

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):
This matter is a consolidation of two cases before the Board involving the Round Lake Sanitary District (District). The enforcement proceeding, $\operatorname{PCB} 75-33$, charges the District with violations of Rules $203(\mathrm{a}), 203(\mathrm{c})$, $303(\mathrm{f}), 402,404(\mathrm{f}), 407(\mathrm{~b}), 952$ and/or 953 of Chapter 3: Water Pollution Rules and Regulations and Sections 12(a) and $12(b)$ of the Environmental Protection Act. After the Agency denied the District's application for an operating permit, the District filed for a variance from Rules 404(f) and 407(b). This latter action, PCB 75-65, was consolidated with the enforcement proceeding on March 13, 1975. The Round Lake Area Concerned Landowners, Citizens and Developers Association (Intervenor) moved to intervene when an order prohibiting additional connections to the sanitary sewer system was requested by Complainants. Motion to intervene was granted on May 15, 1975. Hearings were held on November 7, 1977 and November 21, 1977. A Stipulation and Proposal for Settlement was filed on December 19, 1977.

The District owns and operates a sewage treatment plant serving the Lake County municipalitic' of Gainesville, Round Lake, Round Lake Beach, Round Lake Park and Round Lake Heights. The estimated population served, as of 1974 , was 18,$200 ; 2412$ permits for hookups were issued by the District between 1970 and March 31, 1977.

The plant is a secondary treatment facility followed by three polishing lagoons and chlorination equipment. The design capacity of the plant is 1.68 MGD ; however, District records show an average daily flow of 2.3 MGD . The plant discharges into a stream whose source is Round Lake and whose terminus is Long Lake. During wet weather flows, any influent which cannot be pumped through the plant is by-passed to the lagoon system where it is mixed with effluent from the plant before being discharged into the stream.

The hydrologic and organic overload of the plant prevents the District from meeting the standards for $B O D$ and suspended solids contained in Rule $404(f)$ and for phosphorus as contained in Rule 407(b). Figures submitted by the District in the 1975 variance petition show effluent levels of BOD of $10 \mathrm{mg} / 1$, suspended solids of $12 \mathrm{mg} / \mathrm{l}$ and total phosphorus at $12.7 \mathrm{mg} / \mathrm{l}$. The effect of this effluent on Long Lake gives rise to alleged violations of Rules 203(a), 203(c), and 203(f). Although the District and Intervenor contend that other factors contribute to the eutrophication of Long Lake, the National Eutrophication Study prepared for the U.S. Environmental Protection Agency in 1973 attributes $40.6 \%$ of the nitrogen and $81.5 \%$ of the phosphorus load in Long Lake to the District's operation.

Steps have been taken by the District to improve effluent quality. Interceptor sewers were constructed in 1974 to separate and meter the flows from the sanitary systems that each municipality in the District's service area owns and operates. Each Village is surcharged for any overload attributable to excess inflow and infiltration. In 1975, the District installed alum storage and feed equipment to reduce phosphorus levels. Agency cffluent sample data shows substantial non-compliance cven after these corrective steps were taken.

The District applied for Federal funding in FY 1974 after concluding that plant expansion was the only feasible method to upgrade treatment. During this same period, the Northeastern Illinois Planning Commission (NIPC) and the Lake County Public Works Department (LCPWD) addressed the serious water pollution problem in this area in the Northwest Regional Sewer Area Project. The original proposal received NIPC approval; and the Step I grant, which included the District service area, was approved on September 9. 1974. The plan contemplates a 6 MGD facility to be located in the City of Fox Lake. Sewage from the District service area will be pumped through new interceptors and after tertiary and phosphorus and ammonia removal treatment, effluent will be discharged directly into the Fox River.

The District and the five villages signed contracts with the County on March 11, 1977, agreeing to participate in the regional sewer project. The Lake County Board ratified the sale of bonds for the regional plant on August 9, 1977. The plant is scheduled to be operational on December 31, 1979.

The Board finds the District in violation of Rules 402, 404(f), 407(b), and 952 and Sections $12(\mathrm{a})$ and $12(\mathrm{~b})$. The Complainants assert, and the Board agrees, that the regional plan is the most reasonable method by which the District and the villages can meet the standards of the Board's Regulations and the Act. The Board recognizes, however, that the District's facility provides services of significant economic and social value.

Since the Round Lake facility is to be abandoned upon completion of the regional plant, further capital improvements by the District would constitute an arbitrary and unreasonable hardship upon residents of the service area.

Because of the effluent violations and the possible impact of District effluent on Long Lake, however, it is necessary to take steps to improve the situation during the interim period. The District has agreed to use optimum operational process and to institute any changes not requiring capital equipment purchases as suggested by the Complainants during the term of the variance. The District will also restrict the number of permits for sewer construction to no more than 130 new single family residences during each calendar year of the variance. This figure represents a substantial cutback in the average annual rate of connections. The District further agrees to honor the provisions of its contract with the County as necessary to implement the regional plan. The Board, therefore, accepts the Stipulation and Proposal for Settlement filed December 19,1977 as the most practical solution until such time as the regional plant is complete.

The Board finds that the imposition of a fine is not warranted at this time as the District has sought construction funds, has added alum treatment, and has agreed to participate in the regional plan.

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

Mr. Young abstains.

## ORDER

It is the Order of the Pollution Control Board that:

1. The District has violated Rules 402, $404(\mathrm{f}), 407(\mathrm{~b})$ and 952 of Chapter 3 and Sections $12(a)$ and $12(b)$ of the Act.
2. The District is granted a variance to operate its treatment works until December 31, 1979 or such earlier time as the interceptor to the Regional Treatment Plant at Fox Lake becomes operational and the plant is able to receive sewage for treatment, provided that:
a) The District shall comply with all terms and conditions of Paragraphs 22 and 23 of the Stipulation and Proposal for Settlement filed December 19, 1977, which is incorporated by reference as if fully set forth herein.
b) The District shall comply with all applicable federal effluent limitations during the term of the variance.
3. Within 45 days of the adoption of this Order, the Round Lake Sanitary District shall execute and forward to both the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 and the Pollution Control Board a Certification of Acceptance and Agreement to be bound to all terms and conditions of this Order. The 45 day period shall be held in abeyance during any period this matter is being appealed. The form of said certification shall be as follows:

## CERTIFICATION

I (We),
having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 75-33 and PCB 75-65 as consolidated hereby accept said Order and agree to be bound by all the terms and conditions thereof.

SIGNED $\qquad$
TITLE $\qquad$
DATE
I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the $2^{N^{A}}$ $\qquad$ , 1978 by a vote of el 0 -

