

ILLINOIS POLLUTION CONTROL BOARD
March 10, 1983

VILLAGE OF ALGONQUIN,)
)
) Petitioner,)
)
) v.) PCB 82-140
)
 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

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

This matter comes before the Board on the December 10, 1982 petition for variance of the Village of Algonquin (Village). The Village seeks an extension of the variance granted until January 1, 1981 in PCB 78-3 (Supp. Opinion and Order, April 26, 1979) from the 1.0 mg/l maximum barium concentration limit of 35 Ill. Adm. Code 604.202 [formerly Rule 304(B)(4) of Chapter 6: Public Water Supplies]. On January 24, 1983 the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance for 5 years. Hearing was waived and none has been held.

The Village of Algonquin, McHenry and Kane Counties, owns and operates a public water supply system providing drinking water to approximately 2000 customers within. The system consists of a spring water supply, five wells, three water storage stand-pipes and a system of water mains with water pressure booster stations and appurtenant structures. (As of the time of the PCB 78-3 variance, Well #5 was not in service).

The waters of Wells #1, 3, and 5 "contain no barium", according to the Village; the raw water from Well #2 contains barium in excess of 6 mg/l, and of Well #4 in excess of 8 mg/l. (The Agency notes that barium levels in Well #4 reached 10.2 mg/l in a 1977 test. However, a 1979 test showed a level of 4.5 mg/l, and a 1983 test showed a level of 3.93 mg/l.)

The Village has determined that the use of Well #2 can be terminated, but asserts that Well #4 is an important part of the system, required for its reliability. The Village wishes to use Well #4 only at times of peak demand or when other sources are out of service, due to equipment malfunctions and the like.

The Village alleges that if Well #4 is used in this limited manner, the barium standard may be slightly exceeded in a small portion of the Village from time to time. It notes that since the well discharges into a 0.40 million gallon storage tank, that even when used water from Well #4 would often be mingled with barium free water from its other wells.

In support of its hardship claims, the Village states that it has invested \$200,000 in Well #4, which it is loathe to abandon. It has spent in excess of \$100,000 to develop barium-free Well #5, and an additional \$750,000 to install a new water main system to distribute barium free waters to the Village as a whole.

The Village states that to remove the excess barium from the waters of Well #4 would be feasible only by use of a lime softening method, but that Well #4 site is unable to accommodate a softening plant of the requisite size. The Village notes that it has investigated and will continue to investigate for additional sources of barium-free water. It remarks that the Village had authorized a study of improvements needed in its water system to keep pace with growth demands, to be completed on or about June, 1983. It does not anticipate appreciable increase in pumpage from Well #4, as it expects developers to assume any water costs associated with growth needs, and to provide any necessary barium-free water.

In support of the variance request, the Agency states that it believes that use of water from Well #4 in a limited area around the well under the limited conditions suggested will impose no significant health injury. It believes that limited consumption of water even at the undiluted 10.0 mg/l would be acceptable. In so stating it notes that USEPA is reviewing the barium standard, and has advised that it anticipates issuance of a notice of proposed rulemaking in October, 1983 47 F.R. 48745. Based on USEPA hearings held in this matter, the Agency believes the USEPA revised limit may be increased to 10 mg/l or higher.

While the current deadline exemption date under the Safe Drinking Water is January 1, 1984, the Agency suggests that "it appears that it would be within the spirit of the intention of Congress of barium variances were extended past the January 1, 1984 deadline".

The Board finds that, under the limited use circumstances here requested, denial of variance would impose an arbitrary or unreasonable hardship. Variance with conditions is granted until January 1, 1984, as the Board declines to extend relief beyond a federal statutory deadline based upon speculation concerning possible legislative and regulatory changes.

This Opinion constitutes the finding of facts and conclusions of law of the Board in this matter.

ORDER

1. Petitioner, the Village of Algonquin, is hereby granted variance from the 1.0 mg/l barium limit of 35 Ill. Adm. Code 604.202 until January 1, 1984, subject to the following conditions:

a) Petitioner shall use Well #4 only at times of peak demand or when other water sources are out of service.

b) Whenever Well #4 is used, Petitioner shall sample for barium at the nearest available sampling site. Records of such sample results shall be maintained.

c) Petitioner shall take all reasonable measures with its existing equipment to minimize the level of barium activity in its finished water.

d) Petitioner shall continue to investigate for sources of barium-free water and shall file its results with the Agency (Regional Manager, Public Water Supplies, Illinois Environmental Protection Agency, 595 South State Street, Elgin, Illinois 60120) on or before January 1, 1984.

e) Petitioner shall proceed with the study of its water system to determine the improvements necessary to meet the demands of the expected growth of the Village and shall file its results with the Agency at the address in subparagraph (d) beginning January 1, 1984.

f) Pursuant to 35 Ill. Adm. Code 606.201, Petitioner will send to each user of its public water supply a written notice to the effect that Petitioner has been granted by the Pollution Control Board a variance from the 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 content of barium in samples taken since the last notice period during which samples were taken.

2. Within 45 days of the date of this Order, Petitioner shall execute and forward to Wayne Wiemerslage, Enforcement Programs, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of the variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of this certification shall be as follows:

CERTIFICATE

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 82-140, dated _____, 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.

Mr. Nega abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 10th day of March, 1983 by a vote of 4-0.

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