## ILLINOIS POLLUTION CONTROL BOARD March 6, 1975

NORTH SHORE SANITARY DISTRICT, Petitioner, v. PCB 74-413 ENVIRONMENTAL PROTECTION AGENCY, Respondent.

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):

Petitioner, North Shore Sanitary District (NSSD), filed a Petition for Variance which was received by the Pollution Control Board (Board) on November 6, 1974. On November 8, 1974 the Board found the Petition to be inadequate and ordered Petitioner to file an amended Petition. The amended Petition was received by the Board on December 12, 1974. A hearing was held on January 2, 1975 and the Environmental Protection Agency filed a Recommendation in favor of granting the Variance on January 9, 1975.

NSSD is a municipal corporation providing wastewater treatment in the eastern portion of Lake County. It has begun construction of a new sewage treatment plant in Gurnee, which will discharge into the Des Plaines River. It seeks a Variance from Rule 404(f)(ii) of the Water Pollution Regulations from October 1, 1975, when construction would be sufficiently complete to provide secondary treatment (and thus permit start up of the plant operation) until December 1, 1976. At that date tertiary treatment will become operative and BOD5 and suspended solids concentrations will be within the levels established by Rule 404(f)(ii). Petitioner expects the secondary treatment to produce effluent at concentrations of 20mg/l of both  $BOD_5$  and suspended solids. At the hearing NSSD contended that such a discharge will have no adverse effect on the river and that water quality would not be diminished. It submitted evidence claiming that the 1974 annual average for the whole water course within its boundary was 6 mg/l BOD5 and 85 mg/l total suspended solids. At the testing station immediately upstream of the proposed outfall

of the Gurnee plant these values were 4 mg/l and 78 mg/l, respectively. At the station immediately below the outfall the values rose to 6 mg/l and 84 mg/l, respectively. Although NSSD admitted that effluent from its new Gurnee plant would have "some effect of pollution" with regard to suspended solids (R.43) it speculated that the BOD loading (estimated at around 20 mg/l) would be more than compensated for by additional oxygen provided by the increased flow. As the Agency offered no evidence to dispute this contention we must rely on this testimony and conclude that a grant of this Variance would not result in any significant deterioration of the Des Plaines River. The District's consulting engineer M.D. R. Riddell also testified that the dissolved oxygen standards of the Des Plaines River would not be breeched (R. 23).

NSSD also offered testimony at the hearing adequately justifying the delay in completion of this project. Delays were attributed to a concrete workers' strike, to a change in the standards of Rule 404(f)(ii) brought about by the Board's regulatory hearings, R70-8, in 1972, and to the novelty of the project.

On October 1, 1975 the Gurnee Plant will accept effluent from North Chicago, Great Lakes, Abbott Laboratories, the Village of Gurnee, and the upper Skokie Valley (consisting of the area north of 12th Street in Chicago). Flows from the first three are presently discharged into Lake Michigan. Flows from Gurnee and the upper Skokie Valley are presently treated at the Clavey Road sewage treatment plant. It is clear that a grant of this variance will significantly enhance the quality of Lake Michigan by removing the residual phosphorus still contained in the effluent that now goes to the Lake. It will also reduce the burden on the Clavey Road plant. At the same time it will result in little or no detrimental effect on the water quality of the Des Plaines River. We are hesitant however, considering the early date by which this Petition was filed, to grant the variance for the full period of time desired by Petitioner. We therefore grant the variance for the period October 1, 1975 until a year from today, March 6, 1976, at which time, upon a showing that the Gurnee plant is in compliance with the terms of this Order, Petitioner may be granted an extension.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

## ORDER

Petitioner, North Shore Sanitary District, is granted a Variance from Rule 404(f)(ii) of the Water Pollution Regulations for its Gurnee plant from October 1, 1975 until March 6, 1976 subject to the following conditions:

1. Effluent from this plant shall not exceed 20 and 25 mg/1 of  $\text{BOD}_5$  and suspended solids respectively.

2. Petitioner shall file monthly reports with the Environmental Protection Agency during the course of this Variance indicating the concentrations of BOD<sub>5</sub> and suspended solids in its effluent.

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  $6^{-n}$  day of March, 1975 by a vote of 4-0.

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Illinois Pollution Control Board