

ILLINOIS POLLUTION CONTROL BOARD
July 27, 1989

VILLAGE OF HAMPSHIRE,)
)
 Petitioner,)
)
 v.) PCB 89-57
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

MARK SCHUSTER, ESQ., OF STROM, SCHUSTER, MEYERS AND MEYERS
APPEARED ON BEHALF OF THE PETITIONER.

BOBELLA GLATZ, ESQ., OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by M. Nardulli):

This matter comes before the Board on a petition for variance filed on behalf of the Village of Hampshire ("Hampshire") on March 24, 1989 and as amended on May 22, 1989. Hampshire is seeking a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and from 602.106(b), Restricted Status, to the extent those rules involve 35 Ill. Adm. Code 604.202, which concerns the maximum allowable concentration of barium in public water. The variance is requested for a minimum of eighteen months, or in the alternative until June of 1992.

The petitioner waived its right to hearing in this matter and consequently no hearing has been held. On June 29, 1989, the Illinois Environmental Protection Agency (hereinafter "Agency") filed a variance recommendation recommending that the requested variance be granted subject to conditions. Based on the record, the Board finds that the request for variance should be granted subject to the conditions recommended by the Agency. Compliance with the rule would impose an arbitrary or unreasonable hardship on the petitioner.

BACKGROUND

The Village of Hampshire, which is located in Kane County, owns and operates a water supply system which provides potable water to approximately 586 residential and 75 institutional, commercial and industrial utility customers in the village. Raw water is supplied to the system from three wells:

Wells No. 3 and No. 4 are back-up or stand-by wells completed in 1943. Well No. 3 extends to a depth of 514 feet and is open to Maquoketa (shale) group and Platteville Dolemite (limestone) aquifers. Well No. 4 is open to sand and gravel, Maquoketa (shale) group and Galena--Platteville Dolemite (limestone) aquifers.

Well No. 5-- is the primary source of drinking water for Hampshire. It was constructed in 1968 to a depth of 690 feet, and deepened in 1971 to a depth of 818 feet. This well is open to Maquoketa (shale) group, Galena--Platteville Dolemite (limestone) and Glenwood -- St. Peter (sandstone) aquifers. The well is equipped with a sixty (60) horsepower submersible pump and produces approximately 275 gallons per minute of water.

The water obtained from Well No. 4 has a reported maximum barium content of 0.14 mg/l. Well No. 4 is available for use in emergency situations and is not capable of providing the needs of the village on a continuous basis. The water obtained from Well No. 5 has a reported maximum barium content of 2.2 mg/l. Well No. 5 is available for use as the primary supply of Hampshire on a continuous basis. No information has been provided on the barium concentration of well No. 3.

An analysis of the barium concentration in the distribution system was reported to the petitioner on June 5, 1978. The barium content in the water was reported as ranging between 2.0 mg/l and 2.6 mg/l -- a level in excess of the standard for barium of 1.0 mg/l prescribed by Board Regulations and the U.S. Environmental Protection Agency. No explanation is given for the discrepancy between the measured barium concentration in the distribution system and the barium concentration in the source wells.

Petitioner has previously filed a petition for variance for noncompliance with the barium standard in PCB 80-165. This variance was granted by the Board. A Petition for Extension of Variance was granted by the Board in PCB 85-114. This extension continued until January 22, 1987. However, this variance was revoked by action of the U.S. Environmental Protection Agency in

1986. Subsequent to the revocation of variance by the U.S. Environmental Protection Agency, the village was notified on June 10, 1988 that it would be placed on the Restricted Status List published in the Illinois Pollution Control Board's Environmental Register in October of 1988. Petitioner has remained on restricted status for noncompliance with the maximum allowable concentration for barium to the date of this Opinion and Order. Petitioner is not on Restricted Status for exceeding any other contaminant.

PETITIONER'S COMPLIANCE PLAN

The compliance program developed by the Village of Hampshire involves construction of an additional shallow well to provide water to blend with its existing supply of water and as a result, reduce the concentration of barium in the water distributed. Hampshire anticipates that carrying out this compliance schedule will cost approximately \$232,500.00. The petitioner anticipates that the completion of the compliance plan will take eighteen months and upon completion the level of barium in the water distributed will be below the 1.0 mg/l standard.

The petitioner has received a Community Development Program Grant from the Illinois Department of Commerce and Community Affairs for construction of a new well and pump house modifications. The engineering for the project has been completed and the contract for completion of the work has been let. The anticipated contract completion date is September 16, 1989. After the well drilling is completed, the pump and pump house will need to be modified and the public water will need to be analyzed.

The petitioner also proposed to take a number of actions during the variance period to minimize the impact of the barium. Some of these actions are involved in completing construction while others involve conditions from Hampshire's previous variance. In the Agency's Recommendation, most of these actions were suggested as conditions to the new variance, and have been adopted as conditions in the Order.

HARDSHIP AND ENVIRONMENTAL IMPACT

In its petition for variance, Hampshire maintains that compliance with Section 604.202 during the requested variance period would result in an arbitrary or unreasonable hardship on Hampshire and its taxpayers. Without a variance, Hampshire would be on restricted status which would prevent any construction within the petitioner's service area requiring the extension of the water supply system. This restriction would halt development and the growth of the petitioner's tax base. The petitioner states that the village is under pressure to grow as exemplified by inquiries made in 1988 for development of some sixty acres,

annexation of 200 acres and various industrial projects.

Contrasting with the issue of hardship is the issue of environmental impact. In its recommendation, the Agency states that while barium at any level creates some risk, the risk associated with this level is very low. The maximum allowable concentrations ("MAC") for barium is currently under review at the federal level. However, the Agency does not know when, or if, the standard will be changed. The Agency believes that the level of barium contained in the Village of Hampshire's drinking water should cause no significant health risk for the limited population served by new water main extensions for the time period of this recommended variance. The Agency further believes that grant of the requested variance would impose no significant injury on the public or on the environment and that denial of the recommended variance would be an arbitrary or unreasonable hardship to petitioner.

AGENCY RECOMMENDATION

In its recommendation of June 29, 1989, the Agency recommended that Hampshire be granted a variance from 35 Ill. Adm. Code 602.105(a) and 602.106(b) as they relate to the contaminants in question, subject to the conditions adopted in the Order. The Agency believes that the hardship resulting from denial of the recommended variance from the effect of being on Restricted Status would outweigh the injury to the public from grant of that variance. In light of the cost to the petitioner for treatment of its current water supply, the likelihood of no significant injury to the public from continuation of the present level of the contaminant in question in the petitioner's water for the limited time period of the variance, and the possibility of compliance with the MAC standard due to blending and new wells, the Agency concludes that denial of a variance from the effects of Restricted Status would impose an arbitrary or unreasonable hardship upon Petitioner.

The Agency observes that this grant of variance from restricted status should affect only those users who consume water from any newly extended water lines. This variance should not affect the status of the rest of petitioner's population drawing water from existing water lines, except insofar as the variance, by its conditions, may hasten compliance. Grant of variance may also, in the interim, lessen exposure for that portion of the population which will be consuming more effectively blended water. The Agency emphasized that it continues to place a high priority on compliance with the standards.

CONCLUSION

The Board finds that Hampshire has presented adequate proof that compliance with the regulation would impose an arbitrary or

unreasonable hardship. Further, the environmental impact of granting the variance is considered to be minimal. Accordingly, the variance will be granted with conditions consistent with this Opinion.

The Board does not understand why the petitioner requested a variance for eighteen months or until June of 1992. Under the compliance plan submitted by the petitioner, the majority of the work to come into compliance will be completed by September of 1989 with only adjustments to the pumps and pump houses required after that date. After construction is completed, the petitioner will be required to analyze the water pursuant to 35 Ill. Adm. Code 605.103 to show compliance with the standard for barium. Neither of the requested time periods appear to be closely related to the completion of the required activities. The Board will therefore grant the variance until June 1, 1992 or until the analysis shows compliance with the standard for barium, whichever occurs first.

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

ORDER

The Village of Hampshire is hereby granted a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and from 602.106(b), Restricted Status, to the extent those rules involve 35 Ill. Adm. Code 604.202, which concerns the maximum allowable concentration of barium in public water, subject to the following conditions:

- (a) Compliance shall be achieved with the maximum allowable concentration in question no later than June, 1992.
- (b) This variance expires no later than June, 1992, or when analysis pursuant to 35 Ill. Adm. Code 605.103 shows compliance with the standard for barium, whichever occurs first.
- (c) In consultation with the Agency, Petitioner shall continue its sampling program to determine as accurately as possible the level of barium in its wells and finished water. Until this variance expires, Petitioner shall collect semi-annual samples of its water from its distribution system at locations

approved by the Agency, and shall collect semi-annual samples of its raw water from its wells. Petitioner shall analyze them at six-month intervals, using a laboratory certified by the State of Illinois for barium analysis. The results of the analyses shall be reported to the Compliance Assurance Section, Division of Public Water Supplies, 2200 Churchill Road, IEPA, Springfield, Illinois 62794-9276, within 30 days of each analysis.

- (d) Within ten months after the grant of variance herein, petitioner shall submit to IEPA, DPWS, a detailed Compliance Report showing how compliance shall be achieved within the shortest practicable time, but no later than June of 1992.
- (e) Petitioner shall apply to IEPA, DPWS, Permit Section by January 1, 1991, for all permits necessary for construction of installations, changes or additions to the petitioner's public water supply needed for achieving compliance with the maximum allowable concentration for barium.
- (f) Within two months after each construction permit is issued by IEPA, DPWS, the petitioner shall advertise for bids, to be submitted within 45 days from contractors to do the necessary work described in the construction permit. The petitioner shall accept appropriate bids within a reasonable time. Petitioner shall notify IEPA, DPWS, within 30 days of each of the following actions: 1) advertisements for bids, 2) names of successful bidders, and 3) whether petitioner accepted the bids.
- (g) Construction allowed on said construction permits shall begin within a reasonable time for bids being accepted, but, in any case, construction of all installations, changes or additions necessary to

achieve compliance with the maximum allowable concentration for barium shall begin no later than August 1, 1991. Construction shall be completed no later than May 1, 1992.

- (h) Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Variance 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 has been granted by the Pollution Control Board a variance of 35 Ill. Adm. Code 602.105(a) Standards of Issuance and 35 Ill. Adm. Code 602.106(b) Restricted Status, as it relates to the MAC standard in question.
- (i) Pursuant to 35 Ill. Adm. Code 602.201, 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 standard in question. The notice shall state the average content of the contaminant in question in samples taken since the last notice period during which samples were taken.
- (j) Until full compliance is reached, petitioner shall take all reasonable measures with its existing equipment to minimize the level of contaminant in question in its finished drinking water.
- (k) The petitioner shall provide written progress reports to IEPA, DPWS, FOS every six months concerning steps taken to comply with paragraph (d), (e), (f), (g), (h), (i) and (j). Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps

have been taken to comply with each paragraph.

- (1) It is possible that a final maximum contaminant level for barium may be promulgated by the U.S. Environmental Protection Agency which will bring petitioner into compliance without any changes or additions to its public water supply. Petitioner shall comply with paragraphs a, b, c, d, and e. Petition for modification due to change in standards may be made subsequent to completion of the requirements of these paragraphs if there is good reason to believe changes in the standard are imminent. Compliance with a finally promulgated USEPA maximum contaminant level for barium will automatically terminate this variance on date of compliance in accordance with paragraph (b) herein.
- (m) That within forty-five days of the grant of the variance, petitioner shall execute and forward to Bobella Glatz, Enforcement Programs, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62794-9276, a Certification of Acceptance and Agreement to be bound to all terms and conditions of the granted variance.

CERTIFICATION

I, (We), _____, having read the Order of the Illinois Pollution Control Board, in PCB 89-57, dated July 27, 1989, 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.

B. Forcade dissented.

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 July, 1988, by a vote of 5-1.

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