ILLINOIS POLLUTION CONTROL BOARD February 1, 1996

IBP, INC.,)
Petitioner,))) PCB 93-179
ν.) (Permit Appeal - NPDES)
ILLINOIS ENVIRONMENTÀL)
PROTECTION AGENCY,))
Respondent.))

DISSENTING OPINION (by C.A. Manning and M. McFawn):

We respectfully dissent. We do not believe that petitioners have justified the use of the 1,808 mg/l value as the permit level for their sulfate discharge. The Illinois Environmental Protection Agency's (Agency) permitting decision is supported by its technical analysis of the data submitted in IBP's permit application, and that decision should not be disturbed. The majority opinion discounts technical analysis in favor of common sense inference, and reaches a conclusion which is not technically supportable. Furthermore, IBP has not demonstrated that the permit, issued without the contested condition, would not cause a violation of the Environmental Protection Act (415 ILCS 5/1 *et seq.*) (Act) or applicable Board regulations.

We believe that this is a very straightforward case, which turns on the validity of certain monitoring data points submitted by IBP and determined by the Agency to be "outliers."¹ Neither the majority opinion nor IBP provides any technical support for overturning the Agency's conclusion. In making its permitting decisions, the Agency applied its standard methodology in accordance with its applicable guidance document to determine the appropriate sulfate discharge level for IBP's permit. In determining which data to use when applying this methodology, the Agency applied Nalimov's test (an accepted methodology for examining the validity of values in a data set) to the data set submitted by IBP. This analysis demonstrated that there were three definite outliers² in the data set, including the 1,808 mg/l value upon which the majority relies in establishing the permit level.

While an Agency guidance document does not have the force and effect of a rule, IBP has not challenged the Agency's methodology for calculating its maximum daily sulfate effluent level. Nor has IBP challenged the validity of Nalimov's test. IBP has not even challenged the assertion

¹ The term outlier is a mathematical term that is defined as an observation that is unusually large or small relative to the other values in a data set.

² Definite outlier status indicates that there is a very high degree of certainty that there is a gross error associated with the value.

that the 1,808 mg/l data point is valid, since there were no operational upsets at its facility, and since its analytical laboratory has standard operating procedures which were followed. They have provided no explanation as to why the sulfate level was approximately four times higher than the levels measured immediately preceding and following the 1,808 mg/l value.³ IBP's assertions do not constitute sufficient grounds for overturning the Agency's decision, and the truth of these assertions does not affect the validity of the Agency's determination that these points are outliers.

The fact that the disputed data points are definite outliers for the data set submitted by IBP means that these points are not bona fide values, and should not be considered when establishing a sulfate permit limit. If we assume that the data set submitted by IBP is sufficient for establishing a permit limit, as the Agency was required to do, we cannot use these data points, but must instead rely on other data points which have been determined to be valid. Alternatively, if the data points properly characterize IBP's effluent, as IBP would have us believe, then the data set itself must be insufficient, since the disputed data points are uncharacteristic of the data set. Faced with this situation, it was appropriate for the Agency to set the permit limit at 1,529 mg/l; even the 1,390 mg/l value underlying that limit was characterized by Nalimov's test as a probable outlier.

By relying on an invalid data point, the Board has allowed IBP to avoid compliance with the Board's regulations. As the majority properly points out, 35 Ill. Adm. Code Section 302.102(a) provides an exception to the prohibition in 35 Ill. Adm. Code Section 304.105 against dischargers causing or contributing to a violation of any water quality standard. The exception in Section 302.102(a) allows certain dischargers, who are already providing the best degree of treatment, to use small portions of receiving waters to effect mixing with their effluent, subject to certain limitations set forth in Section 302.102(b). Section 301.102(b)(12) requires that the area of allowed mixing be as small as practicable. As the majority points out, the limitations in Section 302.102(b) are intended to insure that "the volume of waters used for allowed mixing [are] as small as is practical, such as to limit impact on aquatic life, human health, and recreation." (See majority opinion at 7, quoting In The Matter of Amendments to Title 35, Subtitle C (Toxic Control) R88-21, Docket A, January 25, 1990, 107 PCB 281.) However, by relying on an invalid data point to set the effluent level in IBP's permit at an insupportably high level, the majority will allow the area of allowed mixing to exceed the size that would be the smallest practicable. This will permit IBP to cause an exceedence of the water quality standard for sulfate in an area larger than that supported by the valid data submitted by IBP, in violation of the prohibition in Section 302.102(b)(12).

Additionally, by determining that the absolute highest effluent limit for sulfate is 1,808 mg/l, the majority has also actually increased IBP's exposure to potential enforcement for effluent limit violations. It may very well be that IBP's next recorded "high" value will exceed 1,808 mg/l. IBP cannot now claim as a defense that values in this range are outliers.

Furthermore, we believe that the majority's decision reverses the burden of proof in this permit appeal and conflicts with the accepted division of environmental regulatory functions in

³ The sulfate levels immediately preceding and following the 1,808 mg/l value were 569 mg/l and 538 mg/l, respectively. (Agency Brief at 15.)

Illinois. The burden is on a petitioner challenging the Agency's permitting decision to demonstrate that the permit, if issued without the contested condition, would not violate the Act or Board regulations. While the Agency has the opportunity to contest evidence offered by a petitioner, it is not required to meet a burden of proof in supporting its permitting decision; the Agency can rely on the permitting record.

In this case, IBP has failed to sustain its burden of proof. Again, we point out that it is not IBP who has challenged the Agency's methodology, the validity of Nalimov's test, or the application of that test. Rather, it is the majority which has implicitly raised these challenges, and then ruled in its own favor on each. Having done so, the majority has disregarded a critical element of the Agency's permitting methodology, ignored the Agency's technical support for its position, and shifted the burden of proof to the Agency.

In sum, the petitioner has provided no valid grounds for challenging the Agency's technical analysis in this matter, other than its unsupported assertions that the "definite outlier" data point (1,808 mg/l) is valid. The majority, by second-guessing the Agency's methodology, has attempted to usurp the Agency's permitting function and replace it with a "common sense," ad hoc decision-making process unsupported by technical analysis.

Claire A. Manning, Chairman

Marili McFawn, Board Member

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above dissenting opinion was submitted on the 22 day of Ferring, 1996.

Linaly M. Junn Dorothy M. Gunn, Clerk

Illinois Pollution Control Board