

ILLINOIS POLLUTION CONTROL BOARD
April 13, 1978

CENTRAL ILLINOIS UTILITY COMPANY,)
)
 Petitioner,)
)
 v.) PCB 77-349
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.

MR. DANIEL J. KUCERA, OF CHAPMAN AND CUTLER appeared on behalf of Petitioner.

MR. REED NEUMAN AND MR. GEORGE W. TINKHAM, ASSISTANT ATTORNEY GENERAL, appeared on behalf of Respondent.

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

Petitioner is seeking a Variance from the drinking water standard for fluoride for its water supply in Knox County near Dahinda. The Agency has recommended that a Variance be granted until January 1, 1981. A hearing was held at the Knox County Courthouse in Galesburg on February 28, 1978.

Petitioner's water supply system provides service to approximately 114 users in the Oak Run Development (Oak Run) which is a recreational subdivision constructed around a man-made lake. Oak Run is projected to contain 2500 lots and is expected to grow at the rate of 25 houses per year. Only 50% of the present homes are full-time residences and most of these are occupied by retirees. The present level of fluoride in both the raw and finished water is 2.5 mg/l. The Board and Federal standards are presently 2.0 mg/l. Petitioner alleges hardship based on an estimate of \$129,150.00 for installation of fluoride removal facilities and additional annual operational expenses of \$30,500.00. The net result of such expenses would be a need for additional annual revenue of \$60,210.00. In order to meet these needs, the present user rate of \$5.00/month would have to be raised to approximately \$49.00/month. This economic burden is alleged to be unreasonable because negligible public health benefits would accrue. Both parties agree that the appropriate safe level for fluoride concentration in Petitioner's water supply should be 4.0 mg/l and that there would be no detectable impact on the Oak Run users' dental hygiene at the present level of 2.5 mg/l.

When the Board adopted its present fluoride standard it noted that the technology for fluoride removal existed but that it was not in general use. Consequently a delayed compliance date of January 1, 1978 was adopted to give affected communities enough time to evaluate alternatives for compliance. Petitioner has evaluated its alternatives and has determined that installation of an absorption process using bone char media constitutes the only means available to its system. The Agency stated that it was not aware of any defluoridation facilities in Illinois and that a Class A operator, the most qualified type, would be needed to run such a system.

In the Board's Opinion which constituted the rationale for adopting Chapter 6, a level of 3-4 mg/l was cited as the threshold for the observance of fluorosis (tooth mottling). Dr. William Babeaux, the Chief of Dental Health with the Illinois Department of Public Health, stated in the record of this case that discoloration of teeth was observed at the 8-14 mg/l level and that no discernible ill effects would be observed at the recorded levels in Petitioner's system.

The Board is generally reluctant to grant any Variance which does not provide for ultimate compliance with relevant standards. In matters involving public health, this reluctance is doubly important. The record in this proceeding, however, justifies a diversion from the Board's position.

While the projected growth of Oak Run would result in a decrease in the individual user cost for defluoridation, a second well will have to be installed in the future and the costs of fluoride removal will undoubtedly be greater due to inflation. A small system such as Petitioner's is simply not appropriate for the demonstration of what is still fledgling technology. In this instance the Board is impressed by the leadership being taken by the Agency and the Department of Public Health in their joint effort to have the Federal standard revised upward. The fluoride levels here authorized are slightly over the present standard and below the lowest levels at which tooth mottling occur. No deleterious effects on tooth appearance should occur.

It should be noted that the Board lacks the authority to grant relief from the Federal standard 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 extent of Federal authority.

This Opinion constitutes the Board's findings 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 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 45 days after the date of this Board Order herein, 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 the variance. This 45 day period shall be held in abeyance for any period during which this matter is 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 77-349 hereby accept said Order and agree to be bound by all terms and conditions thereof.

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 13th day of April, 1978 by a vote 5-0.

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