

ILLINOIS POLLUTION CONTROL BOARD
June 27, 1985

CITY OF ABINGDON,)
)
 Petitioner,)
)
 v.) PCB 84-134
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by R. Flemal):

This matter comes before the Board on a Petition for Variance, filed on December 31, 1984, and an Amended Petition, filed February 13, 1985, by the City of Abingdon ("Abingdon"). The Environmental Protection Agency ("Agency") filed a Recommendation on March 3, 1985, and an Amended Recommendation on April 11, 1985, both of which support in substance the relief requested by Abingdon. Public hearing was held at 10:00 a.m. on May 2, 1985, in the Council Chambers of the Abingdon City Hall. Although an anonymous citizen letter was filed, no members of the public attended the hearing.

In its December 31 petition, Abingdon requested a variance from the Board's standards for the maximum allowable concentrations of both gross alpha particle activity (35 Ill. Adm. Code 604.301 (b)) and fluoride (35 Ill. Adm. Code 604.202 and 604.203) in finished drinking water.

Based on samples collected between January, 1983, and July, 1984, the Agency has determined that Petitioner is currently in compliance with the 15 pCi/l standard for gross alpha activity, and that variance from this standard is accordingly unnecessary. In its February 16 petition, Abingdon acknowledged the Agency's determination of compliance (Amended Petition, para. 19), and did not reassert its request for variance from the gross alpha particle standard. The Board construes this action as a withdrawal of Petitioner's request for gross alpha particle variance. The Board does note that this withdrawal does not preclude Petitioner from refileing for a variance from the gross alpha standard should Petitioner ever find circumstances so warrant.

With respect to the requested fluoride variance, the Board notes that Abingdon asks for variance from both 35 Ill. Adm. Code 604.202 and 604.203. The Board further notes that section 604.203 (a) treats exceptions to section 604.202, and that section 604.203 (a) overrides section 604.202 in the case of Petitioner.

Abingdon's request for variance to 35 Ill. Adm. Code 604.202 is thereby denied as inapplicable, and the remainder of this opinion and order directs itself solely to variance from 604.203 (a).

Abingdon was previously granted, by Board Order of May 27, 1982, variance from the 2.0 mg/l fluoride limitation in case number PCB 81-107. That variance expired January 1, 1984. The Agency recommends that the Board grant a new variance from 35 Ill. Adm. Code 604.203 (a) for five years as requested by Abingdon, subject to conditions.

The City of Abingdon, located in Knox County, supplies water to its 4150 citizens (approximately 1500 user units) from two deep wells. Raw water is drawn from the wells, chlorinated, pumped to two ground storage reservoirs, and then pumped to the distribution system and a 100,000 gallon elevated storage tank. The daily average water production is 530,000 gallons per day.

Seven samples of finished water recorded between March, 1983, and December, 1984, show respectively a minimum, mean, and maximum fluoride concentration of 2.16, 2.43 and 2.73 mg/l. Such concentrations are endemic to many of the raw water supplies in the west-central area of Illinois, including Knox County.

The Safe Drinking Water Act ("SDWA") requires that the granting of a variance will not result in an unreasonable risk to the health of persons served by the system (42 U.S.C. Section (g)-4). The extent to which fluoride concentrations minimally above the 2.0 mg/l standard impose health risk on the citizens of the State has been at issue in many cases before the Board. Moreover, Illinois is not alone in facing this issue. The Board notes that United States Environmental Protection Agency ("USEPA") has recently proposed a Recommended Maximum Contaminant Level for fluoride in drinking water at 4.0 mg/l (50 Fed. Reg. 20164, May 14, 1985). However, until there is final action on the USEPA proposal the Board must make its findings consistent with the existing standard.

In the instant case the Board agrees with Petitioner and the Agency that there is no overt evidence of health risk, and that therefore the granting of the requested variance would not result in unreasonable risk in the short-term. By conditioning the variance on eventual compliance, long-term exposure is avoided. Further conditioning the variance to prohibit concentrations above 4.0 mg/l assures that exposures above the present risk level are minimized.

Pursuant to conditions accepted in PCB 81-107, Abingdon undertook a study, prepared by Anderson Engineering Consultants, Inc. (Anderson report), of means to attain compliance (Pet. Exhibit A). Measures explored include: (1) an alternate water supply source, (2) reverse osmosis, (3) absorption process and (4) lime softening. A finding of this report is that no alternative ground water supply of sufficient quantity and lower fluoride content is available.

The Anderson report notes that Abingdon could come into compliance by buying either raw or finished water from Galesburg. This would require construction of a connection watermain between 8 and 10.5 miles long, depending upon the point of hookup. It would also require negotiating with the City of Galesburg regarding availability of water, proposed rates, and future charges and ownership of the transmission line. The least expensive alternative would cost \$567,500 and would require a 142 percent increase in rates for the typical user (Amended Pet. 15).

The Anderson report further notes that the various treatment alternatives would entail still greater costs. The Agency concurs with the compliance cost estimates presented by the Petitioner, and concludes that the facts presented by Petitioner establish hardship sufficient to allow the granting of the variance.

The Board may, to the extent consistent with the SDWA, grant a variance if compliance with the Board's standard would impose an arbitrary or unreasonable hardship. The Board finds that the cost of compliance does impose such a hardship in light of the minimal adverse environmental impact.

To continue to grant a series of variances without a plan for compliance would violate the intent of the Illinois Environmental Protection Act and case law in this area. The Supreme Court stated, in Monsanto Company v. Pollution Control Board, 67 Ill. 2d 276, 367 N.E. 2d 684, 688 (1977), that "the concept of a variance which permanently liberates a polluter from the dictates of a board regulation is wholly inconsistent with the purpose of the Environmental Protection Act." It is therefore appropriate to grant a variance for a period of time sufficient to comply with Board regulations. The variance will be granted with conditions that Abingdon continue to explore compliance methods, and from these to develop a compliance plan.

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

ORDER

The City of Abingdon is hereby denied variance from 35 Ill. Adm. Code 604.202 as inapplicable and unnecessary.

The City of Abingdon is hereby granted a variance for its public water supply from the 2.0 mg/l fluoride limitation of 35 Ill. Adm. Code 604.203 (a), subject to the following conditions:

1. This variance will expire three years from the date of this order.
2. Petitioner shall investigate compliance options twice each year and shall report its findings to the Agency on April 1 of each calendar year during which this variance remains in effect.

3. As expeditiously after identification of a feasible compliance method as is practicable, but no later than April 1, 1988, Petitioner shall submit a program (with increments of progress) for bringing its system into compliance with the fluoride standard to the Agency's Division of Public Water Supplies, Permit Section, at 2200 Churchill Road, Springfield, Illinois 62706.
4. Petitioner shall take all reasonable measures with its existing equipment to minimize the level of fluoride in its water supply. The fluoride level shall not be allowed to exceed 4.0 mg/l.
5. Pursuant to 35 Ill. Adm. Code 606.201, Petitioner shall send to each user of its public water supply a written notice to the effect that Petitioner has been granted a variance by the Pollution Control Board from the fluoride standard in the first set of water bills issued after the grant of this variance and every three months thereafter. The notice shall state the average fluoride in samples taken since the last notice period during which samples were taken.
6. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, PWS Enforcement Programs, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five 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 84-184, dated June 27, 1985, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

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 27th day of June, 1985 by a vote of 6-0.

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