ILLINOIS POLLUTION CONTROL BOARD May 21, 2009

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)	(Site Specific Rulemaking – Water)
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Proposed Rule. Final Notice.

OPINION AND ORDER OF THE BOARD (by G.T. Girard):

On August 29, 2008, pursuant to Section 28 of the Environmental Protection Act (Act) (415 ILCS 5/28 (2006)), the City of Springfield (City), Office of Public Utilities, City Water, Light and Power (CWLP), and Springfield Metro Sanitary District (District) (collectively, Springfield) proposed a site-specific rulemaking seeking alternative water quality standards for boron in four river sections stretching approximately 75 miles from the outfall of the Spring Creek Sanitary Treatment Plant (Spring Creek STP) on the Sangamon River to 100 yards downstream of the confluence of the Sangamon and Illinois Rivers.

On April 2, 2009, the Board found that the rule as proposed by Springfield was technically feasible and economically reasonable and is protective of human health and the environment. Therefore, the Board adopted the rule for second notice and filed the rule with the Joint Committee on Administrative Rules (JCAR). JCAR issued a certificate of no objection on May 19, 2009, suggesting that certain changes be made to the rule.

Today the Board adopts the rule for final notice making the changes recommended by JCAR. The Board will briefly describe the procedural background and then summarize the rule. The Board will then discuss the reasons for proceeding to final notice.

PROCEDURAL BACKGROUND

On August 29, 2008, Springfield filed the proposal and statement of reasons (Reasons), along with a Technical Support Document (TSD) in support of the proposal. Springfield also filed motions requesting the Board to waive the requirement for 200 signatures on the petition and to expedite consideration of the petition. See 415 ILCS 5/28 (2006); 35 Ill. Adm. Code 101.220(g) and 101.512. The Board received no response to the motions and, pursuant to 101.500(d), deemed any objection to the granting of the motions waived. See 35 Ill. Adm. Code 101.500(d).

On September 16, 2008, the Board proposed for first notice the rule as proposed by Springfield without comment on the merits of the proposal. The Board granted the motions to waive the signature requirement and to expedite consideration of the petition. The rule was published in the *Illinois Register* on October 10, 2008. *See* 31 III. Reg. 16303 (Oct. 10, 2008).

On September 18, 2009, in accordance with Section 27(b) of the Act (415 ILCS 5/27(b) (2006)), the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study for this rulemaking. The Board received no response from DCEO. At the public hearing held on December 16, 2008 (Tr.2), the Board solicited comments on DCEO's decision not to conduct an economic impact study. No comments were offered. Tr.2 at 5-6.

The Board has conducted two public hearings, on November 3 (Tr.1) and December 16, 2008 in Springfield. At the hearings Springfield presented numerous witnesses in support of the proposal and the Agency presented testimony.

The Board received six public comments. Three public comments were received from Springfield (PC 1, PC 3, and PC 5), and two from the Agency (PC2 and PC 6). The Board also received a public comment from Prairie Rivers (PC 4).

On April 2, 2009, the Board adopted the rule for second notice. On April 7, 2009, Springfield filed PC 7 with the Board asking for corrections to the river coordinates. The Board included that comment when filing the rule with JCAR.

On May 19, 2009, JCAR issues a certificate of no objection to the rule. JCAR did make suggestions to the Board that certain changes be made to the rule language in response to PC 7 and for other nonsubstantive changes.

<u>RULE</u>

The rule establishes an alternative water quality standard for boron from the point of discharge at Outfall 007 from the District's Spring Creek STP to the Sangamon River, to the confluence with the Illinois River, and in the Illinois River 100 yards downstream from the confluence with the Sangamon River. Section 302.208(g) (35 Ill. Adm. Code 302.208(g)) of the Board's water quality rules sets a general use boron water quality standard of 1.0 milligrams per liter (mg/L) and Section 304.105 (35 Ill. Adm. Code 304.105)) of the Board's rules provides that the District's discharge cannot violate that standard. The Board has not adopted an effluent standard for boron; nor has the Agency imposed an effluent limit on the District's discharge from Outfall 7 in the District's National Pollutant Discharge Elimination Permit (NPDES).

The site specific rule is necessary to enable the District to accept pretreated industrial effluent from CWLP's power plant. CWLP's power plant effluent causes increased boron levels in the effluent stream and is necessary to meet the power needs for the City and surrounding communities. The site specific rule will allow CWLP to operate the power plants in compliance with the NPDES permits and State and Federal air regulations.

At second notice, the Board discussed in detail the comments and testimony from this proceeding. After carefully reviewing all the information in the record, the Board found that the site specific rule is economically feasible and technically reasonable. Further, the Board found that the site specific rule will be protective of human health and the environment. Therefore, the Board proceeded to second notice with the rule language as follows:

Section 303.446 Boron Water Quality Standard for segments of the Sangamon River and the Illinois River

The general use water quality standard for boron set forth in 35 Ill. Adm. Code 302.208(g) shall not apply to segments of the Sangamon River and the Illinois River (described below) that receive discharge from Outfall 007 of the Spring Creek Sewage Treatment Plant located at 3017 North 8th Street, Springfield, Illinois, owned by the Springfield Metro Sanitary District. Boron levels in those river segments must meet the following water quality standards for boron:

- a) 11.0 mg/L in the Sangamon River from Outfall 007 (Latitude: 39° 51' 37.234" North, Longitude: 89° 38' 30.082" West) to 182 yards downstream from the confluence of Spring Creek with the Sangamon River (Latitude: 39° 51' 42.595" North, Longitude: 89° 38' 30.089" West);
- b) 4.5 mg/L in the Sangamon River from 182 yards downstream of the confluence of Spring Creek with the Sangamon River (Latitude: 39° 51' 42.595" North, Longitude: 89° 38' 30.089" West) to the confluence of Salt Creek with the Sangamon River (Latitude: 40° 7' 33.009" North, Longitude: 89° 49' 40.224" West), a distance of 39.0 river miles;
- c) 1.6 mg/L in the Sangamon River from the confluence of Salt Creek with the Sangamon River (Latitude: 40° 7' 33.009" North, Longitude: 89° 49' 40.224" West) to the confluence of the Sangamon River with the Illinois River (Latitude: 40° 7' 33.009" North, Longitude: 89° 49' 40.224" West), a distance of 36.1 river miles; and
- d) 1.3 mg/L in the Illinois River from the confluence of the Illinois River with the Sangamon River (Latitude: 40° 7' 33.009" North, Longitude: 89° 49' 40.224" West) to 100 yards downstream of the confluence of the Illinois River with the Sangamon River (Latitude: 40° 1' 20.197" North, Longitude: 90° 26' 3.205" West).

DISCUSSION

As previously discussed, the Board proceeded to first notice without commenting on the rule proposal, but at second notice the Board evaluated the comments and testimony provided in this rulemaking. As Prairie Rivers voiced opposition to the Board's adopting the site specific rule proposal from Springfield, the Board addressed each of the concerns raised by Prairie Rivers in the second notice opinion and order. *See generally* Proposed Site Specific Rule For City Of

Springfield, Illinois, Office Of Public Utilities, City Water, Light And Power and Springfield Metro Sanitary District From 35 Ill. Adm. Code 302.208(g): New 35 Ill. Adm. Code 303.446, R09-8 (Apr. 2, 2009). Specifically, Prairie Rivers raised concerns about the technical feasibility of alternative technologies, such as dry ash conversion and the use of a brine concentrator. Prairie Rivers also questioned whether there were economically reasonable alternatives to the site-specific rule. And, Prairie Rivers questioned the environmental impact of the proposed rule.

On the issue of the technical feasibility of alternative technologies, the Board found that of all the alternatives evaluated, Springfield pumping CWLP's FGDS wastewater to the Spring Creek STP is the only technologically feasible and economically reasonable alternative at this time. Thus, a site specific standard is necessary to address the exceedence of the boron water quality standard in the affected river segments. More, specifically, on the concerns raised by Prairie Rivers regarding the economic reasonableness of the rule, the Board found that based on the record before the Board, the site specific rule is economically reasonable.

The Board also addressed the issues raised by Prairie Rivers concerning the environmental impact of the proposed rule. The Board noted that the testimony from both the Agency and Springfield indicated that the toxicological impact of boron on the stream is not significant. The Board also noted that Mr. Mosher, from IEPA, indicated that although one stream segment is listed as impaired with boron listed as a cause, boron was incorrectly listed as a cause for that impairment. Therefore, the Board found that the site specific rule will be protective of the uses of the streams and will not negatively impact human health or the environment.

The Board also noted that:

Regarding the ongoing review of boron toxicity by IEPA and INHS, as noted by the Agency, the review is being done to support a revision of the state-wide general use boron water quality standard. The results of the IEPA/INHS study is expected to bolster the scientific justification for the revision of the general use boron standard. If the IEPA/INHS study results in new boron toxicity information that raises any concerns with the site specific standards or renders such standards as moot, the Board expects the Agency to address those concerns as a part of its proposal to revise the general use standards. The Board notes that in the past, the Board has revised existing site specific rules to make them consistent with the adopted revisions to the rule of general applicability. *See* Proposed New and Updated Rules for Measurement and Numerical Sound Emissions Standards Amendments to 35 Ill. Adm. Code 901 and 910, (R03-9) March 2, 2006. R09-10, slip op at 28.

The Board received one post-second notice comment from Springfield, which the Board forwarded to JCAR. Springfield commented that the some of the stream coordinates in subsections 303.446(c) and (d) were incorrect and that Springfield suspected that those mistakes were merely errors in transcription. PC 7 at 3. The Board agrees that the errors were inadvertent. Therefore, the Board agreed with the suggestions of JCAR and the Board will

correct those errors at final notice. The Board also agrees to make nonsubstantive changes suggested by JCAR.

CONCLUSION

The Board finds that the site specific rule is economically feasible and technically reasonable. Further, the site specific rule will be protective of human health and the environment. Therefore, the Board finds that proceeding to final notice with this rule is appropriate.

ORDER

The Board directs the Clerk to cause the filing of the following rule for final notice with the Secretary of State and for publication in the *Illinois Register*.

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

PART 303 WATER USE DESIGNATIONS AND SITE-SPECIFIC WATER QUALITY STANDARDS

SUBPART A: GENERAL PROVISIONS

Section	
303.100	Scope and Applicability
303.101	Multiple Designations
303.102	Rulemaking Required
	SUBPART B: NONSPECIFIC WATER USE DESIGNATIONS
Section	
303.200	Scope and Applicability
303.201	General Use Waters
303.202	Public and Food Processing Water Supplies
303.203	Underground Waters
303.204	Secondary Contact and Indigenous Aquatic Life Waters
303.205	Outstanding Resource Waters
303.206	List of Outstanding Resource Waters
	SUBPART C: SPECIFIC USE DESIGNATIONS AND SITE SPECIFIC WATER QUALITY STANDARDS

Section

303.300 Scope and Applicability

303.301	Organization
303.311	Ohio River Temperature
303.312	Waters Receiving Fluorspar Mine Drainage
303.321	Wabash River Temperature
303.322	Unnamed Tributary of the Vermilion River
303.323	Sugar Creek and Its Unnamed Tributary
303.326	Unnamed Tributary of Salt Creek, Salt Creek, and Little Wabash River
303.331	Mississippi River North Temperature
303.341	Mississippi River North Central Temperature
303.351	Mississippi River South Central Temperature
303.352	Unnamed Tributary of Wood River Creek
303.353	Schoenberger Creek; Unnamed Tributary of Cahokia Canal
303.361	Mississippi River South Temperature
303.400	Bankline Disposal Along the Illinois Waterway/River
303.430	Unnamed Tributary to Dutch Creek
303.431	Long Point Slough and Its Unnamed Tributary
303.441	Secondary Contact Waters
303.442	Waters Not Designated for Public Water Supply
303.443	Lake Michigan Basin
303.444	Salt Creek, Higgins Creek, West Branch of the DuPage River, Des Plaines River
303.445	Total Dissolved Solids Water Quality Standard for the Lower Des Plaines River
<u>303.446</u>	Boron Water Quality Standard for Segments of the Sangamon River and the
<u>Illinois River</u>	

SUBPART D: THERMAL DISCHARGES

Section	
303.500	Scope and Applicability
303.502	Lake Sangchris Thermal Discharges

303.APPENDIX A References to Previous Rules 303.APPENDIX B Sources of Codified Sections

AUTHORITY: Implementing Section 13 and authorized by Sections 11(b) and 27 of the Environmental Protection Act [415 ILCS 5/13, 11(b) and 27].

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 27, p. 221, effective July 5, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 5 Ill. Reg. 11592, effective October 19, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended in R87-27 at 12 Ill. Reg. 9917, effective May 27, 1988; amended in R87-2 at 13 Ill. Reg. 15649, effective September 22, 1989; amended in R87-36 at 14 Ill. Reg. 9460, effective May 31, 1990; amended in R86-14 at 14 Ill. Reg. 20724, effective December 18, 1990; amended in R89-14(C) at 16 Ill. Reg. 14684, effective September 10, 1992; amended in R92-17 at 18 Ill. Reg. 2981, effective February 14, 1994; amended in R91-23 at 18 Ill. Reg. 13457, effective

August 19, 1994; amended in R93-13 at 19 Ill. Reg. 1310, effective January 30, 1995; amended
in R95-14 at 20 III. Reg. 3534, effective February 8, 1996; amended in R97-25 at 22 III. Reg.
1403, effective December 24, 1997; amended in R01-13 at 26 Ill. Reg. 3517, effective February
22, 2002; amended in R03-11 at 28 III. Reg. 3071, effective February 4, 2004; amended in R06-
24 at 31 III. Reg. 4440, effective February 27, 2007; amended in R09-8 at III. Reg
effective

SUBPART C: SPECIFIC USE DESIGNATIONS AND SITE SPECIFIC WATER QUALITY STANDARDS

Section 303.446 Boron Water Quality Standard for Segments of the Sangamon River and the Illinois River

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 Spring Creek with the Sangamon River (Latitude: 39° 51' 42.595" North, Longitude: 89° 38' 30.089" West);
- b) 4.5 mg/L in the Sangamon River from 182 yards downstream of the confluence of Spring Creek with the Sangamon River (Latitude: 39° 51' 42.595" North, Longitude: 89° 38' 30.089" West) to the confluence of Salt Creek with the Sangamon River (Latitude: 40° 7' 33.009" North, Longitude: 89° 49' 40.224" West), a distance of 39.0 river miles;
- c) 1.6 mg/L in the Sangamon River from the confluence of Salt Creek with the Sangamon River (Latitude: 40° 7′ 33.009" North, Longitude: 89° 49′ 40.224" West) to the confluence of the Sangamon River with the Illinois River (Latitude: 40° 1′ 20.995" North, Longitude: 90° 25′ 59.451" West), a distance of 36.1 river miles; and
- d) 1.3 mg/L in the Illinois River from the confluence of the Illinois River with the Sangamon River (Latitude: 40° 1' 20.995" North, Longitude: 90° 25' 59.451" West) to 100 yards downstream of the confluence of the Illinois River with the Sangamon River (Latitude: 40° 1' 20.197" North, Longitude: 90° 26' 3.205" West).

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on May 21, 2009, by a vote of 5-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board