

ILLINOIS POLLUTION CONTROL BOARD  
May 28, 1981

VILLAGE OF ORLAND PARK, )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 81-35  
 )  
 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 Orland Park (Village) filed March 5, 1981. 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. The Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of variance on April 6, 1981, and amended it April 8, 1981 to correct a typographical error. Hearing was waived and none has been held.\*

The Village of Orland Park, located in southwestern Cook County, delivers water to its approximately 22,697 resident and non-resident water users (4,637 connections) from a system operated in two separate parts. One draws water from three wells and delivers softened water. The other draws and delivers non-softened water from seven currently operational wells, two of which, Well Nos. 9 and 11, are deep wells. These two deep wells deliver water with gross alpha activity in excess of the standard. A sample from Well No. 11 showed activity of  $29.2 \pm 7.35$  pCi/l (Pet. 3, Ex. A). The Village also reports (but does not attach supporting documentation) that the gross alpha activity of Well No. 9 is  $25.3 \pm 7.15$  pCi/l; as the Agency does not challenge this figure, the Board accepts it as accurate (Pet. 3, Rec. 2).

---

\*As explained in the Board's Order of May 1, 1981 petitions requesting a hearing were signed by 1066 Orland Park residents. As these petitions were filed April 29 and May 1, 1981, long past the date for filing Section 37 objections, the authorization of hearing was not mandatory. The Board did not authorize a discretionary hearing, since the petitioner had not then and has not since waived the statutory decision deadline. Hearing could not have been properly noticed and held, and transcripts reviewed by the Board in the time period available.

The Village has also submitted a report from the Argonne National Laboratories containing results of Argonne's tests of the waters of various wells for radium 226 only. The maximum permissible concentration for combined radium 226 and 228 is 5 pCi/l [Rule 304(C)(1)(a)]. The combined readings for radium 226 from two test samplings each of Wells 9 and 11 were respectively, in pCi/l,  $15.42 \pm 0.30$  and  $16.6 \pm 1.2$ . Testing for radium 228 had not been commenced.

Tests for radium 226 were also conducted by Argonne of the waters of the two deep wells in the softened water system, Wells Nos. 6 and 10. The combined reading for water from Well No. 6 was  $7.84 \pm 0.23$  pCi/l. A single reading from Well No. 10 showed activity of  $4.44 \pm 0.13$  pCi/l, and the finished (softened) water showed activity of  $2.38 \pm 0.10$  (Pet. Ex. B).

The Board finds that the Argonne test results are sufficient to indicate that variance from the 5 pCi/l combined radium standard is needed. The Board will therefore construe the petition as seeking variance from Rule 304(C)(1)(a), as well as subsection (b) of that Rule.

The Village estimates that the capital costs of installing softening equipment for treatment of the waters from Wells 9 and 11 would be \$280,000; annual operating and maintenance costs, and costs for disposal of the resulting low level radioactive sludge were not calculated. The Village asserts that to require expenditure of these funds to attain immediate compliance would be arbitrary or unreasonable, as the Village has obtained a Lake Michigan water allocation available for its use beginning in 1983. The Village believes that delivery of this water cannot be anticipated until January 1, 1984 due to "requirements of planning, engineering, financing, and construction" (Pet 4-5, Ex. C-D).

The Board notes that neither the Village nor the Agency has considered or discussed the possibility of blending the waters of the deep wells with that of the shallow wells, so as to deliver finished water in compliance with the radiological quality standards. As no details concerning this aspect of the Village's system were provided, nor test results of water from the distribution system included in the petition, the Board cannot assess the feasibility of blending. The Board does find, however, that to require immediate compliance would impose an arbitrary or unreasonable hardship, particularly since there would appear to be little risk to health from consuming the Village's water if this variance is granted (see Village of Lemont v. IEPA, PCB 80-48, April 30, 1981). The Board will therefore grant a variance until March 1, 1982, during which time the Village shall investigate the blending option. Further conditions of this variance are that the Village shall expeditiously pursue replacement of its well water sources with Lake Michigan water and shall notify its users of this variance.

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

ORDER

Petitioner, the Village of Orland Park, is granted variance from the gross alpha particle activity and radium limitations of Rule 304(C)(1)(a) and (b) of Chapter 6: Public Water Supplies, until March 1, 1982, subject to the following conditions:

1. 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 shall be continued, and testing for radium 228 shall be commenced.
2. Petitioner shall, in consultation with the Agency, investigate the possibility and economic feasibility of blending water from its shallow wells with that of its deep wells to reduce the radiation level in its finished water, Petitioner shall submit the results of its investigation to the Board on or before January 1, 1982.
3. Petitioner shall replace its current water supply with Lake Michigan water as expeditiously as is practicable.
4. 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 a variance from the radiological quality standards by the Pollution Control Board. The notice shall state the average content of gross alpha particle activity and radium, including available results from samples taken since the last notice period.
5. 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

I, (We), \_\_\_\_\_, having read the Order of the Illinois Pollution Control Board in PCB 81-35 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.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 28<sup>th</sup> day of May, 1981 by a vote of 4-0.

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