ILLINOIS POLLUTION CONTROL BOARD July 9, 1981

VILLAGE (OF HOFFMAN	ESTATE	S,)		
			Peti	tioner,)		
		v.)	PCB	81-51
ILLINOIS	ENVIRONMEN	NTAL PR	OTECTION	AGENCY,)		
			Resp	ondent.)		

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

This matter comes before the Board on the petition for variance of the Village of Hoffman Estates (Village), filed April 9, 1981 as amended May 7, 1981. The Village seeks variance from the 1.0 mg/l barium concentration limitation of Rule 304(B)(4) of Chapter 6: Public Water Supplies. The Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance June 8, 1981. Hearing was waived and none has been held.

The Village of Hoffman Estates, located in Cook and Kane Counties, supplies drinking water to its approximately 30,000 residents from 20 wells. Twelve of these wells are shallow, ranging from 119 to 242 feet deep; these wells, which comply with the barium standard, supply the Village with roughly one-third of its needed water. Of the other eight wells, which are drilled deep (1357 to 1415 feet) into the Galesville sandstone aquifer, six wells produce water with non-complying barium concentrations of from 1.51 to 2.97 mg/l.

The Village has not stated whether its distribution system is such that blending of the waters of these 20 wells can produce finished water with a 1.0 mg/l barium concentration. It has, however, investigated the possibility of removing barium by the sodium zeolite softening process or by ion exchange treatment. The cost of necessary ion exchange facilities was estimated to be \$2,904,000 in capital expenditures, with annual operation and maintenance costs of \$360,000.

The Village does not favor the treatment option on either a long or short term basis, as it has received a Lake Michigan water allocation with which to replace its current well water supply. By ordinance of March 9, 1981, the Village joined the Northwest Suburban Municipal Joint Action Water System (System). It is currently anticipated that the System will have transmission lines

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in operation by October, 1984. The Village has already spent roughly \$44,000 as part of its commitment to this project, which will cost its eight member municipalities a projected \$106.8 million. The Village, then, seeks variance to continue to use its well system while it is pursuing this favored compliance option.

As Hoffman Estates is part of the regional water supply System, the Agency recommends grant of variance until January 1, 1986, consistent with Section 1416 of the Safe Drinking Water Act. The Agency states in support of its conclusion that it believes that consumption of the Village's well water will impose no threat to the health of its water users.

In light of the high cost to the Village of treatment of its current water supply, the lack of demonstrated threats to health from consumption of barium at the levels in the Village's water, and finally the Village's demonstrated commitment to the regional water system, the Board finds that denial of variance would impose an arbitrary or unreasonable hardship. The requested variance from Rule 304(B)(4) of Chapter 6 is hereby granted until January 1, 1986, subject to the conditions outlined in the attached Order.

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

ORDER

- 1. Petitioner, the Village of Hoffman Estates, is hereby granted variance from the 1.0 mg/l barium standard of Rule 304(B)(4) of Chapter 6: Public Water Supplies until January 1, 1986, subject to the following conditions:
 - a. Petitioner shall continue to perform its obligations as outlined in the Northwest Suburban Municipal Joint Action Water System (System) Agreement, as it may be from time to time amended, and shall replace its current water supply with Systemsupplied water as expeditiously as is practicable.
 - b. Petitioner shall take all reasonable measures with its existing equipment to minimize the level of barium in its finished water.
 - c. Pursuant to Rule 313(D)(1) of Chapter 6, on or before September 30, 1981 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 from the 1.0 mg/l maximum barium standard. The notice shall state the average content of barium in samples taken since the last notice period during which samples were taken.

2. Within forty-five days of the date of this Order, Petitioner shall execute and forward to 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 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:

CERTIFICATE

I, (We), the Order of the Illinois Pollu dated conditions thereto binding and	, understand	Board in	
Petitioner			
By: Authorized Agent			
Title			
Date			

IT IS SO ORDERED.

Mr. Anderson abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the of day of the control by the cont

Christan L. Moffett, Clerk
Illinois Pollution Control Baord