

ILLINOIS POLLUTION CONTROL BOARD  
September 11, 1986

CENTRAL ILLINOIS UTILITY CO.,        )  
  )  
          Petitioner,                    )  
  )  
          v.                                )                   PCB 86-53  
  )  
ILLINOIS ENVIRONMENTAL                )  
PROTECTION AGENCY,                    )  
  )  
          Respondent.                    )

MR. DANIEL KUCERA, CHAPMAN & CUTLER APPEARED FOR PETITIONER.

MR. E. WILLIAM HUTTON APPEARED FOR RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J. Theodore Meyer):

This matter comes before the Board upon an April 15, 1986, Petition for Variance Extension filed on behalf of Central Illinois Utility Company (Company). The Company seeks an extension for five years of the variance granted in PCB 80-234, April 16, 1981, from the 2.0 mg/l maximum allowable concentration (MAC) level for fluoride (35 Ill. Adm. Code 604.203(a)). The Illinois Environmental Protection Agency (Agency) filed its recommendation for granting the variance, subject to conditions, on June 12, 1986. Hearing was waived and none has been held.

The Company provides water service to the Oak Run Development, a subdivision located in Knox County, which consists of approximately 250 users, almost all of whom are single family homes. The Company owns and operates a water supply well, water treatment equipment, a 150,000 gallon elevated storage tank and a distribution system. The well is finished at a depth of 802 feet with a capacity of 125 gallons per minute. Treatment consists of the addition of chlorine, potassium permanganate and filtration through pressurized greensand ion exchange filters to remove hydrogen sulfide and iron. (Pet. pp. 1-2).

Based upon laboratory analyses conducted by the Illinois State Water Survey and the Agency, the raw water from the Company's well contains fluoride ranging from 2.5 mg/l to 2.85 mg/l and the finished water quality contains fluoride in the same range. The most recent test, on March 17, 1986, showed a fluoride level of 2.76 mg/l. (Id.).

The Company seeks extension of the variance granted in Central Illinois Utility Co. v. IEPA, PCB 80-234, April 16,

1981. The issue before the Board is whether denying the Company variance would constitute an arbitrary or unreasonable hardship. For the following reasons, the Board finds that denying the Company variance would constitute an arbitrary or unreasonable hardship and, therefore, the Board grants the Company its requested variance, subject to conditions.

The Board notes, at the outset, that the proper decision criteria to apply to this requested variance from the fluoride drinking water standard are those embodied in the state's "arbitrary or unreasonable hardship" standard. The federal decision criteria for granting variance from the fluoride drinking water standard are inapplicable. On April 2, 1986, the USEPA promulgated a new fluoride drinking water standard of 4.0 mg/l up from the then current 2.0 mg/l standard. Consequently, the fluoride standard to which the federal criteria for granting a variance applies is the 4.0 mg/l standard. Such decision criteria include finding that either the water supply system is unable to comply with maximum contaminated level despite installing the best treatment technology generally available (BTGA) or the system is so small that the BTGA is not available and effective. However, since the fluoride content of the Company's water supply is below the federal standard, the federal criteria does not apply and the Board will apply the state's "arbitrary or unreasonable hardship" standard to the Company's requested variance.

In 1981, the Company's consulting engineers recommended that of the various central fluoride removal processes available, that the activated alumina absorption process would be the least costly. Installation of the necessary equipment to treat the water from the existing well would involve a capital expenditure of \$127,860. Yearly operation and maintenance costs of \$28,000, in combination with other treatment related expenses, will impose additional yearly revenue requirements of \$61,248. (Pet. pp. 4-5, Ex. D, E).

The Company also provides a balance sheet and income statement to support its contention that it does not have sufficient cash or income to finance the installation cost of the fluoride removal system. The Company states that its rates are subject to approval by the Illinois Commerce Commission (ICC) and contends that if the ICC were to permit the Company to pass on to its users the burden of the additional revenue requirements, the Company will have to charge the 250 users at least \$360 per year in addition to the present rate for water service. Such an imposition, the Company argues, would result in an unreasonable economic burden being placed on the system's users. (Pet. pp. 5-6). The Board notes that the cost figures quoted in this and the preceding paragraph appear to be based on 1981 cost figures. The Board believes that 1986 cost figures would be appreciably higher due to inflation.

The Company asserts that no adverse health effects are expected if the variance is granted. Further, the Company contends that the presence of fluoride in drinking water has been shown to have beneficial effects including reduction of tooth decay and hardening of bone structure. Consequently, the Company argues that any health effects experienced by ingesting water with fluoride levels in the range of 2.5 mg/l to 2.85 mg/l will be either aesthetic or beneficial. (Pet. p. 7). The Agency agrees that the adverse impact to the users would be minimal at these fluoride levels. (Ag. Rec. p. 5).

The Agency agrees with the facts as presented by the Company, including the cost of compliance as well as the financial hardship experienced by the Company and its users were the Board to deny variance relief. (Ag. Rec. p. 4). The Agency, therefore, recommends the grant of variance, subject to conditions, until September, 1991, or until the Company achieves compliance with the present or any future fluoride drinking water standard.

The Board finds that denying the Company variance would constitute an arbitrary or unreasonable hardship. The Company is a small water supply system serving a small residential community near Dahinda, Illinois. The Board acknowledges the Company's financial condition and believes that immediate compliance with the fluoride standard would impose an unreasonable hardship upon the Company. Also, the Board agrees that any adverse impact experienced by the users of the Company's water would be minimal at these fluoride levels. The Board notes that the Company's water supply system may be in compliance with the state's fluoride standard should it be revised in conformance with the federal standard. However, such a revision is purely speculative at this point in time. The Company's consulting engineers explored the various treatment technologies available to reduce fluoride levels and found that the activated alumina absorption treatment method would be the least costly. In light of this recommendation, the Board will require as a condition of this variance that the Company develop a compliance plan (with increments of progress) for achieving compliance with the 2.0 mg/l fluoride standard five years from the grant of this variance.

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

ORDER

Central Illinois Utility Company is hereby granted variance from 35 Ill. Adm. Code 604.203(a), subject to the following conditions:

1. This variance expires when Petitioner can demonstrate

that its water supply system is in compliance with the applicable maximum allowable concentration level for fluoride or on September 11, 1991, whichever occurs first.

2. Within eighteen months of the grant of variance, Petitioner shall submit to the Agency a plan outlining the method and the complete program (with increments of progress) for achieving compliance with the 2.0 mg/l fluoride standard.
3. Pursuant to 35 Ill. Adm. Code 606.202, on or before January 1, 1987 and every three months thereafter, Petitioner shall send each user of its water supply system a written notice stating that Petitioner has been granted variance by the Pollution Control Board from the 2.0 mg/l fluoride standard. The notice shall state the average content of fluoride in samples taken since the last notice period during which samples were taken.
4. Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Order, whichever occurs first, and every three months thereafter, Petitioner will send to each user of its public water supply a written notice to the effect that Petitioner is not in compliance with the fluoride standard. The notice shall state the average fluoride content in samples taken since the last notice period during which samples were taken.
5. Within 45 days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Division of Public Water Supplies, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound by all the terms and conditions of this variance. This 45 day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

#### CERTIFICATION

I, (We), \_\_\_\_\_, having read the Order of the Illinois Pollution Control Board, in PCB 86-53, dated September 11, 1986, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
Petitioner

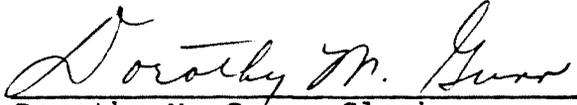
By: Authorized Agent \_\_\_\_\_

Agent \_\_\_\_\_

Date \_\_\_\_\_

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 11<sup>th</sup> day of September, 1986 by a vote of 6-0.

  
\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board