

ILLINOIS POLLUTION CONTROL BOARD
February 21, 1980

SANITARY DISTRICT OF DECATUR,)
)
 Petitioner,)
)
 v.) PCB 79-250
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

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

Petitioner has requested a variance from Rule 203(f) and Rule 404(f) of Chapter 3: Water Pollution. The Agency has recommended that a variance be granted subject to conditions. No hearing was held.

Petitioner's plant is classified as a secondary treatment plant. Treatment is accomplished by air and oxygen activated sludge systems with an additional final stage consisting of polishing lagoons. Plant effluent is discharged to Stevens Creek just before the Creek joins with the Sangamon River.

Major operational problems have been encountered by Petitioner since 1975 when its secondary system was put into full operation. Reasonably consistent operation of the equipment was achieved in 1979.

Heavy industrial overloading of the main treatment plant caused or contributed to operational odors and BOD₅ and suspended solid levels exceeded those levels contained in Petitioner's NPDES permit. A. E. Staley and the Archer-Daniels-Midland Company, two major tributary industries, have proposed settlements at a January 21, 1980 hearing (PCB77-157). The settlement is to be reviewed by the Board and is to include comprehensive plans to reduce waste water loadings to the sewage treatment plant. Industrial waste discharges to the sewage treatment plant have been reduced and there have been no recent excessive discharges. Despite these proposed comprehensive plans it appears doubtful that Petitioner will consistently meet 10/12 mg/l BOD₅ and

suspended solids effluent limitations for design flow as required by NPDES Permit IL0028321 unless significant facility improvements are made under the construction grants program.

The sewage treatment plant has a hyperchlorination system for ammonia nitrogen control. However, both Petitioner and the Agency have stated that chlorine residual and chlorinated compounds from hyperchlorination are more detrimental to the environment than current ammonia nitrogen levels. Acceptable facilities are to be a part of the proposed wastewater treatment plant expansion program.

A Step 1 Facilities Plan was submitted to the Agency in 1976 after Petitioner received a Federal Grant. This Plan has not been fully approved by the USEPA, and prior to Step 2 grants, a further study of combined sewer overflow, engineering work and an amendment to Petitioner's sludge disposal plan must be undertaken. It is estimated that Step 2 funding will not be received for at least a year.

The Agency supports the variance from Rules 404(f) and 203(f) and 402 requirements for a period of five years or until Petitioner's upgraded facilities are completed, finding that no detrimental environmental impact of human, plant or animal life is anticipated. An undue economic hardship would be placed on Petitioner should plant expansion be required without benefit of federal grant assistance. The total cost of plant expansion is estimated at \$31,045,000. Federal grant assistance would amount to \$23,284,000.

The effluent quality problems appear to be partly caused by polishing lagoons which have been allowed to become too full. The ponds are 8 ft. deep and 4 ft. accumulations of sludge are now present. Thus, to a large extent, the effluent deterioration is self imposed. However, because of the problems in getting the UNOX system to operate correctly, the Board will grant the variance requested for BOD₅ and suspended solids.

The statements in the record as to the environmental effects of chlorine residuals and chloramines upon aquatic biota are conclusory. The Board will deny this portion of the variance petition without prejudice to a further proceeding in which the alleged ill effects can be better documented.

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

ORDER

A. It is the Order of the Pollution Control Board that Petitioner's petition for variance from Rule 404(f) of Chapter 3 as regards effluent limitations of 10 mg/l BOD₅ and 12 mg/l suspended solids be granted subject to the following conditions:

1. Concentrations of 20 mg/l BOD₅ and 20 mg/l suspended solids on a 30 day average shall be met in the effluent.
2. The best operation and maintenance practices shall be followed at the sewage treatment plant so as to minimize the discharge of BOD₅ and suspended solids.
3. The variance shall expire five years from the date of this Order or when construction is completed.
4. The Petitioner shall diligently pursue grant funding and meet all grant-related schedules.
5. Within 45 days of the date of this Order, the Petitioner shall execute and forward to the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This 45-day period shall be held in abeyance if this matter is appealed. The form of the Certificate shall be as follows:

CERTIFICATION

I, (We), _____, having read and fully understanding the Order in PCB79-250, hereby accept that Order and agree to be bound by all of its terms and conditions.

SIGNED _____

TITLE _____

DATE _____

- B. The Agency is hereby ordered to amend the District's NPDES Permit, IL0028321 to be consistent with the above variance.
- C. The request for variance from ammonia limits in the effluent is denied without prejudice to a later proceeding.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 21st day of February, 1980 by a vote of 4-0.

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