ILLINOIS POLLUTION CONTROL BOARD June 10, 1982

VILLAGE (OF OAK BROOK,	Petitioner,)))
	* } ") PCB 82-27
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 filed by the Village of Oak Brook (Village) March 16, 1982 as amended March 25, 1982. The Village seeks variance from the 15 pCi/l gross alpha particle activity limitation of Rule 304(C)(1) of Chapter 6: Public Water Supply. On April 5, 1982 the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance until January 1, 1986. Hearing was waived and none has been held.

The Village of Oak Brook, located in DuPage County supplies an annual average of 2.9 million gallons per day of water to 4,323 customers, of which 314 are commercial users accounting for 57% of all water billed. Water is currently supplied by six wells, one of which is shallow (250' deep Well #3) and the other 5 of which are deep (1502' to 1540' deep Wells #1,2,5,6,7). Well #5 pumps directly into a ground reservoir. Water from the other wells is discharged to the distribution system and two elevated tanks.

The gross alpha levels of each individual well have not been provided. However, duplicate Agency analyses of a composite of quarterly distribution system samples taken between August, 1980 and July 1981 showed gross alpha levels in pCi/l of 18.5 ± 4.15 and 15.7 ± 3.79. A single analysis of a single sample taken in July, 1979 showed a gross alpha level of 11.4 ± 4.85 pCi/l, and duplicate analyses of a single sample taken in December, 1981 showed levels of 17.8 ± 4.27 and 11.6 ± 3.11 pCi/l. Testing for radium 226 and 228 has not been done.

The Village asserts that installation of facilities to treat the water from each well presents two problems. First, the cost of facilities per well, based on treatment of 2,000 gallons of water per minute, is estimated to be \$1,277,184. Second, the Village lacks land area sufficient to site such facilities around all but Well #6.

As a long term solution to problems of water quantity and quality, the Village sought and has received a Lake Michigan water allocation which becomes available in 1985. Since March 11, 1980, the Village has been a member of the DuPage Water Commission (Commission), believing that cooperation with the Commission's other municipality members in the development of a common transmission system is the "most economical in acquiring a sufficient supply of water". While no detailed information concerning the Commission's timetable has been outlined, the Village states that it "plans to be able to utilize its allocation by 1985".

The Agency generally agrees with the facts alleged by the Village, and is of the opinion that consumption of the Village's water during any variance period "will not result in an unreasonable risk to health". The Agency believes that the DuPage Water Commission is a regional water supply system, and therefore recommends grant of variance until January 1, 1986, the deadline date for members of regional supply systems under §1416 of the Safe Drinking Water Act.

The Board finds that the Village's membership in the Commission satisfies the SDWA requirement. In light of the high cost and impracticability of treatment of the Village's current well water supply, the Village's commitment to the regional water supply system, and that there would appear to be little risk to health from continued consumption of the Village's water, the Board finds that denial of variance would impose an arbitrary or unreasonable hardship. Variance is therefore granted until Jaunary 1, 1986, subject to the Village's continuing as part of the regional Commission, and to the other conditions outlined in the attached Order.

As the pumping capacity of the Village's one shallow well (1000 gpm) is roughly one-third of the combined pumping capacity of the four wells discharging into the distribution system (3630 gpm, which excludes Well #5's 1380 gpm capacity) the Village has been ordered to utilize Well #3 to the extent practicable, to minimize the radiation content of 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 Oak Brook is granted a variance from the 15 pCi/l gross alpha particle activity limit of Rule 304(C)(1)(b) of Chapter 6: Public Water Supply until January 1, 1986, subject to the following conditions:

- a. Petitioner shall, in consultation with the Agency, continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Testing for radium 226 and 228 shall be commenced.
- b. Petitioner shall continue to perform its obligations as outlined in the DuPage Water Commission Agreement, as it may be from time to time amended, and shall replace its current water supply with Commission-supplied water as expeditiously as is practicable. This variance shall terminate in the event that the Village ceases to continue as a part of the DuPage Water Commission or is able to use its allocation of Lake Michigan water.
- c. The Village shall utilize Well #3 to the extent practicable, so as to minimize the radiation content of its finished water.
- d. Pursuant to Rule 313(D)(1) of Chapter 6, 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 has been granted by the Pollution Control Board a variance from the 15 pCi/l maximum gross alpha particle activity standard. The notice shall state the average content of gross alpha particle activity 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 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:

CERTIFICATE

The Control of the Co								
I, (We),, having read								
the Order of the Illinois Pollution Control Board in PCB 82-27, 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			- Agarigida (m. m.
Date			

IT IS SO ORDERED.

Board Member D. Anderson concurred.

Board Member I. Goodman abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution
Control Board, hereby certify that the above Opinion and Order was adopted on the /oth day of , 1982 by a vote of 40.

Christan L. Moffett Clerk
Illinois Pollution Control Board