ILLINOIS POLLUTION CONTROL BOARD December 1, 1994

In the Matter of :)		
PETITION OF THE CITY OF)	AS 94-9	
SPRINGFIELD, OFFICE OF PUBLIC	j	(Adjusted	Standard)
UTILITIES FOR AN ADJUSTED)		
STANDARD FROM 35 Ill. Adm. Code)		
302.208(e))		

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

This matter is before the Board on a petition for an adjusted standard filed by the City of Springfield Office of Public Utilities, City Water, Light and Power (CWLP). CWLP is seeking an adjusted standard from the Board's water quality standard for boron which is found at 35 Ill. Adm. Code 302.208(e). CWLP is requesting that the Board grant an adjusted standard for Sugar Creek below Spaulding Dam on Lake Springfield, an identified portion of the South Fork of the Sangamon River (South Fork) and an identified portion of the Sangamon River (Sangamon).

CWLP filed its petition on May 4, 1994 and filed an amendment to the petition on July 18, 1994. The Illinois Environmental Protection Agency (Agency) filed a response to the petition instanter on August 17, 1994. CWLP waived hearing and the Board did not receive a request for a hearing, so no hearing was held.

Based upon the record and upon review of the factors involved in the consideration of adjusted standards, the Board finds that CWLP has demonstrated that grant of the requested adjusted standard is warranted. Accordingly, the adjusted standard will be granted.

ADJUSTED STANDARD PROCEDURE

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 et seq.). The Board is charged therein to "determine, define and implement the environmental control standards applicable in the State of Illinois" (415 ILCS 5/5(b)) and to "grant *** an adjusted standard for persons who can justify such an adjustment" (415 ILCS 5/28/1(a)). More generally, the Board's responsibility in this matter is based on the system of checks and balances integral to Illinois environmental governance: the Board is charged with the rulemaking and principal adjudicatory functions, and the Agency is responsible for carrying out the principal administrative duties.

The Act provides that a petitioner may request, and the Board may impose, an environmental standard that is different

from the standard that would otherwise apply to the petitioner as the consequence of the operation of a rule of general applicability. Such a standard is called an adjusted standard. The general procedures that govern an adjusted standard proceeding are found at Section 28.1 of the Act and within the Board's procedural rules at 35 Ill. Adm. Code 106.

Where, as here, the regulation of general applicability does not specify a level of justification required for a petitioner to qualify for an adjusted standard, the Act at Section 28.1(c) specifies four demonstrations that must be made by a successful petitioner:

- 1) Factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
- The existence of those factors justifies an adjusted standard;
- The requested standard will not result in environmental or health effects substantially or significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
- 4) The adjusted standard is consistent with any applicable federal law.

RULES OF GENERAL APPLICABILITY

The Board's general effluent regulations do not include specific limitations for boron. However, they do prohibit any discharge that would cause or contribute to a violation of any water quality standard (35 Ill. Adm. Code 304.105); there is a water quality standard for boron.

In the instant case, the pertinent water quality standard is given in the Board's General Use Water Quality Standards found at 35 Ill. Adm. Code 302.208. The General Use Water Quality Standard for boron is 1.0 mg/L. The intent of the water quality standards is to protect aquatic life and to safeguard the quality of water of the state for consumptive uses, including public water supply. These standards apply in Sugar Creek, South Fork, and the Sangamon River.

FACILITY DESCRIPTION AND DISCHARGE LEVELS

CWLP operates two generating stations and a water purification plant at 3100 Stevenson Drive, Springfield, Sangamon County, Illinois. The two generating stations are comprised of five coal fired units, four of which consist of cyclone boilers

and one which is tangentially-fired. (Pet. at 5.)¹ CWLP burns coal obtained from the Turris Coal Company at Elkhart, Illinois under a 1980 contract. (*Id.*) CWLP began operating the generating stations in 1935 and currently employs approximately 220 persons at the generating stations and an additional 21 at the water purification plant. (Pet. at 5-6.)

CWLP consumes approximately 950,000 tons of coal per year on the average and the ash handling practices of CWLP are similar to those at many other coal-fired plants. (Pet. at 6.) Bottom ash and fly ash from all units are sluiced to ash ponds with sluice water obtained from circulating cooling water systems for the boilers. (Id.) CWLP operates two ash ponds. The south ash pond also receives effluent transporting the lime sludge from the water treatment plant and the north ash pond also receives the water collected from the scrubber sludge landfill adjacent to the ash ponds. (Pet. at 6.) Ash is held and collected in the ponds. (Id.)

CWLP's water discharge (NPDES)² permit covers 16 outfalls of which only three (outfalls 003, 004, 006) are subject to monitoring for the general water quality standards. (Pet. at 6.) Outfall 006 is not subject to this proceeding because it is operated infrequently. Outfall 006 has historically been used only during drought events to supplement the water supply in Lake Springfield. Between 1976 and 1990 outfall 006 was operated only during four drought episodes and has not been operated since 1990. (Pet. at 7-8.) Outfall 003 and Outfall 004 produce the discharges which are at issue in this proceeding. Outfall 003 is located at Spaulding Dam on Lake Springfield and Outfall 004 is located just downstream from the dam. (Am. Pet. at 2.)

Outfall 003 is the discharge of stormwater runoff from the Lakeside Power Plant. The effluent is routed from the power plant by an underground pipe which discharges into the Sugar Creek channel near the east side of the spillway behind Spaulding Dam. (Pet. at 6-7; Am. Pet. at 2.) CWLP indicates that the discharge from outfall 003 may contain boron from the actual discharge area as a result of accumulations of ash in the area caused by abandoned operational practices. CWLP states that

The CWLP petition will be cited as "Pet. at __"; Exhibits to the petitioner will be cited as "Exh. _ at __"; the amended petition will be cited as "Am. Pet. at __"; the Agency recommendation will be cited as "Ag. Rec. at __".

² Water discharge permits are governed by the federal National Pollution Discharge Elimination System (NPDES) laws and are commonly referred to as "NPDES Permits".

cleaning efforts alleviate the impact only temporarily. (Pet. at 7.)

Outfall 004 discharges into Sugar Creek just below Spaulding Dam (Am. Pet. at 2) from the clarification pond which receives the ash pond discharges. (Pet. at 7.) When the elevation of Lake Springfield exceeds 560 feet above mean sea level (MSL), flow goes over the gates of Spaulding Dam and enters the channel of Sugar Creek. When the lake elevation is less than 560 MSL, no flow enters Sugar Creek except minor leakage through the dam Therefore, when Lake Springfield elevation is less than 560 MSL the discharge from Outfall 004 is virtually the only flow entering Sugar Creek. (Am. Pet. at 2.) Boron is contained in this discharge as a result of direct contact with coal ash. approximate volume of effluent created by the ash transport system and ash ponds is 6.98 million gallons per day (MGD) with other discharges to the ash pond of approximately 0.95 MGD. (Pet. at 7.) The total average discharge from outfall 004 is 7.93 MGD. (Id.)

Recorded levels of boron for outfalls 003 and 004 during the period from January 1987 to October 1992 indicated that the standard of 1.0 mg/l cannot be met. (Exh. 1 at 4-9, 4-10.) Outfall 003 averaged 4.51 mg/l with a minimum level of .06 mg/l and a maximum of 18.70 mg/l during that time period. (Exh. 1 at 4-11, 4-12.) Outfall 004 had boron levels ranging from 1.80 mg/l to 10.19 mg/l with an average of 6.12 mg/l. (Id.)

Sugar Creek empties into the South Fork four miles east of Springfield and approximately seven miles northeast of outfalls (Pet. at 10.) Sugar Creek is a series of pools and riffles and its flow is primarily the outflow from Lake Springfield at Spaulding Dam. (Pet. at 10.) Potential outflow rates range from 16.8 mgd when the lake level is 560.1 MSL, to 187 MGD when the lake level is 560.5 MSL. (Am. Pet. at 3.) During times when there is no outflow from the lake, the discharge from outfall 004 represents the actual flow of Sugar Creek downstream to the discharge point of the Springfield Metropolitan Sanitary District (SMSD). (Am. Pet. at 3.) SMSD discharges approximately 10 MGD from a point 2½ miles below Spaulding Dam. (Pet. at 10.) CWLP maintains that there are no withdrawals from Sugar Creek below Spaulding Dam for agricultural or public ware supply purposes. (Pet. at 10.) Further, there are no withdrawals from the portion of the South Fork in the very short reach between Sugar Creek and the Sangamon River.

The Sangamon River is approximately 250 miles long. The River is impounded at Decatur, Illinois, to form Lake Decatur. There are no withdrawals of water for agricultural purposes or public water supply between its confluence with the South Fork and its confluence with Spring Creek. (Pet. at 11; Exh. 1 at 3-8.) Brookdale Development, Inc., has applied for a permit to

construct a raw water intake structure east of the I-55 Loop Bridge (Peoria Road) in the Northwest Quarter of Section 1, Township 10 North Range 5 West, Sangamon County. (Pet. at 11.) This intake would serve a pumping station to augment irrigation water supplies at the Rail Golf Course at Sherman, Illinois. (Id.) This project has not yet been permitted by the Illinois Department of Transportation. (Id.)

There are several permitted discharges to the Sangamon at the reaches for which an adjusted standard is requested including the Decatur sewage treatment plant which discharges below the dam at Lake Decatur. (Pet. at 11.) These are primarily small sewage treatment sources and storm water discharges. (Pet. at 11; Exh. 1 at 3-9.)

RELIEF REQUESTED

CWLP requests an adjusted water quality standard for boron (Pet. at 1) from the Board's general standard found at Section 302.208(e). The adjusted water quality standards that are requested decrease downstream as follows:

- 1. 11.0 mg/l for boron on Sugar Creek from CWLP's Outfall 003 at Spaulding Dam to Sugar Creek's confluence with the SMSD Sugar Creek Plant Outfall 008 in the Northeast Quarter of Section 31, Clear Lake Township, Sangamon County;
- 2 5.5 mg/l for boron from the discharge of the SMSD plant outfall on Sugar Creek to the confluence of Sugar Creek with the South Fork of the Sangamon River; and
- 2.0 mg/l for boron from the confluence of Sugar Creek and the South Fork of the Sangamon Rivers to 100 yards downstream of the confluence of the Sangamon River with Spring Creek in the Northeast Quarter of Section 10, Springfield Township, Sangamon County.

COMPLIANCE ALTERNATIVES

CWLP considered four alternative approaches for complying with the final effluent limitation for boron for outfalls 003 and 004. (Pet. at 13.) Those four alternatives were:

- Treatment of clarification pond discharges using boron specific ion exchange;
- Treatment of clarification pond discharges using reverse osmosis/mechanical evaporation;
- Removal of fly ash from the site in a dry condition;

4. Use of alternative fuels in place of Illinois coal. (Pet. at 13.)

Alternatives 1 and 2 are treatment-based while 3 and 4 would require operating changes. (Pet. at 13.)

Treatment of the discharge using a selective ion exchange process is reportedly capable of removing 90 per cent of the (Pet. at 14.) This process would require installation of ion exchange vessels, sulfuric acid or hydrochloric acid storage tanks for resin regeneration, and chemical feed equipment. It may also be necessary to install filters to remove suspended solids from the discharge for this process. Physical space limitations at Outfalls 003 and 004 may make such installations impractical. (Exh. 1 at 6-1.) Further, regeneration of the resin would itself produce a wastewater very high in boron. (Pet. at 14.) The cost of this option would be a capital cost of \$11,900,000 with an annual operating cost of (Exh. 1 at 6-6.) \$380,000.

Reverse osmosis/mechanical evaporation is a process where moderate pressure is utilized to force water through semipermeable membranes which are relatively impervious to ions such (Pet. at 15.) Depending on the pH of the effluent, 60 to 98 percent of the boron could be removed; however, 20 to 30 percent of the effluent would not penetrate the membrane. This system would require pretreatment of the effluent with filters and a scale inhibitor to protect the membranes, requiring the installation of equipment and vessels. (Id.) A mechanical evaporator and spray dryer would also be necessary to allow the wastewater which would not penetrate the membranes to evaporate. The resulting dry product would then require landfilling. 1 at 6-3.) The cost of this option would be a capital cost of \$49,900,000 with an annual operating cost of \$2,410,000. at 6-6.)

One of the operating changes which was considered was to convert to a dry ash system. Dry fly ash is carried to a storage silo and then transported to a landfill. (Exh. 1 at 6-3.) The cost of this option would be a capital cost of \$11,905,000 with and annual operating cost of \$450,000. (Exh. 1 at 6-6.) Another operating change considered was to switch to a lower boron coal. This would require modifications to coal handling systems, boilers and precipitators because of the nature of low sulfur coal. (Pet. at 16.) The cost of this option would be an annual operating cost of \$4,509,000. (Exh. 1 at 6-6.)

The Agency states that compliance with the boron water quality standard of 1.0 mg/L is neither technically feasible or economically reasonable. (Ag. Rec. at 1.) The Agency states that all coal ash contains relatively high amounts of boron and "all known coal ash settling ponds in Illinois have levels of

dissolved boron that exceed 1.0 mg/l". (Ag. Rec. at 2.) Therefore, according to the Agency, all such discharges require relief from the boron water quality standard either through mixing zones or other relief. (Ag. Rec. at 2.) The Agency states that there are currently two adjusted standards and one site-specific rule granted by the Board giving boron relief for discharges from coal ash ponds. (Id.) The Agency also states that in all those proceedings the Agency has agreed that treatment to remove boron from the ash ponds effluent or change over to a dry ash handling system are either technically infeasible or economically unreasonable. (Id.)

HEALTH AND ENVIRONMENTAL EFFECTS

The Agency has conducted macroinvertebrate studies on Sugar Creek on a reach of the stream containing 3.9 miles, and encompassing the sewage treatment plant discharge. (Pet. at 12.) The studies concluded that the stream could partially support designated aquatic life uses with moderate impairment. (Pet. at 12; Exh. 1 at 3-18.) Water quality studies of Sugar Creek indicate that it has good stream and water quality with certain limitations noted that are slight nutrient loading and moderate siltation. (Pet. at 12.) The Sugar Creek fishery is average for a stream of this size. Based upon a variety of factors, Sugar Creek is rated as providing partial support of the designated aquatic life use with only minimal impairment at the Agency sampling station. (Pet. at 12-13; Exh. 1 at 3-34.)

The South Fork above its confluence with Sugar Creek has fair to good water quality, an excellent rating for macroinvertebrates, but a poor fishery. At the sampling site it was rated as providing partial support of the designated aquatic life use with only a minor impairment. (Pet. at 12.)

Because of extensive stream channelization and sewage treatment plant discharge, loss of riparian vegetation, and agricultural and urban runoff, the Sangamon River below the confluence with the South Fork is partially supportive of aquatic life, with minor impairment. (Pet. at 12-13.)

CWLP points out that it has used Illinois high sulfur coal since 1981 and has been discharging for over 50 years. (Pet. at 18-19.) CWLP states that "compliance with the proposed adjusted standard would have no adverse affects because the discharge concentration of boron will not change from historical and existing concentrations". (Pet. at 21.) CWLP further states that an Agency investigation from 1988 of potential toxicity of CWLP discharges indicated no significant acute toxicity was observed for the species investigated. (Pet. at 22.)

A current literature review of the environmental and ecological impacts of boron concentrations at the levels CWLP

requests in the proposed adjusted standard is found in Exhibit 1, pages 4-4 through 4-8. Those studies, performed on a diversity of aquatic organisms, demonstrate the response to boron of three aquatic trophic levels, plant, invertebrate and vertebrate (fish).

"These studies demonstrate that adverse effects on an aquatic food chain, and consequently the biological community structure of an aquatic ecosystem, would not be observed at or below a boron concentration of 11.0 mg/l. Overall the results indicate that the Sugar Creek - Sangamon River biological community would not be significantly affected by the 11.0 mg/l standard proposed for the upper portion of Sugar Creek." (Exhibit 1, page 4-8.)

The Agency in its recommendation indicated that in terms of harm to aquatic life or other uses of the affected waters, the proposal will not cause any harm. (Ag. Rec. at 2.) In support of this position the Agency preferred an evaluation of the toxicity literature to determine the risk of boron to native aquatic organisms. This review of the toxicity literature indicates that the tests reported in the literature agree that no acute or chronic toxicity is likely to occur at the highest concentration requested (11 mg/l). (Ag. Rec. at 2-3.) Additionally, the Agency states that the communities of aquatic organisms residing in the receiving streams, while partially impaired from other sources, are not known to be impacted from CWLP's ash pond discharges. (Ag. Rec. at 3.) This assessment comes from a variety of Agency sampling programs including Facility Related Stream Surveys (conducted at the Springfield Sanitary District's discharge to Sugar Creek), Intensive Basin Surveys and the Ambient Water Quality Monitoring Network.

Using the summaries of data reported in the Illinois Water Quality Report 1990 - 1991, the Agency lists all the waterbodies in the downstream continuum from the Petitioner's discharges as "partial use support - minor impairment". (Ag. Rec. at 3.) causes of this minor impairment are listed as siltation to a moderate degree and nutrients to a slight degree in Sugar Creek and the South Fork of the Sangamon River and the sources of the impairment to these waterbodies are municipal point sources, combined sewer overflows, agriculture, urban runoff, channelization and flow regulation/modification, all to a slight degree. (Id.) The Sangamon River downstream of the discharge is listed as having impairment caused by nutrients and organic enrichment to a slight degree and siltation to a moderate degree. The sources for this are given as non-irrigated crop production, pasture land, municipal discharges and combined sewer overflows, all to a slight degree. (Id.)

According to the Agency, the discharge concentrations of boron requested in the petition accurately reflect the worst case

stream concentrations expected. Moving downstream from Spaulding Dam, additional inflows from various sources dilute the initial (Ag. Rec. at 3-4.) The requested boron effluent concentration. concentrations for each stream portion are the predicted concentrations if the streams were under 7Q10 drought flow and the effluent concentration was at the highest requested level (11 The reliability of these projections has been demonstrated by actual water quality sampling by the Agency. highest boron concentration observed by the Agency in the Sangamon River downstream from CWLP's discharge (AWQMN station E-26 at Riverton) has been 1.82 mg/l. (Ag. Rec. at 4.) was recorded during the summer of 1988, in the midst of one of the most severe droughts of the century. Usually, the Sangamon River at this point does not exceed the General Use standard and in fact from the period between January 1987 and October 1992 a period including the three drought years of 1987, 1988, and 1989, the Sangamon River exceeded the 1.0 mg/l existing standard only (Id.) No violations of the boron in 12.8% of all samples. standard were recorded at the Agency's sampling station at Petersburg further downstream on the Sangamon River.

The Agency notes that CWLP, in its assessment of use impairments, used the previous (1988-1989) edition of the Illinois Water Quality Report. From studies conducted since, the Agency has found some improvement in the streams of the area. The reach of the Sangamon River below Decatur is no longer considered nonsupportive of uses. In fact, most of the reach is also partial support - minor impairment with a few miles closest to Decatur being partial support - moderate impairment. The overall conclusion is that these waterbodies are in fair to good condition and what impairment has been identified cannot be linked to boron from any source. This fits with the Agency's experience that no aquatic life impairment is known to occur anywhere in the State due to boron.

Petitioner's evaluation of uses of the affected waters for irrigation has discovered one potential use, a golf course north of Springfield. If this facility receives a withdrawal permit to utilize water from the Sangamon River for grass irrigation there theoretically could be some conflict, i.e., boron toxicity to the grass resulting from Petitioner's discharge. However, the likelihood for any harm is extremely slight. The concentration of boron at the withdrawal point will be at most 2.0 mg/l. will occur only during maximum effluent concentrations (11 mg/l) and 7Q10 or lower river flows. Probably a more important factor in this scenario is that grass is not very sensitive to boron. An article in the Canadian Journal of Soil Science, August 1985, "Boron Toxicity and Deficiency: a Review" by Guptz Umesh, et. al., states that various members of the grass family, wheat, barley, oats, etc., are not affected by irrigation water with boron concentrations in the 1.0 to 2.0 mg/l range. (Ag. Rec. at 10.) This tolerance was determined by raising plants in a sand

bed and using water with a known boron content as the sole water source. In Illinois, total irrigation over the life cycle of the golf course grass is extremely unlikely with rains eventually leaching away any accumulated excess boron. The most likely result of this proposed irrigation, if boron above 1.0 mg/l is even present in the river, is that beneficial amounts of boron will be provided since boron is a vital plant nutrient that sometimes is deficient in soils.

CONSISTENCY WITH FEDERAL LAW

CWLP and the Agency agree that the Board may grant this adjusted standard consistent with federal law. (Pet. at 25; Ag. Rec. at 5.) Section 303 of the Clean Water Act, 33 U.S.C. 1313, grants to the states the authority to promulgate water quality standards applicable to both interstate and intrastate waters. (Pet. at 25.) Illinois has adopted water quality standards at 35 Ill. Adm. Code 302 and the standard for boron found at Section 302.208(e). States may also revise water quality standards pursuant to 40 CFR 131.4 and remove a designated use pursuant to 40 CFR 131.10(g). (Pet. at 26.) CWLP asserts that the adjusted standard procedures at 35 Ill. Adm. Code 106 satisfy the federal requirements. (Id.)

DISCUSSION

The Board notes that this requested adjusted standard proceeding is similar to the adjusted standard proceeding in Rhone-Poulenc Basic Chemicals Company and Thorn Creek Basin Sanitary District, (Rhone-Poulenc) AS 94-7, June 23, 1994. In that case, the petitioners had sought an adjusted standard from the water quality standards for the discharge of total dissolved solids and sulfate. The Board granted an adjusted standard; however, the adjusted standard was to the provisions in 35 Ill. Adm. Code 304.105 rather than to the general water quality standards. Section 304.105 is titled "Violation of Water Quality Standards" and states:

no effluent shall, alone or in combination with other sources, cause a violation of any applicable water quality standard.

The Board took this course of action in Rhone-Poulenc due to a concern by the Board that granting relief from water quality standards for the stretch of receiving waters in Rhone-Poulenc could give "other dischargers located on these streams essentially the same relief . . . even though other discharges have not made" a demonstration that they are entitled to similar relief. (Rhone-Poulenc at 18.)

The Board believes that granting an adjusted standard to the general water quality standards may have the same effect on the

Sugar Creek and Sangamon River. The Board is especially concerned given the known discharges from the Springfield and Decatur sanitary works. Therefore, the Board finds that the relief in this proceeding should be consistent with the relief granted in Rhone-Poulenc. In order to ensure that the relief is consistent, the Board will grant an adjusted standard to 35 Ill. Adm. Code 304.105 rather than to the general water quality standards at 35 Ill. Adm. Code 302.208.

CONCLUSION

CWLP has provided evidence that the streams into which CWLP discharges will not be adversely affected by the adjusted standard for boron at the requested concentrations. During dry conditions when the level of Lake Springfield is below 560 MSL, the only flow into the upper reaches of Sugar Creek is from Outfall 004. The Agency indicated that even with a high discharge of boron there has been no degradation of the streams and in fact parts of the Sangamon River have improved. Therefore, the Board finds that the adjusted standard will not result in health or environmental effects substantially or significantly more adverse than the effects considered by the Board when promulgating the rule of general applicability.

CWLP has demonstrated that there are currently no withdrawals from the receiving streams for agriculture irrigation. One potential use being considered is grass watering at a nearby golf course. CWLP presented evidence and the Agency agreed that the proposed boron concentrations will not adversely affect grass growth. CWLP also established that without the discharge for outfall 004 Sugar Creek's flow is substantially reduced and is essentially zero when Lake Springfield is below 560 MSL. Therefore, the Board finds that the factors relating to CWLP are substantially and significantly different from those relied upon by the Board when adopting the general water quality standards. The existence of those factors justify the granting of an adjusted standard, which is consistent with federal law.

The Board hereby grants an adjusted standard to CWLP consistent with its decision in <u>Rhone-Poulenc Basic Chemicals</u> <u>Company and Thorn Creek Basin Sanitary District</u>, AS94-7, June 2, 1994.

This opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The City of Springfield, Office of Public Utilities, City Water, Light and Power's (CWLP) facility which discharges to Sugar Creek to 100 yards downstream of the confluence of the Sangamon River with Spring Creek in the Northeast Quarter of

Section 10, in Springfield Township, Sangamon County, is hereby granted a partial adjusted standard from 35 Ill. Adm. Code 304.105. Pursuant to this grant, 35 Ill. Adm. Code 304.105 does not apply to discharges from outfalls 003 and 004 as regards boron concentrations that are less than or equal to:

- 1. 11.0 mg/l for boron from CWLP's Outfall 003 at Spaulding Dam on Sugar Creek to its confluence with the discharge of the Springfield Metropolitan Sanitary District's Sugar Creek Plant Outfall 008 in the Northeast Quarter of Section 31, Clear Lake Township, Sangamon County;
- 2. 5.5 mg/l for boron from the discharge of said sanitary district plant outfall on Sugar Creek to its confluence with the South Fork of the Sangamon River; and
- 3. 2.0 mg/l for boron from the confluence of Sugar Creek and the South Fork of the Sangamon Rivers to 100 yards downstream of the confluence of the Sangamon River with Spring Creek in the Northeast Quarter of Section 10, Springfield Township, Sangamon County.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/40.1) provides for the appeal of final Board orders within 35 days of service of this decision. The Rules of the Supreme Court of Illinois establish filing requirements. (But see also, 35 Ill. Adm. Code 101.246, Motions for Reconsideration.)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the the day of the man of the part of the pa

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board