

ILLINOIS POLLUTION CONTROL BOARD
May 25, 1978

LITTLE SWAN LAKE SANITARY DISTRICT,)	
)	
Petitioner,)	
)	
v.)	PCB 78-53
)	
ENVIRONMENTAL PROTECTION AGENCY,)	
)	
Respondent.)	

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

Petitioner is seeking a variance from the drinking water standard for fluoride contained in Rule 304(b)(4) of Chapter 6: Public Water Supplies for its water supply in Warren County near Avon. The Agency has recommended that a variance be granted until January 1, 1981. No hearing was held.

Petitioner is constructing a water supply system which will serve a present community of 300 people who live in permanent homes and seasonal cabins on 100 lots surrounding Little Swan Lake. Since there are 580 lots, a greater population is anticipated. The system will draw from two existing deep wells containing raw water which averages slightly over 3.0 mg/l fluoride. Petitioner alleges hardship based on an estimate of \$140,000.00 to install fluoride removal equipment and an additional \$24,000.00/year to operate this equipment. This figure has been translated into an additional \$22/user/month which is almost three times the present water rate. This economic burden is alleged to be unreasonable because negligible public health benefits would accrue. Both parties agree that the fluoride level in Petitioner's system is safe. Petitioner claims that if it is denied a variance, its users will probably continue to use individual systems which are subject to contamination.

The Board was faced with a similar problem in a recent case. In Central Illinois Utility Company v. EPA, PCB 77-349 (April 13, 1978), a variance from the fluoride standard was granted to a small system with fluoride levels below 3.0 mg/l. The Board noted in its Opinion that no defluoridation facilities were in use in Illinois and that

the Federal standard may be raised from 2.0 mg/l. The Board concluded that it would be unreasonable to require a small system to use "fledgling technology" when its fluoride levels are not likely to cause any tooth mottling.

The levels present in this case are in the range (3-4 mg/l) of what the Board considered the threshold for the observance of tooth mottling when it adopted the present standard. Petitioner's levels are significantly lower than the levels suggested as the threshold in PCB 77-349 (8-14 mg/l). The Agency stated in paragraph 3 of its Recommendation that the appropriate Board and Federal standard should be 8.0 mg/l. It would appear then that no significant amount of tooth discoloration will occur if Petitioner is granted a variance.

The additional costs cited by Petitioner are difficult to evaluate based on the record. The capital cost associated with fluoride removal is divided by 569, the total number of lots. The operation and maintenance costs are divided by 100, the number of developed lots. It is not clear why this distinction has been made. By Petitioner's analysis the cost per lot would decrease as the number of lots increases, but the amount of the decrease is unclear. The number 100 was probably used because it approximates the number of lots that had been developed as of December 1, 1976 (97). No reason is given for Petitioner's failure to supply more recent data.

In spite of the deficiencies in the cost data the Board concludes that Petitioner would suffer an arbitrary and unreasonable hardship if it were forced to install a system which may not be necessary if the standard is revised, may not be reliable on such a small scale, and would not result in any significant improvement in public health.

It should be noted that the Board lacks the authority to grant relief from the Federal standard for fluoride which became effective on June 23, 1977. However, the Board is mindful of the Agency's efforts to obtain primary enforcement responsibility under the Safe Drinking Water Act and understands the need to maintain as stringent a program as that encompassed by the Federal Act. Consequently, the January 1, 1981 date will be honored in this variance since it represents the maximum variance period that can be granted if Illinois is to be eligible for the administration of the Safe Drinking Water Act.

This Opinion constitutes the Board's findings of fact and Conclusions of law in this matter.

Mr. Goodman abstains.

ORDER

It is the Order of the Pollution Control Board that Petitioner be granted a variance from the drinking water standard for fluoride in Rule 304(b)(4) of Chapter 6: Public Water Supplies until January 1, 1981 subject to the following condition:

Within forty-five (45) days after the date of this Order, the Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Division of Public Water Supply, 2200 Churchill Road, Springfield, Illinois 62706 a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. This 45 day period shall be held in abeyance for any period during which this matter is appealed. The form of the Certification shall be as follows:

CERTIFICATION

I (We), _____, having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 78-53 hereby accept the Order and agree to be bound by all of its terms and conditions.

Signature

Title

Date

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 25th day of May, 1978 by a vote of 4-0.

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