ILLINOIS POLLUTION CONTROL BOARD
April 10, 1986

IN THE MATTER OF:	)	
	)	
SITE-SPECIFIC RULEMAKING	)	R85-15
FOR THE SANITARY DISTRICT	)	
OF DECATUR	)	

PROPOSED RULE. SECOND NOTICE.

OPINION AND ORDER OF THE BOARD (J. Anderson):

On January 23, 1986, the Board proposed to adopt a new rule, 35 Ill. Adm. Code 304.212, which provides site-specific relief from the Board's effluent discharge regulations for the Sanitary District of Decatur (District). The parameters at issue are five day biochemical oxygen demand (BOD_5), which is proposed to be limited to 20 milligrams per liter (mg/l), and total suspended solids (TSS), which is proposed to be limited to 25 mg/l.

First notice of the proposal was published in the Illinois Register on February 21, 1986. The first notice comment period expired on April 6, 1986. On March 17, 1986, the Board received written comments from the Illinois Environmental Protection Agency (Agency), which also contain submissions from the District. On March 25, 1986, the District submitted an independent filing in which it adopts and supports the Agency's comments; no other comment has been received.

The Agency comments specifically addressed five issues, as requested in the First Notice Opinion. Based on review of these comments, the Board will make a change in the proposed rule concerning restrictions on ammonia-nitrogen (NH3-N) concentrations. This and the other issues in the comments are discussed individually below.

IMPACT OF SUSPENDED SOLIDS

The Board noted in the First Notice Opinion that the record as then developed contained minimal information concerning the impact of the proposed increase in effluent TSS. While recognizing that the proposed increase in the BOD_5 limitation required an attendant increase in the TSS limitation due to interrelationships between these two parameters, the Board believed that further exposition of the environmental impact of TSS should be presented before this matter proceeded further.

The Agency comments address this concern by providing excerpts from the United States Environmental Protection Agency's "Quality Criteria for Water" and the American Fisheries Society's "A Review of the EPA Red Book: Quality Criteria for Water" (Comments, Exh. 1 and 2). These excerpts present, inter alia,

the effects of TSS on aquatic communities, and conclude that TSS concentrations under 25 mg/l provide a "high level of protection" and that concentrations under 80 mg/l provide a "moderate level of protection". The Agency further notes that TSS concentrations above 80 mg/l do occur at water quality stations located downstream from Decatur, associated principally with high flow events. The Agency thereby concludes that "the District's discharge, at 25 mg/l TSS, will not cause or contribute to excessive suspended solids levels in the river". The Agency also concludes that the District's discharge should not result in any identifiable bottom deposits.

With the addition of these observations, the Board determines that the matter of environmental impact of the proposed TSS effluent limitation is now adequately addressed in the record and that no alteration in the TSS aspect of the First Notice Rule is warranted.

INSTREAM MONITORING

The second issue raised by the Board in the First Notice Opinion and addressed in the Agency's comments relates to the appropriateness of requiring the District, as a provision of the proposed rule, to conduct instream monitoring of dissolved oxygen (DO) concentrations. The concern of the Board on this issue stemmed from the District's contention, based on computer modeling, that the proposed relief would not occasion violations of the instream DO water quality standard. The Board asked whether addition monitoring would be necessary to enable verification of this contention.

Both the Agency and the District (Comments, Exh 4) believe that monitoring requirements specified as part of the rule would not provide any meaningful benefit over existing program authority. They point out that it is the Agency's prerogative through the NPDES permitting process to impose any necessary requirement as to monitoring, pursuant to 35 Ill. Adm. Code 309.146 and Section 301(b)(1)(C) of the Clean Water Act; that the District already conducts monitoring of instream DO; and that the Agency already monitors DO at three downstream ambient water quality stations. Thus, the Agency and District contend that adequate monitoring safeguards already exist, and further that adding a specific monitoring provision in the rule would restrict any flexibility in future monitoring.

Based on these observations, the Board affirms its determination in the First Notice Opinion that it would be unwarranted to specify instream monitoring provisions in the proposed rule.

AMMONIA NITROGEN LIMITATION

In the First Notice Opinion the Board proposed that the District's relief be limited to such times as when the NH3-N

effluent discharge is less than or equal to 1.5 mg/l. This proposal was based on demonstration by the District that at an NH3-N discharge of 1.5 mg/l no violations of instream DO are projected by the modeling studies, but an absence of demonstration of the same condition at higher NH3-N discharges. The Board specifically asked that comments address whether the 1.5 mg/l restriction is necessary, and, if necessary, whether it should apply under both warm and cold weather conditions.

In response the Agency and the District suggest that the ammonia provisions of 35 Ill. Adm. Code 302.212, which place limitations on instream ammonia levels, are sufficient safeguard to assure that the District's facilities perform in accordance with the modeling results. The District has further affirmed its previous contention, and the Agency agrees (Comments, p.4), that the design of the plant will allow treatment adequate to meet the water quality limitations of Section 302.212. On this basis, it is asserted that an additional limitation on NH3-N in the site-specific rule is unnecessary.

The Board notes that it is explicit in 35 Ill. Adm. Code 304.105 that an exception to an effluent regulation, as is the issue here, does not remove the burden of meeting water quality standards. The Board, in fact, so emphasized in the First Notice Opinion. Accordingly, the existence of a water quality rule on the same parameter, which in this case is Section 302.212, could be viewed as an effective limitation on effluent discharges. While the Board does not find this position broadly compelling, in that its logical extension is that the existence of water quality standards negates the need for any parallel effluent standards, the Board nonetheless does determine that there is merit in allowing the water quality standards to control in this case.

The Board does not at present have a generally applicable effluent standard for ammonia. Moreover, in promulgating Section 302.212, the Board noted, inter alia, that it was so doing "in order to relieve municipalities from the burden of ammonia control where such control does not appear necessary to protect the environment" (In the matter of: Amendments to Title 35: Environmental Protection; Subtitle C: Water Pollution; Chapter I: Pollution Control Board (Ammonia Nitrogen), R81-23, 49 PCB 297). Implicit in this determination is that, for the case of ammonia, performance to water quality standards is an acceptable determinant of the appropriate level of ammonia effluent discharge. The Board sees no reason why this strategy is any less appropriately applied to the District's discharge than it is to other discharges across the State.

Based on the above, the Board determines that the inclusion of an NH3-N limitation in the Decatur site-specific proposed rule is unnecessary. Accordingly, the Board will delete the NH3-N limitation provisions as proposed under First Notice. This

determination makes irrelevant the matter of whether such a limitation should differ depending upon the temperature of the receiving water.

BIOCHEMICAL OXYGEN DEMAND

The fourth issue requested to be addressed is the matter of the relationship between carbonaceous five-day biochemical oxygen demand ($CBOD_5$) and five-day biochemical oxygen demand (BOD_5). This request was occasioned by the Board's note that the District's modeling was based upon various scenarios of $CBOD_5$ discharge, but that the proposed rule is presented as a limit on BOD_5. The Agency responded in its comments that, as the Board had noted in the First Notice Opinion, presenting the proposed rule in terms of BOD_5 introduces a safety factor into the modeling results. This condition stems from the fact that $CBOD_5$ is a component of the more general BOD_5*. Thus, since the modeling results indicate that 20 mg/l of $CBOD_5$ produces minimal environmental impact, setting of the proposed rule with a 20 mg/l BOD_5 limitation restricts the District to a lower $CBOD_5$ output than demonstrably produces minimal environmental impact.

Based on this additional perspective, the Board will make no modification in the BOD_5 provision of the proposed rule.

LIMITED DURATION ("SUNSET") PROVISION

The final issue addressed by the Agency is the matter of the Board's proposal to limit the requested relief to 10 years beginning from completion of the District's improvements. This is the "sunset" proposal. The Board asked that two aspects of this proposal be addressed: the impact such proposals might have on procurement of funding, and the general appropriateness of such proposals in certain site-specific rulemakings.

It is the Agency's belief that a sunset provision should have no effect on federal funding, since the purpose of the federal program is to enable a facility to meet final effluent limits at the time of completion (Comments, p.12). The matter of whether the procurement of other capital funding would be affected is less certain. Since this funding is typically achieved through the issuance of twenty-year bonds, the Agency speculates that a ten-year limit "could conflict" with this issuance (Comments, p.12). No more substantial perspective is offered.

At the outset, the Board notes that it is persuaded by the Agency arguments, at least in part, against including a "sunset" provision in this particular site-specific. The following concerns, taken together, weigh against the inclusion.

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*In the District's current effluent $CBOD_5$ comprises approximately 61% of the BOD_5 (Comments, p.5).

The implications of, and rationale for, a 10 year sunset provision as it would relate to Decatur's circumstances would better have been raised earlier and aired at hearing. However, this statement is not intended to imply that in other circumstances airing at hearing is a necessary prerequisite to establishing sunset provisions. Additionally, the Board's rationale supporting "sunset" in large measure focused on concerns applicable generally to site-specific regulations (and arguably to general regulations), rather than concerns special to the Decatur situation.* Next, the effect of specific sunset language on local bond issues is a matter that needs further consideration. Finally, the Board, on balance, does not feel that a sunset provision is so essential in Decatur's case, given other review benchmarks, as to warrant delaying the decision in order to hold further hearings.

In so holding, however, the Board wishes to emphasize its areas of disagreement with the Agency's comments, as follows.

In addressing the general merits of sunsetting certain site-specific rules, the Agency first questions whether the Board presently possesses authority to do so. The Agency points out that both the Illinois Environmental Protection Act (Act) and the Board's procedural rules are silent on the matter of limiting the duration of rules. The Agency concedes that the Act does provide the Board authority to adopt procedural rules which could include provisions for sunsetting site-specific rules (Comments, p.7-8). However, the Agency believes that the Board may not impose sunset provisions without first promulgating an enabling procedural rule; to do otherwise, the Agency argues, would cause the Board to exceed its authority.

The Agency additionally notes that a higher court may invalidate a Board regulation if it is clearly arbitrary, unreasonable, or capricious, and believes that it may "be argued that in the absence of a procedural rule setting forth criteria for the imposition of a limited duration provision in a site-specific rule the Board's action in doing so would be arbitrary and capricious" (Comments, p.10).

The Board does not find compelling the argument that there must be underlying procedural rules before sunsetting on a site-specific basis, although this route might be more desirable. Section 27(a) of the Act delegates a broad rulemaking authority to the Board and authorizes, inter alia, that "any such regulations may make different provisions as required by circumstances for different contaminant sources and for different geographical areas". The same section concludes with the

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* The Board recognized this in asking for general comments on the concept. These general comments on the policy aspects will be further considered in R82-36, the generally applicable regulatory proceeding.

statement that "the generality of this grant of authority shall only be limited by the specifications of particular classes of regulations elsewhere in this Act". No restriction on sunsetting exist elsewhere in the Act. Moreover, sunsetting may prudently be viewed as within the scope of Board authority to make different provisions as required by circumstances for different contaminant sources and for different geographical areas. Therefore, the Board determines that it presently does have authority to promulgate sunset provisions in rulemakings, as circumstances may warrant. While the Board allows that a procedural rule specifying procedures for sunsetting may have merit*, it does not believe its existence is a necessary condition to a determination that sunsetting is appropriate in any specific case.

The Agency also asserts that the particular facts in this proceeding do not justify a sunset provision. The Board agrees only insofar as enunciated earlier. The Board has not retreated from its concerns expressed in the First Notice Opinion, including loss of justification with time, inequitable future distribution of the spoils and burdens of environmental regulation, assignment of the burden of justification for exceptions to rules, evolution of treatment technologies and understanding of appropriate environmental controls, and obsolescence of rules.

The Agency further argues that the ten-year period is arbitrary, in that it bears no relationship to any of the following: the expected timetables of funding, the expected performance of the treatment facilities, the projected impacts upon the Sangamon River, the projected growth of the City of Decatur, or the potential development of downstream uses. The Board concedes that the above listed criteria were not given weight in determination of the proposed ten-year duration of the rule, and could legitimately be raised at hearing. However, it should also be noted that, in the First Notice Opinion, the Board determined that "a ten-year exception should provide a sufficiently long period for observation and study so that a well-informed decision on the continuing merits can then be made".

Lastly, the Agency argues that:

> there is no substantial benefit in requiring the Board to re-evaluate the proposed relief after ten years. Since no water quality standards would be relaxed, the Agency has the capability to modify permit requirements at any time to eliminate violations. In addition, permits may be issued for a maximum of five years. The renewal process will

*However, the Board notes that the instant matter is not the proper forum within which such merits might be debated.

> allow the assessment of water quality in the Sangamon River and any conflict between the operations of the District and downstream dischargers. Agency review will be more timely and efficient in this matter. (Comments, p.12)

The Agency's argument fails to recognize the sharp distinction in responsibilities delegated to the Board and the Agency by the Act. Section 5(b) of the Act plainly states:

> The Board shall determine, define and implement the environmental control standards applicable in the State of Illinois and may adopt rules and regulations in accordance with Title VII of this Act.

Though the functions performed by the Agency obviously are crucial to the State and multivariate in nature, the Board is the entity in Illinois created to "determine, define and implement" environmental control regulations. Exercise of this authority necessarily involves a certain amount of judgement and discretion that only the Board can appropriately exercize. The Board must assume responsibility, both concurrently and in the future, for the decisions it reaches. For this reason the Board must be the entity to re-evaluate the proposed relief after ten years if in fact such re-evaluation necessarily must take place. Given that the relief could only emanate from the Board initially, it is appropriate that the Board determine the continuing validity of that relief in the future.

Based on the foregoing, the Board will delete the provision in its First Notice proposal that the rule be of a defined duration.

ORDER

The Board hereby directs that second notice of the following proposed rule be submitted to the Joint Committee on Administrative Rules:

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

PART 304

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

Section 304.212 Sanitary District of Decatur Discharges

a) This Section applies only to effluent discharges from the Sanitary District of Decatur's Sewage Treatment Plant into the Sangamon River, Macon County, Illinois.

b) The provisions of Section 304.120(c) shall not apply to said discharges, provided that said discharges shall not exceed 20 mg/l of five day biochemical oxygen demand (BOD_5) (STORET number 00310) and 25 mg/l of total suspended solids (STORET number 00530).

IT IS SO ORDERED.

J. Dumelle, R. Flemal and B. Forcade concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Rule/Second Notice Opinion and Order was adopted on the 10th day of April, 1986, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board