

ILLINOIS POLLUTION CONTROL BOARD
May 30, 1985

VILLAGE OF HANOVER PARK,)
)
 Petitioner,)
)
 v.) PCB 85-22
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

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

This matter comes before the Board on a variance petition filed by the Village of Hanover Park (Hanover Park) on February 20, 1985. The Petitioner requests a variance from the combined radium standard of 35 Ill. Adm. Code 604.301(a) up to and including January 1, 1989.* The Illinois Environmental Protection Agency (Agency) filed its recommendation that variance be granted on May 9, 1985. Hanover Park waived hearing and none has been held.

The Village of Hanover Park is located in Cook and DuPage Counties, Illinois. The Village owns and operates its water distribution system which consists of four deep wells, two shallow wells, pumps and other distribution facilities. The system provides potable water to approximately 8,592 residential and 120 industrial and commercial utility customers.

Section 604.301(a) provides for a maximum allowable concentration for combined radium-226 and radium-228 activity in community water supplies of 5 picoCuries/liter (pCi/l). An analysis of Hanover Park's water performed by USEPA indicated a combined radium content of 6.8 pCi/l, while an analysis performed by Petitioner from samples taken on September 20, 1984 indicated the level at 8.95 pCi/l. The Village states that it was subsequently placed on the Agency's Restricted Status list for public water supplies. The Agency maintains, however, that its Public Water Supply Division has not yet informed the Village

*Reference is also made in the petition to gross alpha particle activity in the Village's water supply. The Agency states, however, that it has no analysis demonstrating that the Village is exceeding this standard. Accordingly, it is the Agency's opinion and the Board concurs, that any references in the petition to gross alpha activity are inadvertent.

that it will be placed on Restricted Status but that it will do so if variance is not granted. The variance is sought to allow for the continued operation of the Petitioner's water supply and distribution system, the expansion or extension of the system as necessary, and the "removal of this facility from the Agency's Restricted Status List" (Pet. at par. 1). The requested term of the variance is until January 1, 1989 or until such time as the Village receives Lake Michigan water to combine with existing well source water and is no longer in violation of the Public Water Supply Rules. (Pet. at par. 1,6).

Under Section 35 of the Environmental Protection Act, Ill. Rev. Stat. 1983, ch. 111-1/2, par. 1035, a variance from the drinking water regulations can only be granted upon a showing of arbitrary or unreasonable hardship which outweighs any environmental detriment and if consistent with the Federal Safe Drinking Water Act (SDWA), 42 U.S.C. 300f et seq., and regulations pursuant thereto.

Hanover Park claims that it will suffer an arbitrary and unreasonable hardship if required to immediately reduce the combined radium level in its public drinking supply. The Village is currently pursuing a conforming water supply as a member of a regional public water supply agency known as the Northwest Suburban Municipal Joint Action Water Agency (JAWA). JAWA was created by seven contiguous municipalities for the purpose of securing Lake Michigan water for its members. JAWA's system is scheduled to be completed and in operation with delivery of lake water to Petitioner by June 20, 1985. Upon receipt of the lake water, the Village intends to blend not less than 50 percent lake water with existing well water. Beginning after 1985, the Village will increase the percentage of lake water used until 1989 when lake water will be used exclusively. Hanover Park states that it has already issued \$1.6 million in bonds for start-up costs associated with its membership in JAWA (Pet. at 7).

Hanover Park's only other compliance alternative would be to construct new treatment facilities which would cost in excess of \$1.5 million and take approximately two years to implement. In light of the substantial time and funds the Village has expended as a member of JAWA, requiring the construction of new treatment facilities would be unreasonable. Moreover, such facilities would become obsolete upon delivery of the anticipated lake supply. The Agency also notes increased health risks are associated with control methods such as ion exchange softeners because the necessary regeneration raises the sodium content of the water. This may result in a significant health risk to persons who are hypertensive or who have heart problems.

Illinois has adopted state regulations which are no less stringent than the national primary drinking water regulations in effect and thus, it has been delegated primary enforcement responsibility for its public water systems under the SDWA. A

state with primary enforcement responsibility may grant variances from those regulations pursuant to section 1415 of the SDWA, but only upon a finding that:

a) Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the requirements respecting the maximum contaminant levels of the drinking water regulations despite application of the best technology, treatment techniques, or other means, which the [USEPA] Administrator finds are generally available (taking costs into consideration); and

b) The granting of a variance will not result in an unreasonable risk to the health of persons served by the system. Section 1415 of the SDWA, 42 U.S.C. 300g-4(a)(1)(A).

The Agency maintains and the Board has previously determined that since the Administrator has issued no regulation respecting treatment technologies under Section 1415(a)(1)(A) the Board has the authority to grant individual variances under the SDWA to both small and large water systems provided that there is a demonstration of arbitrary or unreasonable hardship. City of Crystal Lake v. IEPA, PCB 84-2, May 29, 1984. As noted by the the Agency, USEPA has published a "Manual of Treatment Techniques for Meeting the Interim Primary Drinking Water Regulations" which identifies some treatment technologies and serves as a helpful guidance. These suggested treatment techniques, however, do not fulfill the requirement that USEPA promulgate regulations.

The Agency states, however, that it "recognizes that USEPA disagrees with [this] analysis" citing a notice of proposed amendment to the national interim primary drinking water regulations. 45 Fed. Reg. 56633, July 31, 1980. The notice contained USEPA'S legal interpretation of the requirements of Section 1415(a)(1)(A) for a federal variance from maximum contaminant levels (MCL). Specifically, the notice stated that "the determination of 'best technology generally available' is made only by the Administrator when the MCL is established through rule-making." In a footnote thereto it is stated that:

"These techniques were described by EPA in the economic impact assessments prepared for the proposal and the promulgation of the National Interim Primary Drinking Water Regulations, as well as in USEPA'S publication 'Manual of Treatment Techniques for Meeting the Interim Primary Drinking Water Regulations'."

Notably, the proposed rule was never promulgated. However, it appears to be USEPA'S interpretation that the Manual and any economic impact assessments prepared for the promulgation of MCLs address the requirement that the Administrator determine through "rulemaking" generally available treatment techniques taking costs into consideration.

The Agency, while not retreating from its conclusion that the Board has authority to grant federal variances, recommends that the variance from combined radium be denied. Rather, "the Agency believes that the concerns of the public water supplies to no longer be under Restricted Status and the concerns of the USEPA that federal variances not be granted without installation of specific control technology can both be met by the Board granting variance from the effect of being on Restricted Status, i.e., from 35 Ill. Adm. Code 602.105(a), Standards for Issuance, and not granting a variance from the combined radium . . . standards." (Agency Rec. at par. 36).

The Board notes that Hanover Park has specifically requested variance from the combined radium standard and that grant of a variance from Restricted Status would not afford the Village the full relief sought. First, as noted by the Agency, such a variance would not insulate the Village from the possibility of federal enforcement for violation of the combined radium standard. The Agency opines, however, that if the Board requires a compliance plan within approximately three years and ultimate compliance within five years, possibly USEPA may consider the variance order to be a "Compliance Order" and defer federal enforcement. The Board points out, however, that all variances in which the petitioner demonstrates a plan for ultimate compliance could be considered "compliance orders". In any event, Hanover Park will shortly be in compliance by utilizing its allotment for Lake Michigan water, and thus a five year compliance plan is unnecessary.

Secondly, even if a variance from "Restricted Status" could operate to deter federal enforcement it cannot prevent enforcement proceedings brought by third parties against the Village for violations under the Illinois Environmental Protection Act and the applicable radium regulation.

USEPA's interpretation that the Manual suffices to identify applicable treatment technology has been before the Board previously. City of Crystal Lake v. IEPA, supra at 3-4; Village of Altona v. IEPA, PCB 80-74, July 10, 1980 at 3; Turnberry Utilities, Inc. v. IEPA, PCB 79-257, March 20, 1980 at 4. The Board has received no new information which would cause it to retreat from its finding in those cases that granting variances from the SDWA is within its authority. Accordingly, the Board can find no reason to deny the Village's request for a variance from the combined radium standard. The Board wishes to note, however, that in affirming that it does have the power to grant variances under the SDWA, it is not deciding whether variances from "Restricted Status" should or should not be granted. In the context of Hanover Park, which has not requested such a variance, the issue is inappropriately presented.

The Village has performed no formal assessment of the effect on the environment should this variance be granted. The Agency states that although radiation at any level contains some risk,

the risk associated with this level is very low. This conclusion reflects research demonstrating that much less radium is retained in the body than originally thought when the federal standard was established. See Village of Lemont v. IEPA, PCB 80-48, May 1, 1981. The current standard is now under review by USEPA. The Board finds that granting the variance will not create an "unreasonable risk to the health of the persons served by the system" at these concentrations.

Balancing the great expense to immediately comply with the minimal threat to the public health, the Board finds that requiring immediate compliance with the radium standard would constitute an arbitrary and unreasonable hardship. However, the Board will not grant the variance for the requested term through January 1, 1989. The Village has stated that delivery of lake water is anticipated by June 20, 1985 at which time 50% blending will begin. Using the Petitioner's data of a combined radium level of 8.95 pCi/l, the initial blending program should result in a reduction in the level to below 4.5 pCi/l. This reduced level falls below the 5.0 pCi/l standard. Nevertheless, the Board will grant variance to make provision for unexpected delays in delivery of lake water and start-up time in establishing the blending program as well as for adequate time to demonstrate compliance with the regulations which requires at least a year. Accordingly, variance is hereby granted to the Village of Hanover Park from the provisions of 35 Ill. Adm. Code 604.301(a) for 18 months or until compliance is demonstrated in accordance with 35 Ill. Adm. Code 605.105(a), whichever occurs first, subject to conditions.

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

ORDER

The Village of Hanover Park is hereby granted a variance from 35 Ill. Adm. Code 604.301(a) for 18 months subject to the following conditions:

1. That this variance expires when analysis pursuant to 35 Ill. Adm. Code 605.105(a) demonstrates compliance with the combined radium standard or for 18 months from the grant of this variance, whichever occurs first.
2. That Petitioner shall blend its well water with the maximum amount of Lake Michigan water legally available to Petitioner so as to achieve compliance with 35 Ill. Adm. Code 604.301(a) in as timely a manner as possible.

3. That pursuant to 35 Ill. Adm. Code 606.201, Petitioner shall 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 radium-226 and radium-228 standard in the first set of water bills issued after the grant of this variance and every three months thereafter until such time as the water supply is in demonstrated compliance with Section 606.301(a).
4. Petitioner shall take all reasonable measures with its existing equipment to minimize the level of combined radium-226 and radium-228 in its finished water, but that at no time during the period of this variance shall the maximum allowable combined concentration for radium-226 and radium-228 in Petitioner's public water supply be more than 9 pCi/l.
5. That within forty-five days of the date of this order, Petitioner shall execute and forward to Wayne Wiemerslage, 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.

CERTIFICATION

I, (We) _____, hereby accept and agree to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 85-22, May 30, 1985.

Petitioner

Authorized Agent

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 30th day of May, 1985, by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board