

neither has the Agency moved to file the comment instanter. The Board will nevertheless consider the Agency's comment in the interest of seeking full resolution of this matter.

ISSUES

In its First Notice Opinion the Board requested that interested persons address several issues. These have been responded to generally by both Modine and the Agency. In addition, the Agency raises several other issues.

At hearing Modine alleged that the Agency had underestimated the depth of Modine's existing lagoons, and hence the size and treatment capacity of the lagoons (R. at 362). The Board at First Notice noted that Modine had apparently elsewhere cited depth figures not inconsistent with those cited by the Agency, and requested that Modine clarify this possible discrepancy (First Notice Opinion, footnote 6 at 17). Modine responds that the Agency's underestimation of depth relates to the first of the three lagoons, as attested to at hearing (R. at 324-6, 345); the second and third lagoons have depths consistent with those assumed by the Agency (PC #9 at 1-2). It is within the first lagoon where the principal removal of TSS and BOD occurs.

The Board at p. 20 of the First Notice Opinion noted:

The ability of the Board to grant any relief to Modine is contingent upon assurance that Modine operates and configures its current wastewater treatment system in the most environmentally sound manner. * * * One step which is recommended [by Modine's consultants] * * * is replacement of the submerged pipe outlet by a spillway/cascade outlet. The Board believes that modification would significantly enhance the DO of the receiving stream, thus mitigating the potential problem associated with Modine's BOD discharges.

The Board thereupon requested that Modine provide assurance that the spillway/cascade modification be undertaken. Modine responds that in October 1989 Modine constructed a concrete and riprap elevated spillway outfall at the Ringwood Facility (PC #9 at 2).

Similarly, Modine has indicated that it could comply with the General Use standards for un-ionized ammonia and ammonia nitrogen after installing a pH adjustment system. Modine now reports that it has filed with the Agency an application for a construction and operating permit for such system (PC #9 at 7).

The Board at p. 21 of the First Notice Opinion requested that Modine provide additional support for its proposal to define

"winter" as the seven months including October through April. The Agency also questions why the definition of "winter" in the instant proposal differs from that found in some other rules² (PC #10 at 1). Modine responds that northeastern Illinois, where Modine's facility is located, is the coolest region of the State, and that in the northeastern region the onset of low mean temperatures precedes that in the southern portion of the State by several weeks in the fall and the onset of warm mean temperatures in the northeast lags the south by more than a month in the spring (PC #9, exhibit 1). On this basis, Modine contends that the requested definition of "winter" is consistent with site-specific climatological data.

The Board accepts Modine's position concerning these particulars of climate. The Board believes, however, that neither of the terms "winter" or "summer" is an appropriate label for the times periods in question. Accordingly, the seasonal aspect of the rule in question is today expressed simply by citing the months within which the various standards apply.

The Board proposal of the modified fluoride standard at 35 Ill. Adm. Code 303.430 was, for purposes of First Notice, based largely on the record developed in R78-7 (In the Matter of: Proposed Amendments to Rule 203.1 of the Water Pollution Control Regulations, final action taken March 4, 1982), and introduced into the instant record by Modine as Exhibit 36. In R78-7 the Board found in a site-specific rulemaking that fluoride concentrations up to 5.0 mg/l would have no adverse environmental or health impact as applied to a portion of the Vermilion-Wabash River system in east-central Illinois. Although at First Notice the Board allowed that the conclusions reached in R78-7 might also be applicable to the waterway into which Modine discharges, the Board requested that Modine and the Agency address the similarities between the waterways considered in R78-7 and the instant waterway (First Notice Opinion at 22).

Modine responds that an important commonality between Modine's receiving waterway and the waters considered in R78-7 is that of the hardness of the waters (PC #9 at 3-5 and Exhibit 2). Modine notes, as does the Agency (PC #10 at 3), that

² The concept of a "winter" season is used variously in different Board rules. For example, it is November through March with respect to ammonia nitrogen discharges to the Illinois River system at 35 Ill. Adm. Code 304.122 and 35 Ill. Adm. Code 304.201(b); it is December through March with respect to BOD and February through May with respect to TSS in the Galesburg SD site-specific rule at 35 Ill. Adm. Code 304.207; and it is November through March with respect to violations of the ammonia nitrogen water quality standard at 35 Ill. Adm. Code 304.301.

fluoride toxicity is inversely proportional to hardness. In the Modine case hardness is of the order of 328 mg/l (PC #9 at Exhibit 2); in the R78-7 case hardness was ca. 350 mg/l (Id.). Thus, both streams are classified as "very hard" pursuant to standard hardness classifications. On this basis, Modine contends that the toxicity conclusions reached in R78-7 are equally applicable to the instant case (Id.). Based on its own review of the record, including Exhibit 36 and the similarities between the facts of R78-7 and this proceeding, the Board concludes that the fluoride standard as proposed would be protective of aquatic life uses in the limited receiving waters specified.

As an associated matter, the Board noted at First Notice that it proposes to limit the site-specific fluoride water quality standard to only that portion of Modine's receiving waterway extending approximately 1,200 feet downstream from Modine's outfall. This position was based on the Board's determination that Modine had justified the site-specific standard only for that part of the unnamed tributary for which Modine constitutes the principal source of low-flow discharge (First Notice Opinion at 25). Modine responds that it has no objection to this limitation (PC #9 at 6).

Also as regards fluoride, the Agency questions whether the use of a monthly average and daily maximum is workable as a water quality standard. The Agency points out that water quality standards are generally not defined in this manner due to the difficulty of assessing compliance where grab samples constitute the sampling norm (PC #10 at 3). The Board believes that the Agency makes a valid point. The First Notice phrasing the fluoride standard was premised on sampling programs commonly employed in effluent monitoring. However, this perspective neglects the fact that effluents are monitored by the discharger, whereas the Agency is responsible for water quality sampling. Therefore, the water quality standard has to be phrased in a manner which is workable in the confines of the Agency's ability to monitor. Water quality standards are normally defined as instantaneous maxima, which are not to be equalled or exceeded at any time. The Board believes that this is the only appropriate way to phrase the instant rule, and accordingly proposes the instant rule for Second Notice in this manner.

As a final matter regarding fluoride, the Board today proposes for purposes of Second Notice an alternative method of effectuating the requested relief. The alternative method is to cite the exception within the Board's effluent standards at Section 304.221, rather than in the water quality standards at Section 303.430 as proposed at First Notice. The Board believes that this alternative constitutes a more efficient and cleaner method of codification. The Board also believes that the practical effects of the alternative are identical to those of

the language proposed at First Notice. Nevertheless, the Board will reserve filing of the instant proposal with JCAR for 15 days from this date, during which time any interested persons are requested to provide the Board with comment on the matter of placement of the fluoride exception within Section 304.221.

CONCLUSION

The Board remains persuaded that Modine has demonstrated that there is no alternative treatment method which is simultaneously technically feasible and economically reasonable and which would allow Modine to comply fully with the Board's rules of general applicability at issue. The Board also remains persuaded that Modine's effluent, at least as regards the parameters at issue, is not a limiting factor in the quality of the receiving waterway. Finally, other than for the matter of the fluoride water quality standard as noted above, the Board finds nothing in the post-First Notice record which would cause it to modify its First Notice Proposal. Accordingly, the Board today adopts the proposal for Second Notice.

ORDER

The Board hereby proposes for Second Notice the following additions to 35 Ill. Adm. Code, Subtitle C: Water Pollution. The Board directs that these additions be submitted to the Joint Committee on Administrative Rules.

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

PART 304
EFFLUENT STANDARDS

Section 304.221 Ringwood Drive Manufacturing Facility in
McHenry County

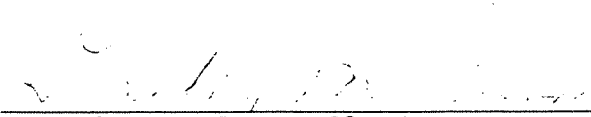
- a) This Section applies to discharges from the manufacturing facility located on Ringwood Drive in Ringwood, McHenry County, which discharges to an unnamed tributary of Dutch Creek.
- b) The general effluent standards for deoxygenating wastes contained in Section 304.120 shall not apply to these discharges. Instead these discharges shall comply with the following effluent limitations as measured at the point of discharge after the third lagoon and prior to discharge to the unnamed tributary:

TSS	12 mg/l	monthly average
	30 mg/l	daily maximum
BOD ₅	25 mg/l	May to September monthly average
	35 mg/l	May to September daily maximum
	60 mg/l	October to April monthly average
	70 mg/l	October to April daily maximum

- c) These discharges shall not be subject to Section 304.105 as Section 304.105 applies to the water quality standard for fluoride contained in Section 302.207 for those waters of the unnamed tributary between the discharge point of subsection (b) and a distance of 1200 yards downstream from the discharge point, so long as the concentration of fluoride does not exceed 5.6 mg/l in those waters.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 23rd day of February, 1990, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board