

facilities for a period of approximately one year to account for the effect of seasonal changes on the aquatic life in the receiving streams. Petitioner agreed with the concept and the need for additional scientific research regarding the effects of chlorination. Revised NPDES permits would be necessary for Petitioner to maintain compliance with Board rules.

At the hearing, a witness for Petitioner explained the proposed study. A six month period of monitoring the chlorinated system would be undertaken, followed by a one year period of discontinuing chlorination, then six months of resumed chlorination. The effects prior and subsequent to chlorination could then be observed (R. 6).

The Agency has submitted a proposal to delete Rules 203 (g) and 405 of Chapter 3. This request is presently filed as R77-12, Docket D. Should this proposed rule change be adopted and the Institute has not ended its study the petitioner will resume chlorinating the effluent 395 days after the modified permits are issued and continue to do so for an interval long enough to account for all major seasonal changes. The Institute will seek funds necessary to offset the cost of chlorine for Petitioner to continue in the research project when rechlorination becomes necessary within the program (R. 13). Should the Institute prove unable to provide the funds Petitioner has agreed to cover the cost (R. 15).

The Agency supports the variance from Rules 203 (g), 405 and 402 as they apply to fecal coliform for a period of one year at the Northeast and Southwest plants. In connection with its proposed rule change, the Agency has offered to provide evidence that chlorine is toxic to aquatic life and that chlorination may be ineffective in reducing pathogens. It is the Agency's opinion that further studies on the biological effects of chlorination and recovery following cessation of chlorination will be of some public benefit.

The Board concludes that although Petitioner has not demonstrated arbitrary or unreasonable hardship, further studies of the effects of chlorination are necessary and finds the conditions imposed on Petitioner during the period of its variance to be reasonable. No mention appears in the record of possible danger to the public from wading or canoeing in the receiving stream when chlorination has ceased. Petitioner will file a report to the Board and Agency within 30 days of the date of this Order detailing the extent of such public uses of the stream in a 20 mile distance downstream of the discharges. The Board shall retain jurisdiction for the purposes of reviewing this report.

This Opinion constitutes the Board's finding of fact and conclusions of law in this matter.

ORDER

It is the Order of the Pollution Control Board that Petitioner be granted a variance from Rules 203 (g), 405 and 402 of Chapter 3: Water Pollution as they apply to fecal coliform, for a period of one year at the Northeast and Southwest plants subject to the following terms and conditions:

- 1). Petitioner's NPDES Permits Nos. IL 0031500 and IL 0031526 shall be modified to permit suspension of chlorination for a period of 365 days to begin 30 days after the modified permits are issued.
- 2). Petitioner's variance shall automatically terminate should the Institute elect to end its study within the one year period.
- 3). At the end of the 365 day period described in Paragraph 1, Petitioner shall comply with the Board's decision on the proposed rule change in R77-12, Docket D.
- 4). Within 30 days of the date of this Order the Petitioner shall file a report with the Board and Agency detailing the extent, if any, of wading and canoeing by the public in the receiving stream for a distance of 20 miles downstream of the discharges.
- 5). The Board shall retain jurisdiction in this case for the sole purpose of renewing the report described in Paragraph 4.
- 6). Within 45 days of the date of this Order, Petitioner shall execute of certification of acceptance and agreement to be bound to the terms and conditions of this variance. This 45 day period shall be held in abeyance if this matter is appealed. The certification shall be forwarded to the Illinois Environmental Protection Agency, Variance Section, 2200 Churchill Road, Springfield, Illinois 62706 shall read as follows:

CERTIFICATION

I (We), _____ having read and fully understanding the Order in PCB 79-186, hereby accept that Order and agree to be bound by all of its terms and conditions.

SIGNED _____

TITLE _____

DATE _____

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 29th, day of November, 1979 by a vote of 4-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board