

ILLINOIS POLLUTION CONTROL BOARD  
March 21, 1984

THE METROPOLITAN SANITARY DISTRICT )  
OF GREATER CHICAGO, )  
 )  
Petitioner, )  
 )  
v. ) PCB 84-16  
 )  
ILLINOIS ENVIRONMENTAL PROTECTION )  
AGENCY, )  
 )  
Respondent. )

CONCURRING OPINION (by J. D. Dumelle):

My main reason for concurring is the lack of a requirement in the instant case that E. coli. and enterococcus be measured in the sampling program ordered by this Board.

On January 31, 1984 in sworn testimony in R83-20 a USEPA official stated that new Federal bacteriological criteria would be shortly issued using water quality enterococcus (R.78). On March 8, 1984 another USEPA official, in a briefing to this Board, stated that E. coli. and enterococcus would be used.

The MSDGC has highly competent laboratory staff who can do analyses for these organisms. As it stands now, unless the MSDGC voluntarily expands the list of organisms it tests, its sampling will be done measuring only fecal coliform.

If a further variance is needed after December 31, 1984 the MSDGC will be presenting to this Board its sampling results using an organism (fecal coliform) soon to be supplanted by an evidently better measure of the safety to the public of the Illinois River. That new variance, if granted, may then not be acceptable to the Federal government. Worse still, this Board, in late 1984, will not have the best scientific indicator of public health danger before it when it makes its next decision.

The prime concern of this Board has to be protection of public health. Morris, Illinois, which is about 28.5 miles below Lockport, is a major center for water-skiing. Chicago beaches are now closed when the levels reach 500 fecal coliform per 100 ml. In Exhibit 2, Table 2, Dr. Charles N. Haas shows a doubling of fecal coliform counts at Highway 83 for the August through December, 1983 period of no chlorination compared to the single background month of July 1983 when chlorination was done (15,200 versus 7,600).

The distance from Halsted St. to Highway 83 on the Cal-Sag Channel is about 14 miles. The die-off in this stretch was from 268,300 to 15,200 or a rate factor of 17.6. If this rate factor holds true, then 14 miles further downstream should bring the fecal coliform levels below 1,000. This point would be about 2 miles below the Lockport Lock and Dam. Based upon this rough computation, the levels at Morris should not exceed the Chicago beach closing standard because of the Calumet Plant.

However, the West-Southwest Sewage Treatment Plant, the largest in the world, is located closer to Morris than is the Calumet Sewage Treatment Plant by about 7 miles. Its untreated effluent will then have levels higher than 15,200 at the Junction of the Sanitary and Ship Canal and the Cal-Sag Channel. What effect this will have upon Morris is not clear.

In R77-12 (Docket D) Dr. Haas was the principal technical witness in opposition to the cessation of chlorination. He advanced die-off formulae and predicted bacterial levels at Morris and other locations along the Illinois River. Yet, no one from the IEPA asked him at the March 14, 1984 hearing if he still held to those predictions (R.32-34). Were those worst-case predictions yet to come?

This proceeding is bothersome because of the paucity of data and the haste generated. In Exhibit 1 introduced by the MSDGC, Tables 1 and 2 show only six samples at Morris in 1977 and four samples in 1983. The data sets are six years apart. Why were additional samples not taken given the obvious need for public health protection at Morris?

Similarly, the IEPA Recommendation, on p.3 lists bacterial data at six locations for 1980, 1981 and 1982. But no data are given for 1983 or 1984. Was IEPA bacteriological sampling discontinued after 1982? If it was, why was it discontinued with cessation of disinfection about to happen? Is sampling now being done? This record is silent.

In this proceeding and in the immediate past variance (PCB 83-72) a pattern of "file late and rush the decision" has emerged. In the instant case, the Petition was filed Feb. 9, a bare 6 weeks before a scheduled MSDGC vote on March 22 for new supplies of sodium hypochlorite. The Board hearing was held March 14 in such haste that no member of the public received notice of it through the Board's Environmental Register (see No. 288, March 13, 1984). In PCB 83-72 filing was on June 2, 1983 which was less than two months before a self-imposed August 1, 1983 construction contract deadline.

Public scrutiny and participation at hearings are major tenets of the Environmental Protection Act. Future variance applications should be filed with the need for adequate public notice in mind.

Dr. Cecil Lue-Hing in his testimony seemed to endorse the IEPA "20-mile limit." But he gave as an example the "precipitous drop" in fecal coliform below the Dresden Lock and Dam at River Mile 272.4 (R.30-31). The Lockport Lock and Dam is at River Mile 291.5 or 19.1 miles upstream. There are two points to be made about Dr. Lue-Hing's statement. First, the MSDGC plants are not at Lockport but significant distances upstream. Second, the Kankakee River joins the Des Plaines River at River Mile 274 to form the Illinois River. The diluting effect of the Kankakee River may in fact be the reason for lower bacterial levels at Dresden Lock and Dam.

Respectfully submitted




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Jacob D. Dumelle  
Chairman

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Concurring Opinion was filed on the 23<sup>rd</sup> day of March, 1984.




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Christan L. Moffett, Clerk  
Illinois Pollution Control Board