

ILLINOIS POLLUTION CONTROL BOARD  
April 1, 1982

VILLAGE OF HOFFMAN ESTATES, )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 81-209  
 )  
 ) ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 ) Respondent. )

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 December 31, 1981 as amended January 18, 1982. The Village seeks variance from the 15 pCi/l gross alpha particle activity level of Rule 304(C) of Chapter 6: Public Water Supplies. On February 22, 1982 the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance. Hearing was waived and none has been held.

The Village of Hoffman Estates, located in Cook and Kane Counties, supplies the water needs of its approximately 34,000 residents from 20 wells. Twelve of these wells are shallow, ranging from 119 to 242 feet deep, and produce roughly one-third of the Village's water. The other 8 wells are drilled deep (1357 to 1415 feet) into the Galesville sandstone aquifer, the non-complying barium concentrations of which were the subject of a variance granted in PCB 81-51 (July 9, 1981). The gross alpha particle activity levels of the individual wells have not been presented in this record. Five Agency samples of water from various points in the Village's distribution system analyzed in 1981 show gross alpha particle activity levels in pCi/l of 31.9 ± 5.60 (composite sample), 43.2 ± 6.42, 20.9 ± 3.94, less than 1.84 (sic) and 8.71 ± 4.22. As the former three samples indicate non-compliance with the 15 pCi/l standard, the Board finds this sufficient evidence to support the Village's assertion of need for a variance and to allow the Board to consider this petition.

Perhaps because the gross alpha levels of each well seem not to have been determined, the Village has made no mention of the possibility of achieving compliance through blending. However, the Village asserts that the ion exchange treatment system which was investigated in the course of consideration of barium removal in PCB 81-51 would serve to reduce the gross alpha levels in its finished water. This system was estimated to entail costs of

\$2,904,000 in capital expenditures, with annual operation and maintenance costs of \$360,000. The Village believes that to require construction of these facilities would impose an arbitrary or unreasonable hardship as it has continued its participation in the regional Northwest Suburban Municipal Joint Action Water Agency (Water Agency). According to the Water Agency's timetable, a pipeline allowing for transmission and use of the Village's Lake Michigan water allocation could be in operation by October, 1984.

As Hoffman Estates is part of the regional Water Agency, 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 immediate 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 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(C) of Chapter 6 is hereby granted until January 1, 1986, subject to the conditions outlined in the attached Order.

Given the relatively short life of this variance, assuming no delays in the Water Agency's timetable, the Board will not require the Village to make extensive investigation of blending as an option. However, the gross alpha particle activity level of each well should be determined. Thereafter, to the extent practicable and reasonable considering the nature of its distribution system, the Village will be ordered to minimize the gross alpha levels in its finished water.

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 15 pCi/l gross alpha particle activity standard of Rule 304(C) 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 Agency (Water Agency) Agreement, as it may be from time to time amended, and shall replace its current water supply with Water Agency supplied water as expeditiously as is practicable. This variance shall terminate at such earlier time as the Village ceases to be part of the Water Agency.

b) The gross alpha particle activity level of each well shall be determined as expeditiously as is practicable. Thereafter, petitioner shall take all economically and technically reasonable measures with its existing equipment to minimize the gross alpha particle activity level in its finished water.

c) Pursuant to Rule 313(D)(1) of Chapter 6, on or before June 30, 1982 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 15 pCi/l gross alpha particle activity standard. The notice shall state the average gross alpha particle activity level 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), \_\_\_\_\_, having read the Order of the Illinois Pollution Control Board in PCB 81-209, dated \_\_\_\_\_, understand and accept 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, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 15<sup>th</sup> day of April, 1982 by a vote of 4-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board