

ILLINOIS POLLUTION CONTROL BOARD
May 13, 1982

VILLAGE OF ROUND LAKE,)
)
) Petitioner,)
)
) v.) PCB 82-17
)
 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

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

This matter comes before the Board on the February 23, 1982 petition for variance filed by the Village of Round Lake (Village). The Village seeks variance until December 31, 1984 from the 15 pCi/l gross alpha particle activity limitation of Rule 304(C)(1) of Chapter 6: Public Water Supply. On March 24, 1982 the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of variance. Hearing was waived and none has been held.

The Village of Round Lake, Lake County, serves the water needs of its approximately 2,578 (the Agency estimated 3,107) residents from two wells. Well #2 is a shallow (359' deep) well supplying approximately 120,000 gallons per day (gpd), while Well #3 is a deep (1241' deep) well supplying approximately 240,000 gpd. Analysis on May 12, 1980 of Agency samples of water taken from the Village's distribution system April 7, 1980 showed a gross alpha particle activity level of 22.3 ± 4.26 pCi/l.* A composite of four quarterly distribution system samples taken between April 7, 1980 and June 9, 1981 showed a gross alpha level of 19.9 ± 3.64 . (No test results concerning radium 226 and 228 levels were provided to the Board.)

Thereafter, the Village engaged Hazelton Environmental Sciences Corporation to perform additional sampling. Attached as Exhibit C to the Village's petition is the result of one distribution system sample taken October 8, 1981 showing a gross alpha particle activity level of 2.0 ± 1.2 pCi/l, a level well within the Board's standard. The Agency contacted Hazelton

*The Agency did not comment on the accuracy of the analyses of these samples, which took place during a period of time when the Agency subsequently discovered that there were problems with the testing procedures.

concerning this result on March 1, 1982, and discovered that Hazelton did not know from where the sample had been taken. The Agency noted that it could have been taken near well #2 or even from a house with a water softener. The Agency also found that Hazelton had, however, also determined that the gross alpha particle activity level of shallow Well #2 was less than 1.0 pCi/l, while that of deep Well #3 was found to be 16.1 ± 3.9 pCi/l. Finally, Agency distribution system samples taken in November and December, 1981 showed gross alpha particle activity levels, respectively in pCi/l, of 9.07 ± 2.67 and 8.45 ± 2.48 , again, well within the Board's standard.

The threshold question, then, is whether variance is even necessary, given these varying analyses. Rule 309(C)(1)(a) provides in part that "Compliance [with Rule 304] shall be based on the analysis of an annual composite of four consecutive quarterly samples..." The Board has previously held that, a single sample is a sufficient indicator of non-compliance and the need for variance relief, even though no enforcement action could be brought until a non-complying composite sample had been obtained (e.g. City of Rolling Meadows v. IEPA, PCB 80-70, July 14, 1980). Fortunately, the Board need not rely in this case on non-composite analysis alone, as the Agency analysis of the composite of the April, 1980 through June, 1981 quarterly samples shows gross alpha levels of 19.9 ± 3.64 . Therefore, the Board finds that the Village's system is out of compliance, for the purpose of justification of need for, and Board consideration of, the Village's variance request.

In support of its petition, the Village states that it understands that installation of a water softening system to remove radioactivity would cost approximately \$400,000 - \$500,000. The Village believes that immediate compliance would impose an unreasonable economic hardship. This is based on the fact that, as of the petition's filing, the Village had outstanding a principal balance of \$347,000 for bonds relating to water works and sewer improvement. In addition it noted that its residents were being faced with increased sewer charges (a dispute between the Village and Lake County as to whether the total monthly charge should be \$6.00 or \$9.00 as evidenced in Ex. E-F to the petition). The Village also states, however, that it is its intention to engage a water resource consultant to consider compliance requirements and options.

The Agency does not dispute the Village's hardship assertions, and states its belief that grant of variance "will not result in an unreasonable risk to health". The Agency therefore recommends grant of variance until January 1, 1984 subject to conditions including engagement of a water resource consultant within four months.

Based on the Village's uncertainty as to whether variance was necessary, the Board does not find the petition's lack of data concerning compliance options to be a fatal deficiency in light of the Village's asserted willingness to develop such information.

The Board observes that neither the Village nor the Agency has presented details about the distribution system. Nor have they discussed whether the waters of the two wells are already blended or, if so, whether better blending might deliver finished water in compliance with the radiological quality standards. Based on the information presented, the Board cannot assess the economic feasibility of this option, but does note that the shallow well is capable of pumping roughly one-half (120,000 gpd) of the water pumped by the deep well (240,000 gpd).

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 immediate risk to health from consuming the Village's water if variance is granted (see Village of Lemont v. IEPA, PCB 80-48, April 30, 1981). The Board will therefore grant a short-term variance subject to conditions, until June 1, 1983, during which time the Village shall investigate blending and any other compliance options. In addition, given the divergent sample results, it is even more than usually important that testing continue, and the Board will so order.

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

ORDER

1. Petitioner, the Village of Round Lake, 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 June 1, 1983, 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. On or before September 15, 1982 the Petitioner shall secure professional assistance in investigating compliance options, including the possibility and feasibility of achieving compliance by blending water from its shallow well with that of its deep well. On or before October 15, 1982, evidence that such professional assistance has been secured shall be submitted to Wayne Weimerslage, Enforcement Programs, at the address stated in paragraph 2, below.

c. As expeditiously after identification of a feasible compliance method as is practicable, but no later than April 1, 1983, Petitioner shall submit a program (with increments of progress) for bringing its system into compliance with radiological quality standards to the Agency's Division of Public Water Supplies, FOS, at the address stated in paragraph 2, below.

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

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 82-17, 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 was adopted on the 13th day of May, 1982 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board