinfection of the Stickney WRP effluent is not necessary to serve the purposes of the Act. *Id.*

The District points to the research performed for the District and presented to the Board in this rulemaking and notes that both support the Board's decision not to require disinfection at Stickney's WRP. Those two reports are: 1) "Dry and Wet Weather Microbial Risk Assessment of Human Health Impacts of Disinfection vs. No Disinfection of the Chicago Area Waterways System", April 2008 (Microbial Risk Assessment) (Exh. 71); and 2) CHEERS (PC 478). The District notes that the Microbial "Risk Assessment concluded that low pathogen levels in the District plants' effluents and in the CAWS downstream of those plants posed minimal risk for gastrointestinal illness associated with recreational use on the CAWS." PC 1153 at 6. Further, the District opines that CHEERS makes clear that "disinfection is not necessary to support the Incidental Contact and other uses proposed for the reaches of the CAWS" impacted by the discharge from the Stickney WRP. PC 1153 at 9.

The District also points to evidence provided to the Board concerning the economic reasonableness of disinfecting the effluent from the Stickney WRP. PC 1153 at 9. The District notes that its expert testified that a UV disinfection system for Stickney WRP could be one of the largest in North America and the cost is estimated at \$511.2 million. PC 1153 9-10. The District opines that for all of these reasons disinfection of Stickney WRP's discharge is not appropriate. PC 1153 at 10.

Furthermore, the District agrees that a numeric water quality standard for waters not designated for Primary Contact recreation is not necessary. PC 1153 at 11. The District states that at this time there is not enough "research, scientific support, or other evidence on which to base a numeric limit applicable to Incidental Contact Recreation waters." *Id.*

General Use Standards Applicable to Primary Contact Recreation Waters. The participants have agreed that the bacteria standard in Section 302.209 should apply to Primary Contact Recreation waters in the CAWS. PC 1153 at 10. The District agrees, that given the uncertainty at the federal level, adoption of the bacteria standard in Section 302.209 “makes sense”. *Id.*

Environmental Groups Comment (PC 1155)

The Environmental Groups submitted their final comment to address two issues not discussed in the joint statement. PC 1155 at 2. The first issue is the length of the recreation season. *Id.* The second issue is the Board’s determination that effluent disinfection is unnecessary at Stickney WRP, and the related determination that numeric recreational use criteria are not necessary in waters designated as Incidental Contact Recreation, Non-contact Recreation, and Non-recreation waters. *Id.* The Environmental Groups argue that CHEERS should not be the basis for the Board’s decision not to require disinfection for dischargers to those waters. PC 1155 at 4. The Board will summarize the Environmental Groups comments in turn below.

Length of Recreation Season

The Environmental Groups strongly support a recreation season for March 1 through November 30 given the information in the record. PC 1155 at 2. The Environmental Groups opine that the Board’s decision was “sound and supported” by the record and ask the Board to apply the effluent disinfection standards for a period of March 1 through November 30. PC 1155 at 3. The Environmental Groups note that additional polling has taken place since the Board proposed the disinfection requirement at first notice. *Id.* The result of that polling “strongly supports the need to protect some of the most frequent” recreating populations on the river. *Id.*

Disinfection Not Required for Dischargers to Incidental Contact Recreation, Non-contact Recreation and Non-Recreation Waters

The Environmental Groups agree that disinfection need not be required at the Stickney WRP at this time based on the current record before the Board. PC 1155 at 4. The Environmental Groups express concern with the Board’s “wholesale reliance” on CHEERS as the Environmental Groups do not believe such reliance is necessary and is “prone to being misinterpreted as bad precedent.” *Id.* The Environmental Groups opine that it would be unfortunate if future decisionmakers concluded that a single epidemiologic study was sufficient basis for a decision on public health protections. *Id.* The Environmental Groups state that the Board should rely on the Board’s conclusion that the record for establishing an effluent standard for Incidental Contact Recreation is not as convincing as the record for establishing a standard for Primary Contact Recreation. *Id.*

The Environmental Groups believe that there is no need to revisit the extensive testimony regarding CHEERS; however, there is concern that the Board placed more reliance than necessary on “a problematic study”. PC 1155 at 5. The Environmental Groups argue that the Board’s decision not to require disinfection at the Stickney WRP is aptly supported by the record

in that recreation is less frequent in that area and “wet” uses are less prevalent below Stickney. PC 1155 at 6. The Environmental Groups request that the Board amend its decision by eliminating the current discussion of the CHEERS and instead noting that there is insufficient basis to conclude that the area below Stickney WRP requires disinfection. *Id.*

USEPA

On December 12, 2011, the Board received additional comment from USEPA. The Board notes that the comment was filed sometime after the close of the comment period. *See* Hearing Officer order August 16, 2011. However, the comment was received prior to the Board adopting a second notice opinion and order, so the Board will consider the comment.

The USEPA commends the participants for the agreements reached and set forth in the joint statement. PC 1214. The USEPA “strongly recommends” that the Board adopt the compliance date set forth in the joint statement, without the “force majeure” provisions. *Id.*

DISCUSSION

The Board will address several areas in this discussion beginning with the issues resolved by participants as reflected in the joint statement. The joint statement addressed many of the questions posed by the Board at first notice. The Board will then discuss the remaining issues beginning with the period during which disinfection must take place and then discussing the Board’s reliance on CHEERS. Finally, the Board will reiterate its position on the economic reasonableness and technical feasibility of the rule.

Joint Statement

The joint statement indicated four areas of agreement among participants in this rulemaking. Those areas are: 1) water quality criteria for Primary Contact Recreation waters, 2) technology-based effluent limitation for disinfection, 3) schedule for commencement of disinfection, and 4) disinfection at the Stickney WRP. The participants provided further comment supporting the joint statement and their reasons for supporting the position enunciated in the joint statement. For the reasons discussed below, the Board accepts the resolution offered by the participants.

Water Quality Standards for Primary Contact Recreation Waters

At first notice, the Board invited “participants to comment on whether the Board should adopt the existing General Use fecal coliform water quality standard for Primary Contact Recreation waters of the CAWS.” 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, R08-9(B), slip op. at 1 (Jul. 7, 2011). The participants in the joint statement agree that the water quality standards at Section 302.209 should be made applicable to waters designated for Primary Contact Recreation in the CAWS and LDPR. *See e.g.* PC 1152 at 3; PC 1153 at 10; and PC 1154 at 2. The IEPA opines that the Clean Water Act requires some type of water quality standard for waterborne human pathogens to protect Primary Contact waters. The IEPA acknowledges that the existing numeric bacteria standard is out of

date and will need to be updated. However, until then, the IEPA believes that applying the current standard to Primary Contact waters is necessary and appropriate. The District believes that applying the water quality standard “makes sense”. While the USEPA was not a part of the joint statement, the USEPA also urged the Board to apply the current bacteria standard at Section 302.209 to the Primary Contact Recreation waters, in its pre-first notice comment. The USEPA noted that it had approved the current standard for implementation in Illinois. PC 994.

The Board is convinced that adopting a water quality standard for waterborne human pathogens to protect Primary Contact Recreation waters is necessary to meet the requirements of the CWA. The Board’s proposed designation of portions of the CAWS and LDPR as Primary Contact Recreation waters means that the waters must be safe for recreating. To insure the safety of recreators, the Board believes that a water quality standard for waterborne human pathogens must be adopted. As the record in this proceeding addressed primarily protection of Incidental Contact Recreation and Non-contact Recreation, little is included in this record that supports establishing a standard different from the General Use water quality standard. Therefore, because the General Use water quality standard has been adopted by the Board and approved by the USEPA for statewide implementation, the Board will adopt the fecal coliform water quality standard for protected waters in Section 302.209 for protection of Primary Contact Recreation waters.

The IEPA provided the Board with language amending Sections 303.204 and 303.220 (35 Ill. Adm. Code 303.204 and 303.220) to apply the General Use fecal coliform water quality standard to Primary Contact Recreation waters in the CAWS and LDPR. However, the Board did not propose changes to Sections 303.204 or 303.220 (water quality standards) at first notice in this docket. Therefore, at this time, the Board cannot make the language changes suggested by the IEPA, without reissuing the rules to first notice. As discussed below, implementation of disinfection will not occur for four years, and the Board will make the changes suggested by IEPA before implementation of disinfection. The Board intends to propose the changes when proceeding with Subdocket C.

Technology Based Effluent Limitation for Disinfection

In the joint statement, the participants support the Board’s proposed first notice fecal coliform effluent standard of 400 CFU/100 mL if less than 10 samples are taken. PC 1154 at 2. However, if 10 or more samples are taken, the participants recommend that the standard require compliance with a 30-day geometric mean not to exceed 200 CFU/100 mL fecal coliform with no more than 10% of the samples exceeding 400 CFU/100 mL. *Id.* The joint statement indicates that such a standard will address occasional outlier effluent samples. The participants did not comment further on the effluent limits except in a footnote where the District states that “it is very important that the specific numerical effluent standards” be included rather than the general 400CFU/100 mL originally proposed by the Board. PC 1153 at 4.

While the joint statement does not provide a detailed explanation regarding the revisions to the effluent standard, the Board notes that the suggested clarification of the standard is consistent with the General Use fecal coliform water quality standard at Section 302.209. As the participants have agreed to this clarification of the standard and no comments have been received

in opposition, the Board will accept this change to the rule language. The Board is convinced that adding the 30-day geometric mean fecal coliform limit of 200 CFU/100 mL will help in addressing potential outliers in effluent sampling data. Therefore, the Board will clarify the language at Section 304.121 to reflect the changes proposed in the joint statement.

Schedule for Commencement of Disinfection

The joint statement suggests that a compliance date beginning in 2016 is achievable and should be adopted. The IEPA and the District discuss the District's schedule for investigation, design, bidding and construction. *See e.g.* PC 1152 at 12; PC 1153 at Attach A. The Board requested that the participants address this issue and noted that a compliance deadline between March 1, 2015 and March 1, 2020 would be appropriate. 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, R08-9(B), slip op. at 114 (Jul. 7, 2011). The joint statement and the District note that this compliance deadline is achievable, but that the compliance deadline may be extended for circumstances beyond the discharger's "reasonable control". PC 1154 at 2; PC 1153 at 4-5. The IEPA proposed language for the rule adding the four-year compliance deadline, but IEPA did not include a statement regarding circumstances that might delay compliance. *See* PC 1152 at 13. The USEPA supports the proposed language offered by IEPA.

The Board finds that a compliance deadline of 2016 is achievable based on the record before the Board and will amend the rule to reflect that compliance date. The Board understands that unforeseen circumstances can impact the ability to construct the disinfection units. However, the Board is not convinced that placing words in the rule language as nebulous as "unforeseen circumstances" or "beyond the dischargers' reasonable control" is appropriate. Rather the Board believes that if such a circumstance occurs, a request for an adjusted standard or variance pursuant to Sections 28.1 or 35 of the Act (415 ILCS 5/28.1 and 35 (2010)) is the more appropriate relief. Such a request will insure that the IEPA and interested parties are notified and that the agreed extension of time equal to time lost due to delay is the time extended. Therefore, the Board will not include language concerning unforeseeable circumstances and the Board will include a date certain for compliance with the effluent standard.

Disinfection of Stickney WRP

The joint statement indicates that the participants agree with the Board's decision not to require disinfection for effluent discharged to Incidental Contact Recreation, Non-contact Recreation and Non-Recreation waters. The Board's decision means that the Stickney WRP effluent need not be disinfected at this time. Also, the participants agree that a bacterial water quality standard is not appropriate at this time for those waters. The IEPA agreed to support the Board's decision regarding Incidental Contact Recreation and Non-contact Recreation waters to narrow the issues. PC 1152 at 7. The IEPA believes that this decision may need to be reevaluated in the future. The District elaborated on its support of the Board's decision indicating that the CHEERS and Microbial Risk Assessment supported the decision. PC 1153 at 9. The District also reiterates that disinfection of the Stickney WRP effluent is not economically

reasonable. *Id.* The Environmental Groups support the Board's decision, but as discussed below, express concern about the Board's reliance on CHEERS.

The Board appreciates the support for the Board's decision at first notice not to require effluent disinfection for effluent dischargers to Incidental Contact Recreation, Non-contact Recreation and Non-Recreation waters. The Board will not reiterate its discussion on this issue from the first notice opinion and order. *See* 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, R08-9(B), slip op. at 115-16 (Jul. 7, 2011). The Board does note that the record is not sufficient to convince the Board that effluent disinfection for dischargers to Incidental Contact Recreation, Non-contact Recreation and Non-Recreation waters is necessary at this time.

Months that Disinfection Should Take Place

The participants offered comments on the time period during which the discharger must disinfect the effluent. The District argues that the water quality standard set forth in Section 302.209, which will be proposed for adoption in Subdocket C for Primary Contact Recreation waters, applies only during the months of May through October. *See e.g.* PC 1153 at 2. The District argues that requiring disinfection from May through October is reasonable and consistent with Illinois law. *Id.*

The IEPA and Environmental Groups argue that the first notice proposal to require disinfection from March 1 until November 30 was correct and the Board should maintain those dates. *See e.g.* PC 1152 at 8; PC 1155 at 2. The IEPA offers that dischargers to General Use waters are required to disinfect year round pursuant to Section 304.121 and an exception for not disinfecting may be granted by the IEPA under that section. PC 1152 at 9. Further, Section 302.209 sets forth the bacterial water quality standard applicable only to "protected waters". *Id.* The Environmental Groups argue that recreation occurs in CAWS during March, April and November and therefore a longer recreation season is warranted. PC 1155 at 2.

The Board agrees with the IEPA and the Environmental Groups that disinfection is required for all dischargers to General Use waters pursuant to Section 304.121(a) which provides:

Effluents discharged to all general use waters shall not exceed 400 fecal coliform per 100 ml unless the Illinois Environmental Protection Agency determines that an alternative effluent standard is applicable pursuant to subsection (b). 35 Ill. Adm. Code 304.121(a).

Illinois law for dischargers other than in the CAWS and LDPR requires year round disinfection unless an alternative effluent standard is set by IEPA pursuant to Section 304.121(b). The proposed rule will require disinfection only for dischargers in the CAWS and LDPR who discharge to waters designated for Primary Contact Recreation during the months of March through November. Thus, CAWS and LDPR dischargers will have an exemption from year round effluent disinfection. Regarding the disinfection time period, the Board believes that the

rules should require disinfection over the recreation season. The record indicates that during the UAA process, the District agreed with other stakeholders to a recreation season extending from March through November. *See* Attach B at 5-10. *See* Attach B at 5-10.

Additionally, the record includes information that recreation occurs during the months of March, April and November, albeit Incidental Contact Recreation uses. *See* Attach B at 4-24 (educational institutions use), 5-10 (stakeholders agreement as to recreation dates) and PC 1155. Thus, evidence indicates recreating does occur during March, April and November. Furthermore, the District itself notes that the reason for disinfection is to protect Primary Contact Recreation, and the Board agrees. The designation of the segments for Primary Contact Recreation is a goal consistent with the CWA goal of attaining swimmable. The Board finds that to protect for full body contact and to insure protection during the recreating season, effluent disinfection from March through November is appropriate.

Board's Reliance on CHEERS

The Board has reviewed its first notice opinion and order and the discussion regarding CHEERS in response to the Environmental Groups' concern. *See* 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, R08-9(B), slip op. at 115-16 (Jul. 7, 2011). Because CHEERS is a part of the record, The Board cannot disregard CHEERS. CHEERS is the only epidemiological study in the record specific to the CAWS, although the results were challenged by the Environmental Groups and the IEPA. The Board's decision not to require disinfection of discharges to Incidental Contact Recreation waters was based on the totality of the record and CHEERS was one part of the record.

Economic Reasonableness and Technical Feasibility

At first notice the Board found the proposed rule economically reasonable and technically feasible, based on the record. *See* 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, R08-9(B), slip op. at 116-19 (Jul. 7, 2011). During the first notice period no additional information regarding economic reasonableness or technical feasibility was provided. During the Board's hearing on DCEO's decision not to perform and Economic Impact Analysis, no one testified. Therefore, the Board finds that based on the record the proposed rule is economically reasonable and technically feasible.

CONCLUSION

The Board proposes for second notice a rule establishing an effluent limit of for fecal coliform colony forming units during the months of March 1 through November 30 for effluent discharges to Primary Contact Recreation water segments of the CAWS and LDPR. Those segments are 1) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River; 2) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River; 3) Chicago River; 4) South Branch of the Chicago River; 5) Little

Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and 6) Calumet-Sag Channel. The Board finds that the rule proposed is economically reasonable and technically feasible.

The Board declines at this time to establish an effluent bacterial limit for other segments of the CAWS and Lower Des Plaines River (LDPR) that are designated as Incidental Contact Recreation, Non-contact Recreation, and Non-Recreation waters.

The Board, in consideration of comments received, will propose for adoption bacterial water quality standards for the Chicago Area Waterway System and Lower Des Plaines River but only as to those waters designated as Primary Contact Recreation waters. The Board cannot propose bacterial standards at second notice in R08-9 Subdocket B as the sections of the rule that need to be amended to adopt bacterial standards (Sections 303.204 and 303.220) were not proposed in the *Illinois Register* for first notice. See 5 ILCS 100/5-40 (2010). Those sections will be proposed for amendment in R08-9 Subdocket C to reflect the Board's findings concerning the bacterial water quality standard in this opinion and order.

ORDER

The Board directs the Clerk to file the following rule with the Joint Committee on Administrative Rules for second notice:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 304
EFFLUENT STANDARDS

SUBPART A: GENERAL EFFLUENT STANDARDS

Section	
304.101	Preamble
304.102	Dilution
304.103	Background Concentrations
304.104	Averaging
304.105	Violation of Water Quality Standards
304.106	Offensive Discharges
304.120	Deoxygenating Wastes
304.121	Bacteria
304.122	Total Ammonia Nitrogen (as N: STORET number 00610)
304.123	Phosphorus (STORET number 00665)
304.124	Additional Contaminants
304.125	pH
304.126	Mercury
304.140	Delays in Upgrading (Repealed)

- 304.141 NPDES Effluent Standards
 304.142 New Source Performance Standards (Repealed)

SUBPART B: SITE SPECIFIC RULES AND EXCEPTIONS NOT OF GENERAL
 APPLICABILITY

- Section
 304.201 Wastewater Treatment Plant Discharges of the Metropolitan Water
 Reclamation District of Greater Chicago
 304.202 Chlor-alkali Mercury Discharges in St. Clair County
 304.203 Copper Discharges by Olin Corporation
 304.204 Schoenberger Creek: Groundwater Discharges
 304.205 John Deere Foundry Discharges
 304.206 Alton Water Company Treatment Plant Discharges
 304.207 Galesburg Sanitary District Deoxygenating Wastes Discharges
 304.208 City of Lockport Treatment Plant Discharges
 304.209 Wood River Station Total Suspended Solids Discharges
 304.210 Alton Wastewater Treatment Plant Discharges
 304.211 Discharges From Borden Chemicals and Plastics Operating Limited
 Partnership Into an Unnamed Tributary of Long Point Slough
 304.212 Sanitary District of Decatur Discharges
 304.213 PDV Midwest Refining, L.L.C. Refinery Ammonia Discharge
 304.214 Mobil Oil Refinery Ammonia Discharge
 304.215 City of Tuscola Wastewater Treatment Facility Discharges
 304.216 Newton Station Suspended Solids Discharges
 304.218 City of Pana Phosphorus Discharge
 304.219 North Shore Sanitary District Phosphorus Discharges
 304.220 East St. Louis Treatment Facility, Illinois-American Water Company
 304.221 Ringwood Drive Manufacturing Facility in McHenry County
 304.222 Intermittent Discharge of TRC
 304.224 Effluent Disinfection

SUBPART C: TEMPORARY EFFLUENT STANDARDS

- Section
 304.301 Exception for Ammonia Nitrogen Water Quality Violations (Repealed)
 304.302 City of Joliet East Side Wastewater Treatment Plant
 304.303 Amerock Corporation, Rockford Facility

Appendix A References to Previous Rules

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/13 and 27].

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 30, p. 343, effective July 27, 1978; amended at 2 Ill. Reg. 44, p. 151, effective November 2, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 3 Ill. Reg. 25, p. 190, effective June

21, 1979; amended at 4 Ill. Reg. 20, p. 53, effective May 7, 1980; amended at 6 Ill. Reg. 563, effective December 24, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 6 Ill. Reg. 13750, effective October 26, 1982; amended at 7 Ill. Reg. 3020, effective March 4, 1983; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended at 7 Ill. Reg. 14515, effective October 14, 1983; amended at 7 Ill. Reg. 14910, effective November 14, 1983; amended at 8 Ill. Reg. 1600, effective January 18, 1984; amended at 8 Ill. Reg. 3687, effective March 14, 1984; amended at 8 Ill. Reg. 8237, effective June 8, 1984; amended at 9 Ill. Reg. 1379, effective January 21, 1985; amended at 9 Ill. Reg. 4510, effective March 22, 1985; preemptory amendment at 10 Ill. Reg. 456, effective December 23, 1985; amended at 11 Ill. Reg. 3117, effective January 28, 1987; amended in R84-13 at 11 Ill. Reg. 7291, effective April 3, 1987; amended in R86-17(A) at 11 Ill. Reg. 14748, effective August 24, 1987; amended in R84-16 at 12 Ill. Reg. 2445, effective January 15, 1988; amended in R83-23 at 12 Ill. Reg. 8658, effective May 10, 1988; amended in R87-27 at 12 Ill. Reg. 9905, effective May 27, 1988; amended in R82-7 at 12 Ill. Reg. 10712, effective June 9, 1988; amended in R85-29 at 12 Ill. Reg. 12064, effective July 12, 1988; amended in R87-22 at 12 Ill. Reg. 13966, effective August 23, 1988; amended in R86-3 at 12 Ill. Reg. 20126, effective November 16, 1988; amended in R84-20 at 13 Ill. Reg. 851, effective January 9, 1989; amended in R85-11 at 13 Ill. Reg. 2060, effective February 6, 1989; amended in R88-1 at 13 Ill. Reg. 5976, effective April 18, 1989; amended in R86-17(B) at 13 Ill. Reg. 7754, effective May 4, 1989; amended in R88-22 at 13 Ill. Reg. 8880, effective May 26, 1989; amended in R87-6 at 14 Ill. Reg. 6777, effective April 24, 1990; amended in R87-36 at 14 Ill. Reg. 9437, effective May 31, 1990; amended in R88-21(B) at 14 Ill. Reg. 12538, effective July 18, 1990; amended in R84-44 at 14 Ill. Reg. 20719, effective December 11, 1990; amended in R86-14 at 15 Ill. Reg. 241, effective December 18, 1990; amended in R93-8 at 18 Ill. Reg. 267, effective December 23, 1993; amended in R87-33 at 18 Ill. Reg. 11574, effective July 7, 1994; amended in R95-14 at 20 Ill. Reg. 3528, effective February 8, 1996; amended in R94-1(B) at 21 Ill. Reg. 364, effective December 23, 1996; expedited correction in R94-1(B) at 21 Ill. Reg. 6269, effective December 23, 1996; amended in R97-25 at 22 Ill. Reg. 1351, effective December 24, 1997; amended in R97-28 at 22 Ill. Reg. 3512, effective February 3, 1998; amended in R98-14 at 23 Ill. Reg. 687, effective December 31, 1998; amended in R02-19 at 26 Ill. Reg. 16948, effective November 8, 2002; amended in R02-11 at 27 Ill. Reg. 194, effective December 20, 2002; amended in R04-26 at 30 Ill. Reg. 2365, effective February 2, 2006; amended in R08-9B at 36 Ill. Reg. _____, effective _____.

SUBPART B: SITE SPECIFIC RULES AND EXCEPTIONS NOT OF GENERAL APPLICABILITY

Section 304.224 Effluent Disinfection

From March 1 through November 30, effluents discharged to the Primary Contact Recreation waters listed in 35 Ill. Adm. Code 303.220 must not exceed 400 fecal coliform colony forming units (CFU) per 100 mL from March 1 through November 30 if less than 10 samples are taken in a month. If 10 or more samples are taken in a month, fecal coliform shall not exceed a 30-day geometric mean of 200 CFU per 100 mL, nor shall more than 10% of the samples during any 30 day period exceed 400 CFU per 100 mL. All effluents in existence on or before the

effective date of this Section must meet these standards by March 1, 2016. All new discharges must meet these standards upon the initiation of discharge.

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on December 15, 2011, by a vote of 5-0.

A handwritten signature in black ink that reads "John T. Therriault". The signature is written in a cursive style with a long horizontal stroke at the end.

John T. Therriault, Assistant Clerk
Illinois Pollution Control Board