

ILLINOIS POLLUTION CONTROL BOARD
July 3, 1990

VILLAGE OF ELBURN,)
)
 Petitioner,)
)
 v.) PCE 90-41
) (Variance)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by R. C. Elenal):

This matter comes before the Board on a Petition for Variance Extension ("Pet.") filed March 27, 1990 by the Village of Elburn ("Elburn"). Elburn is requesting an extension of the variance granted by the Board on April 6, 1989 in PCB 88-204. Elburn seeks relief from 35 Ill. Adm. Code 602.105(a) "Standards For Issuance" and 602.106(b) "Restricted Status" to the extent those rules relate to violation by Elburn's public water supply of the 5 picocuries per liter ("pCi/l") combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a). Variance is requested for a period of five years or for a period of 29 months following promulgation by the United States Environmental Protection Agency ("USEPA") of revised radium standards.

The Illinois Environmental Protection Agency ("Agency") filed its Variance Recommendation ("Rec.") on May 14, 1990. The Agency recommends that variance be granted, subject to conditions. Elburn waived hearing and none has been held.

Based on the record before it, the Board finds that Elburn has presented adequate proof that immediate compliance with the Board regulations at issue would impose an arbitrary or unreasonable hardship. Accordingly, the variance will be granted, subject to conditions as set forth in this Opinion and Order.

BACKGROUND

Elburn, a municipality located in Kane County, provides a potable public water supply to a population of 1,435 residents (Pet. at 8). The water supply is derived from a system consisting of one shallow well and two deep wells.

Elburn was first placed on restricted status in January 1985, based on violation of the 5 pCi/l combined radium

standard. Representative test results have indicated the following combined radium concentrations:

	<u>pCi/l</u>
September 1984	12.1
December 1986	7.2
October 1988	9.7
December 1988	8.4
February 1989	9.4
April 1989	7.3
August 1989	7.1

(1988 Pet. at 2; Pet. at 4)¹

Elburn has been granted two prior variances from Restricted Status and Standards for Issuance regulations. In PCB 88-4, the Board granted Elburn a 13-month variance to "allow Elburn to formally secure professional assistance, investigate compliance options and submit a compliance to which it is fully committed." (PCB 88-4, April 21, 1988 and upon reconsideration, June 16, 1988). In PCB 89-204, the Board granted Elburn a 4-year variance extension, to allow Elburn "sufficient time . . . to implement the thirty-eight month compliance plan approved by Elburn on December 5, 1988" (PCB 88-204, April 6, 1989).

REGULATORY FRAMEWORK

In recognition of a variety of possible health effects occasioned by exposure to radioactivity, the USEPA has promulgated a maximum concentration limit for drinking water of 5 pCi/l of combined radium-226 and radium-228. Illinois subsequently adopted this same limit as the maximum allowable concentrations under Illinois law. Pursuant to Section 17.6 of the Illinois Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111^{1/2}, par. 1017.6), any revision of the 5 pCi/l standard by the USEPA will automatically become the standard in Illinois.

The action that Elburn requests here is not variance from the maximum allowable concentration for radium. Regardless of the action taken by the Board in the instant matter, this standard will remain applicable to Elburn. Rather, the action Elburn requests is the temporary lifting of prohibitions imposed pursuant to 35 Ill. Adm. Code 602.105 and 602.106. In pertinent part these Sections read:

¹ Elburn incorporated parts of its original petition in its prior variance, PCB 88-204, into the record in this proceeding and appended the document to the instant petition. This document will be cited as "1988 Pet. at ____".

Section 602.105 Standards for Issuance

- a) The Agency shall not grant any construction or operating permit required by this Part unless the applicant submits adequate proof that the public water supply will be constructed, modified or operated so as not to cause a violation of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111¹/₂, pars. 1001 et seq.) (Act), or of this Chapter.

Section 602.106 Restricted Status

- b) The Agency shall publish and make available to the public, at intervals of not more than six months, a comprehensive and up-to-date list of supplies subject to restrictive status and the reasons why.

Illinois regulations thus provide that communities are prohibited from extending water service, by virtue of not being able to obtain the requisite permits, if their water fails to meet any of the several standards for finished water supplies. This provision is a feature of Illinois regulations not found in federal law. It is this prohibition which Elburn requests be lifted. Moreover, grant of the requested variance would not absolve Elburn from compliance with the combined radium standard, nor insulate Elburn from possible enforcement action brought for violation of those standards.

In consideration of any variance, the Board determines whether a petitioner has presented adequate proof that immediate compliance with the Board regulations at issue would impose an arbitrary or unreasonable hardship (Ill. Rev. Stat. 1989, ch. 111¹/₂, par. 1035(a)). Furthermore, the burden is upon the petitioner to show that its claimed hardship outweighs the public interest in attaining compliance with regulations designed to protect the public (Willowbrook Motel v. Pollution Control Board (1977), 135 Ill.App.3d, 481 N.E.2d, 1032). Only with such showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship.

Lastly, a variance by its nature is a temporary reprieve from compliance with the Board's regulations (Monsanto Co. v. IPCB (1977), 67 Ill. 2d 276, 367 N.E.2d, 684), and compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter (Id.). Accordingly, except in certain special circumstances, a variance petitioner is required, as a condition to grant of variance, to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance.

COMPLIANCE PROGRAM

Elburn proposes to achieve compliance through the phased construction of three deep wells and ion-exchange treatment facilities. For Phase I, Elburn desires to initially construct a single-unit ion-exchanger, with attendant appurtenances. For Phase II, Elburn anticipates the construction of deep well #5 and an additional ion-exchange unit with appurtenances.

Elburn and the Agency anticipate USEPA will promulgate a modified radium standard with final promulgation expected by September 1992. Should the USEPA alter the radium standard to 5 pCi/l for each of the two radium isotopes², Elburn observes that existing levels of radium-226 and radium-228 in its water may possibly lie within the acceptable range or at least would be close to the proposed standard levels (Pet. at 7-8). Under this scenario, Elburn believes that a lesser degree of treatment will be required to obtain compliance which would impact the sizing of the ion-exchange treatment facilities (Pet. at 8-9).

Given the uncertainties associated with USEPA action and the differing size of treatment facilities which would be warranted depending upon USEPA's particular action, Elburn contends that it would be premature to complete final design and construction of the ion-exchange facilities at this time (Pet. at 10). Rather, at this time Elburn agrees to commit to those sections of its compliance plan short of final design and construction of its ion-exchange equipment (through Phase IB3) at a cost between \$2,018,300 and \$2,731,413.00 (1988 Pet. at 5, Pet. at Exh. H). Elburn further commits to complete final design and construction upon promulgation of (or the determination not to promulgate) revised standards, dependent on the form of those standards.

Elburn contends that it has aggressively pursued compliance throughout the time of its various variance requests (Pet. at 5). As evidence thereto, Elburn submits a summary of its activities respecting radium since 1988 (Pet. at 5-6):

- 1) On May 2, 1988 Elburn signed an Engineering Contract with Rempe-Sharpe & Associates to investigate compliance options.
- 2) On October 3, 1988 Elburn signed the Agency's January 1988 Letter of Commitment.

² As the Board has noted elsewhere (e.g., Village of North Aurora v. IEPA, PCB 89-66, Feb. 8, 1990, Slip Op. at 7-8), this is one of the options apparently under consideration by the USEPA.

- 3) On December 5, 1988 Elburn approved the ion-exchange radium removal technology.
- 4) On June 6, 1989 Elburn authorized the expenditure of \$24,000 to permit Rempe-Sharpe & Associates to provide Engineering Services for the North Street Sanitary Sewer interceptor pursuant to phase IA of the radium compliance project...
- 5) On June 22, 1989 Elburn entered into a contract with Rempe-Sharpe & Associates for the Preliminary Engineering Services for the Radium Compliance Facility in the amount of \$35,350, with regards to Phase IEl of the Compliance Project.
- 6) On October 11, 1989 Elburn filed a Complaint For Condemnation to condemn a 2.35 acre parcel within the Village to serve as the location for the Radium Treatment Facility. The original offer was \$61,000, the Village has made a subsequent offer of \$87,103.67. Negotiations are currently underway.
- 7) On November 4, 1989 Elburn purchased a 2.41 acre parcel for \$60,250 to serve as the location for the Well #4 as required under Phase I of the radium compliance project.
- 8) On January 11, 1990 Elburn opened bids for the construction of the North Street Sanitary Sewer Interceptor which will channel the radium backwash from the Water Treatment Facility to the Wastewater Treatment Facility. On February 5, 1990 the Village awarded the contract to Dempsey Eng, Inc. in the amount of \$177,002.93.
- 9) On February 20, 1990 the Village approved an ordinance authorizing the sale of \$975,000 in General Obligation Bonds for the purpose of financing Phase IA, IB, property acquisition, legal fees, and administrative costs for the Village's Radium Compliance Plan.
- 10) On March 5, 1990 the Village approved the Preliminary Engineering Report from Rempe-Sharpe & Associates.

- 11) On March 5, 1990 the Village entered into a contract with Rempe-Sharpe and Associates for engineering services related to Phase IE2 of the Radium Compliance Project in the amount of \$57,900.

HARDSHIP

Elburn believes that denial of variance would constitute an arbitrary or unreasonable hardship in that denial would preclude significant development in and around Elburn, and that such hardship would outweigh any injury to the public (Pet. at 10). The Agency also notes that continuation of restricted status would mean that no new water main extension permits could be issued by the Agency, and any economic growth dependent on those water main extensions would not be allowed (Rec. at 7). The Agency further notes that the possibility of reduced costs for treatment due to a change in the standard for combined radium should be considered (Rec. at 6).

Elburn cites several proposed developments including annexation of various parcels of land which will provide the village with 900 single family homes, 310 multi-family units, and 20 acres of commercial developments. Elburn anticipates that its population and tax base will double as a result of these annexations. Elburn believes that the failure to obtain variance would prohibit the extension of water supply to the annexed areas.

In addition, as addressed in PCB 88-204, Elburn again discusses other aspects of anticipated hardship should variance be denied:

Imposition of restricted status has had a negative impact on Elburn. Elburn has recently carried out a number of public projects which it has been struggling to pay for. In December 1980, Elburn expanded its sewage treatment plant to service its existing residential and commercial customers as well as its expected growth. This required a \$430,000 General Obligation Bond issue in 1978. In addition Elburn, in October 1986, completed the necessary construction of a new water tower to provide a safe and adequate system. Again, this project was sized to serve the existing residents and commercial customers, as well as anticipated growth. The Agency's Division of Public Water Supply had informed Elburn that it needed to provide additional storage and system pressure. The construction of the new water tower cost approximately \$750,000. Elburn used \$50,000 from

existing operating funds, a \$200,000 Community Development Assistance Program grant and \$500,000 General Obligation Bonds issued in 1986 to raise the necessary funds.

Elburn has suffered a severe financial blow as its principal wastewater generator and employer closed its facility on April 12, 1985. Kneip Company announced the closing of its meat packaging operations in February 1985 and closed its facility on April 12, 1985.

This resulted in a loss of 85 jobs and \$133,904 in wastewater treatment revenue to the Village of Elburn which represents approximately 25% of Elburn's total revenue. In addition, Elburn was left with a wastewater treatment system designed and sized to accommodate waste from the meat packing company and upon which its rates were based. Without the waste from the meat packing plant, the existing sewage treatment plant is operating at approximately 25% of capacity with a resulting loss in anticipated and needed revenue. As a result, Elburn is struggling to pay off the approximately \$930,000 for General Obligation Bonds for the cost of the new water tower and sewage treatment plant expansion.

(PCB 88-204 at 3-4, Pet. at 8-9).

PUBLIC INTEREST

Although Elburn has not undertaken a formal assessment of the environmental effect of its requested variance, it contends that there will be little or no adverse impact caused by the granting of variance (Pet. at 10). The Agency contends likewise (Rec. at 5). In support of its contention, the Agency references testimony presented by Richard E. Toohey, Ph.D. of Argonne National Laboratory at the hearing held on July 30 and August 2, 1985 in R85-14, Proposed Amendments to Public Water Supply Regulations, 35 Ill. Adm. Code at 602.105 and 602.106, and to updated testimony presented by Dr. Toohey in the Board's hearing on the Braidwood variance, PCB 89-212 (Rec. at 5).

The Agency believes that while radiation at any level creates some risk, the risk associated with Elburn's water is very low (Rec. at 5). In summary, the Agency states:

The Agency believes that the hardship resulting from denial of the recommended variance from the effect of being on Restricted Status would outweigh the injury of the public from grant of that variance. In light of the cost to the Petitioner of treatment

of its current water supply, the likelihood of no significant injury to the public from continuation of the present level of the contaminants in question in the Petitioner's water for the limited time period of the variance, and the possibility of compliance with a new MAC standard by less expensive means if the standard is revised upward, the Agency concludes that denial of a variance from the effects of Restricted Status would impose an arbitrary or unreasonable hardship upon Petitioner.

The Agency observes that this grant of variance from restricted status should affect only those users who consume water drawn from any newly extended water lines. This variance should not affect the status of the rest of Petitioner's population drawing water from existing water lines, except insofar as the variance by its conditions may hasten compliance. Grant of variance may also, in the interim, lessen exposure for that portion of the population which will be consuming more effectively blended water. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the standards.

(Rec. at 8 and 9).

CONSISTENCY WITH FEDERAL LAW

The Agency believes that Elburn may be granted variance consistent with the requirements of the Safe Drinking Water Act (42 U.S.C. 300(f)) and corresponding regulations because the requested relief is not variance from a national primary drinking water regulation (Rec. at par. 23).

CONCLUSION

The Board finds that, in light of all the facts and circumstances of this case, denial of variance would impose an arbitrary or unreasonable hardship upon Petitioner. The Board also agrees with the parties that no significant health risk will be incurred by persons who are served by any new water main extensions, assuming that compliance is timely forthcoming.

It is the Board's understanding that Elburn will be ready to proceed with the final phases of their chosen plan immediately upon the effective date of any regulation promulgated by USEPA which amends the maximum concentration level for combined radium, either of the isotopes of radium, or the method by which compliance with a radium maximum concentration level is demonstrated.

The Board believes that the conditions as recommended by the Agency are generally appropriate. However, the Board makes one substantive insertion. That is the addition of condition A and the placement at appropriate positions of the phrase "the date of USEPA action", as that phrase is defined in condition A, at appropriate places in the Order. Since the term of the variance tracks in part USEPA's action, rather than repeat all possible actions at each point, the Board will use this phrase as so defined.

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

ORDER

1. Petitioner, the Village of Elburn, is hereby granted variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, but only as they relate to the 5 pCi/l combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a), subject to the following conditions:
 - (A) For the purposes of this Order, the date of USEPA action shall consist of the earlier of the:
 - (1) effective date on any regulation promulgated by the U.S. Environmental Protection Agency ("USEPA") which amends the maximum concentration level for combined radium, either of the isotopes of radium, or the method by which compliance with a radium maximum concentration level is demonstrated; or
 - (2) date of publication of notice by the USEPA that no amendments to the 5 pCi/l combined radium standard or the method for demonstrating compliance with the 5 pCi/l standard will be promulgated.
 - (B) Variance shall terminate on the earliest of the following dates:
 - (1) Twenty-nine months following the date of USEPA action; or
 - (2) Five years from the date of grant of this variance; or
 - (3) When analysis pursuant to 35 Ill. Adm. Code 605.104(a), or any compliance demonstration method then in effect, shows compliance with any standards for radium in drinking water then in effect.

- (C) Compliance shall be achieved with any standards for radium then in effect no later than 29 months following the date of USEPA action or five years from the grant of this variance, whichever occurs first.
- (D) In consultation with the Illinois Environmental Protection Agency ("Agency"), Petitioner shall continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance terminates, Petitioner shall collect quarterly samples of its water from its distribution system at locations approved by the Agency. Petitioner shall composite the quarterly samples for each location separately and shall have them analyzed annually by a laboratory certified by the State of Illinois for radiological analysis so as to determine the concentration of radium-226 and of radium-228. At the option of Petitioner the quarterly samples may be analyzed when collected. The results of the analyses shall be reported within 30 days of receipt of the most recent analysis to:

Illinois Environmental Protection Agency
Compliance Assurance Section
Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62794-9276

- (E) Within eight months after the date of USEPA action, Petitioner shall apply to the Agency at the address below for all permits necessary for construction of installations, changes, or additions to Petitioner's public water supply needed for achieving compliance with the maximum allowable concentration for combined radium, or with any standards for radium in drinking water then in effect:

Illinois Environmental Protection Agency
Division of Public Water Supply
Permit Section
2200 Churchill Road
Springfield, Illinois 62794-9276.

- (F) Within eleven months after the date of USEPA action, Petitioner shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. Petitioner shall accept appropriate bids within a reasonable time. Petitioner shall notify the Agency at the address in condition (D) of each of the following actions: 1) advertisement for bids, 2) names of successful bidders, and 3) whether Petitioner accepted the bids.

- (G) Construction allowed on said construction permits shall begin within a reasonable time of bids being accepted, but in any case, construction of all installations, changes or additions necessary to achieve compliance with the maximum allowable concentration of combined radium, or with any standards for radium in drinking water then in effect, shall begin no later than thirteen months after the date of USEPA action. Construction shall be completed 29 months after the date of USEPA action.
- (H) Pursuant to 35 Ill. Adm. Code 606.201, 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 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 35 Ill. Adm. Code 602.105(a) Standards of Issuance and 35 Ill. Adm. Code 602.106(b) Restricted Status, as they relate to the combined radium standard.
- (I) Pursuant to 35 Ill. Adm. Code 606.201, 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 shall send to each user of its public water supply a written notice to the effect that Petitioner is not in compliance with standard for combined radium. The notice shall state the average content of combined radium in samples taken since the last notice period during which samples were taken.
- (J) Until full compliance is achieved, Petitioner shall take all reasonable measures with its existing equipment to minimize the level of combined radium, radium-226, and radium-228 in its finished drinking water.
- (K) Petitioner shall provide written progress reports to the Agency at the address below every six months concerning steps taken to comply with paragraphs A-J. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph.

Illinois Environmental Protection Agency
Division of Public Water Supply
Field Operations Section
2200 Churchill Road
Springfield, Illinois 62794-9276.

- 2) Within 45 days of the date of this Order, Petitioner shall execute and forward to Bobella Glatz, Enforcement Programs,

Illinois Environmental Protection Agency, 2200 Churchill Road, Post Office Box 19276, Springfield, Illinois 62794-9276, a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period shall be held in abeyance during any period that this matter is being appealed. Failure to execute and forward the Certificate within 45 days renders this variance void and of no force and effect as a shield against enforcement of rules from which variance was granted. The form of said Certification shall be as follows:

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 90-41, July 3, 1990.

Petitioner

Authorized Agent

Title

Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1989 ch. 111 1/2 par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

Board Members Jacob D. Dumelle and Bill Forcade dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 3rd day of July, 1990, by a vote of 5-2.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board