

ILLINOIS POLLUTION CONTROL BOARD
June 20, 1996

EDELSTEIN WATER CO-OP,)	
)	
Petitioner,)	
)	
v.)	PCB 96-213
)	(Variance - Public Water Supply)
)	
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

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

This matter is before the Board on an April 10, 1996 Petition for Variance filed by Edelstein Water Co-op (Edelstein).¹ Edelstein seeks a variance from the requirements of 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(b), "Restricted Status", but only to the extent those rules involve 35 Ill. Adm. Code 611.330(a) which establishes the maximum contaminant level (MCL) for combined radium-226 and radium-228 of 5 picocuries per liter (pCi/L) (Pet. at 1.).

On May 16, 1996 the Illinois Environmental Protection Agency (Agency) filed a Motion to File Recommendation Instantly and the Agency's Recommendation for Variance. In its motion the Agency stated that its recommendation was due May 9, 1996 but that the Agency was awaiting the signed Letter of Commitment which was not received until May 13, 1996. Therefore, the recommendation was filed 5 days late. The Board hereby grants the Agency's motion and accepts its recommendation. On May 20, 1996 Edelstein filed a Motion for an Expedited Decision which the Board will be granting by the adoption of this opinion and order.

The Board's responsibility in this matter arises from the Illinois Environmental Protection Act (Act). (415 ILCS 5/1 *et seq.* (1994).) The Board is charged therein with the responsibility of granting variance from Board regulations whenever it is found that immediate compliance with the regulations would impose an arbitrary or unreasonable hardship upon the petitioner. (415 ILCS 5/35(a).) The Agency is required to appear in hearings on variance petitions (415 ILCS 5/4(f)), and is charged, among other things, with the responsibility of investigating each variance petition and making a recommendation to the Board as to the disposition of the petition. (415 ILCS 5/37(a).)

In its recommendation, the Agency advocates the granting of the requested variance, subject to certain conditions. (Rec. at 1.) Edelstein waived hearing in this matter. Having

¹ Edelstein's Petition for Variance shall hereinafter be referred to as (Pet. at ____). The Agency Recommendation shall be referred to as (Rec. at ____).

received no requests for hearing, none was held. For the reasons set forth below, the Board finds that Edelstein has presented adequate proof that immediate compliance with the Board's regulations for "Standards for Issuance" and "Restricted Status" would impose an arbitrary or unreasonable hardship. Accordingly, the variance is granted for a period of five years beginning on the date of this opinion, subject to the conditions set forth in the attached order.

BACKGROUND

Edelstein, located in Peoria County, Illinois, is a municipality that provides a potable water supply and distribution system to approximately 120 residential customers and four industries and businesses which employ 30 people. The total population served by Edelstein's water supply is approximately 150 people. (Pet. at 3.)

Edelstein maintains the public water distribution system which consists of one deep well, constructed in 1964 at a depth of 1401 feet, as well as a pump and distribution facilities. Water is provided to all residential, commercial and industrial users, as needed, and charges, as established by ordinance, are made to all users. Edelstein is not part of a regional public water supply. (Pet. at 3-4.)

Edelstein is requesting a variance to allow for continued operation of its water supply and distribution system, and its expansion or extension as necessary. Edelstein has not previously requested a variance for its water supply; however, the most recent analyses of its water supply showed a combined radium content of 10.9 pCi/L. The results were obtained from analyses of composite samples compiled from four consecutive quarterly samples. The most recent Gross Alpha Particle Activity level was completed on January 17, 1996 and showed a level of 35 pCi/L. These levels exceed the current MCL of 5 pCi/L. (Pet. at 4-5.)

In addition, Edelstein had been in violation of not providing public notice to the users of its water supply regarding the exceedence of the MCL levels for radium-226, radium-228 and gross alpha particle activity. The Agency notified petitioner of this violation on May 1, 1996. Ms. Lauretta Boyer, the person in responsible charge of sending out the required notice, has since signed a Letter of Commitment (LOC). (Pet. at 4.) The Agency received the LOC on May 13, 1996. (See Motion to File Recommendation Instantner.)

REGULATORY FRAMEWORK

In determining whether any variance is to be granted, the Act requires the Board to determine whether a petitioner has presented adequate proof that immediate compliance with the Board regulations at issue would impose an arbitrary or unreasonable hardship. (415 ILCS 5/35(a).) Furthermore, the burden is upon 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, 135 Ill.App.3d 343, 481 N.E.2d 1032 (1st Dist. 1977).) Only with such showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship.

A variance, by its very nature, is a temporary reprieve from compliance with the Board's regulations, and compliance is to be pursued regardless of the hardship which eventual compliance presents an individual petitioner. (Monsanto Co. v. Pollution Control Board, 67 Ill.2d 276, 367 N.E.2d 684 (1977).) Accordingly, as a condition to the granting of variance, a variance petitioner is required to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance, unless certain special circumstances exist.

The instant variance request concerns two features of the Board's public water supply regulations: Standards for Issuance and Restricted Status. These features are found at 35 Ill. Adm. Code 602.105 and 602.106, respectively, and in pertinent part read:

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...or of this chapter.

(35 Ill. Adm. Code 602.105.)

Section 602.106 Restricted Status

- a) Restricted status shall be defined as the Agency determination pursuant to Section 39(a) of the Act and Section 602.105, that a public water supply facility may no longer be issued a construction permit without causing a violation of the Act or this Chapter.
- 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.

(35 Ill. Adm. Code 602.106.)

The principal effect of these regulations is that public water suppliers are prohibited from extending water service due to their inability to obtain the requisite permits, unless and until their water meets all the standards for finished water supplies. A grant of variance from "Standards for Issuance" and "Restricted Status" neither absolves a petitioner from compliance with the drinking water standards at issue, nor insulates a petitioner from possible enforcement actions for violation of those standards. The underlying standards remain applicable to the petitioner regardless of whether the variance is granted or denied.

Standards for combined radium in drinking water were first adopted as National Interim Primary Drinking Water Regulations by the United States Environmental Protection Agency (USEPA) in 1976. The standard adopted was 5 pCi/L for the sum of two isotopes of radium radium-226 and radium-228 ("combined radium"). Shortly thereafter Illinois adopted the same limits. Although characterized as "interim" limits, these standards nevertheless are the

maximum contaminant levels under both federal and Illinois law, and will remain so unless modified by the USEPA. In anticipation of USEPA's revision of the radium standard, the Illinois legislature amended the Act at Section 17.6 in 1988 to provide that any new federal radium standard will immediately supersede the current Illinois standard. The state standard is therefore inexorably tied to the federal standard, and cannot be greater than or less than the federal limit.

Since their original promulgation, the current radium standards have been under review at the federal level. The USEPA first proposed a revision of the standards in October 1983 in an Advance Notice of Proposed Rulemaking (48 Fed. Reg. 45502). It later republished this advance notice in September 1986 (51 Fed. Reg. 34836). On June 19, 1991, the USEPA announced a proposal to modify both standards. USEPA proposes to replace the 5 pCi/L combined radium standard by separate standards of 20 pCi/L each for radium-226 and radium-228.

This change was to be promulgated by April 1995, but this deadline was later extended to September 1995. However, Congress prohibited funds for the promulgation of final radionuclide standards for fiscal year 1994 and 1995. Mr. Joseph Harrison, Chief of the Safe Drinking Water Division, USEPA Region V, announced that in light of the projected proposal for the relaxed standard, the USEPA would not force any municipality to spend funds to comply with the federal combined standard. Most recently, the Federal Register has indicated that radionuclide standards are no longer scheduled for a specific final regulatory action date. (60 Fed. Reg. 60656, November 28, 1995.)

COMPLIANCE PLAN

On December 8, 1986 Edelstein was notified that its water supply system had been placed on Restricted Status List for exceeding the MCL for combined radium. (Rec. at 5.) Edelstein was notified on May 14, 1986 that its water supply system had exceeded the MCL for gross alpha particle activity. (Id.) Since notification of the MCL violations, Edelstein states that it has been investigating options for reducing the amount of radium in its water supply, and has evaluated the following alternatives to achieve compliance:

- (a) Ion Exchange Treatment: a water softening treatment with an estimated cost of \$65,600, and an estimated construction time of 18 months. An Ion Exchange Treatment can effectively remove more than 90% of the radium but will increase the sodium content of the water supply and concentrate the radioactivity in the system's waste stream, possibly causing more of a hazard than if left in the drinking water. (Pet. at 5-6.)
- (b) Using shallow wells for blending and diluting purposes. Edelstein estimates the construction time to be 18 months, and the total cost at \$233,700. (Pet. at 5.)
- (c) Reverse Osmosis Treatment: Edelstein estimates the construction time to be 18 months at a cost of \$88,300. (Pet. at 5.)

- (d) Lime or Lime-Soda Softening: This treatment can effectively remove 80-90% of radium in a water supply; however, this method produces large quantities of sludge and concentrates the radium which in turn creates additional waste disposal problems and expenses. (Pet. at 6.)

During the term of the variance, Edelstein proposes to take certain steps toward achieving compliance. First, in consultation with the Agency, Edelstein will continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Second, every 3 months, Edelstein will notify its water supply customers that it is not in compliance with the combined radium-226 and radium-228 standard, and that it has received a variance from the requirements of 35 Ill. Adm. Code 602.105(a) "Standards for Issuance" and 602.106(b) "Restricted Status". Petitioner further states that it will continue to pursue compliance and take all reasonable measures to minimize the radium levels in its finished water. (Pet. at 7.)

ARBITRARY OR UNREASONABLE HARDSHIP

Edelstein asserts that compliance with the standard would not significantly benefit the public or environment and any expenditure of money to comply would be an arbitrary or unreasonable hardship. Edelstein contends that failure to obtain a variance would result in the termination of all construction within those parts of its service area requiring the extension of its water supply system. This in turn, Edelstein claims, would harm prospective home purchasers. (Pet. at 8.)

ENVIRONMENTAL IMPACT

In its recommendation, the Agency states that while radiation at any level creates some risk, the risk associated with the level found in Edelstein's drinking water supply is very low. (Rec. at 7.) The Agency asserts that the proposed variance should cause no significant health risk for the population served by any new water main extensions for the time period of the recommended variance. (Id. at 9.) The Agency agrees with Edelstein that a granting of the requested variance would not result in a significant injury to the public or to the environment for the limited time period requested, and that denial would be an arbitrary or unreasonable hardship for Edelstein. (Id.) Denial of the requested variance would also require the Agency to deny construction and operating permits until compliance with the standards is achieved. According to Board regulations, placing Edelstein on restricted status means that no new water main extension permits could be issued, and further development would be obstructed. (Id. at 10.)

CONSISTENCY WITH FEDERAL LAW

In its petition, Edelstein did not make a formal assessment of whether or not its requested variance is consistent with federal law. The Agency, however, believes the Board can grant the requested variance consistent with the Safe Drinking Water Act, PL 93-523, as amended by PL 96-502, 42 U.S.C. 300(f), and the USEPA drinking water regulations (40 CFR 141 (1993)). The Agency contends that the requested variance can be granted because the recommended relief would not be a variance from federal regulations, but only a variance from the state's regulations regarding restricted status. Granting the variance will not insulate Edelstein from possible enforcement actions for violations of the radium standards. The Agency concludes that, due to Edelstein's continuing efforts towards achieving compliance while awaiting final promulgation of a possibly revised standard, it is unlikely that USEPA will object to the issuance of the variance. (Rec. at 10-11.)

CONCLUSION

Based upon the record, the Board finds that immediate compliance with the "Standards for Issuance" and "Restricted Status" regulations would impose an arbitrary or unreasonable hardship on Edelstein. The Board also agrees with the parties that granting this variance does not pose a significant health risk to those persons served who are affected by the variance.

Timely compliance by Edelstein may be affected by pending USEPA action to promulgate new standards for radionuclides in drinking water. USEPA's proposal of separate 20 pCi/L standards for both radium-226 and radium-228 (56 Fed. Reg. 33082, 33126 (1991)), if adopted, could significantly alter Edelstein's need for variance from the Board's rules concerning restricted status, or alternatives for achieving compliance with the underlying radium limitations.

Accordingly, the Board hereby grants Edelstein a variance subject to the conditions stated below. Today's action is solely a grant of variance from standards of issuance and restricted status. Edelstein is not granted variance from compliance with the combined radium standard, nor does today's action insulate Edelstein in any manner from enforcement for violation of these standards.

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

ORDER

The Edelstein Water Co-op (Edelstein) is hereby granted a variance from 35 Ill. Adm. Code 602.105(a), "Standards of Issuance" and 602.106(b), Restricted Status, only as they relate to the standards for combined radium-226 and radium-228 in drinking water as set forth in 35 Ill. Adm. Code 611.220(a), subject to the following conditions:

- (A) For purposes of this order, the date of United States Environmental Protection Agency (USEPA) action shall consist of the earlier date of the:
- (1) Date of the promulgation by USEPA of any regulation which amends the maximum contaminant level (MCL) for combined radium, either of the isotopes of radium, or the method by which compliance with a radium MCL is demonstrated; or
 - (2) Date of publication of notice by USEPA that no amendments to the 5 cPi/L combined radium standard or the method for demonstrating compliance with the 5 cPi/L will be promulgated.
- (B) The variance shall terminate on the earliest of the following dates:
- (1) Five years from the date of this order; or
 - (2) Two years following the date of USEPA action.
- (C) In consultation with the Illinois Environmental Protection Agency (Agency), Edelstein shall continue a sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance terminates, Edelstein shall collect quarterly water samples from its distribution system at locations approved by the Agency. Edelstein shall composite quarterly samples from 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 radium-228. At its own option, Edelstein may have the quarterly samples analyzed when collected. The results of the analyses shall be sent to:
- Illinois Environmental Protection Agency
Compliance Assurance Section
Drinking Water Quality Unit
P.O. Box 19276
Springfield, Illinois 62794-9276
- (D) Within 30 days of receiving the most recent quarterly sample, Edelstein shall also send to the address in paragraph (C) the running average results of the most recent four quarterly samples.
- (E) Within three months of USEPA action, Edelstein shall apply to the Agency at the address below for all permits necessary for construction, installation, changes, or additions to its public water supply needed for achieving compliance with the MCL for combined radium or with any other standard for radium in drinking water then in effect:

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

- (F) Within three months of the issuance of each construction permit by the Agency, petitioner shall advertise for bids, to be submitted with 60 days, from contractors to do the necessary work described in the construction permit. Edelstein shall accept appropriate bids within a reasonable time. Edelstein shall notify the Agency, Division of Public Water Supplies (DPWS), within 30 days, of each of the following actions: 1) advertisements for bids; 2) names of successful bidders; and 3) whether Edelstein 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 MCL in question, shall be completed no later than two years following USEPA action. One year will be necessary to prove compliance.
- (H) Pursuant to 35 Ill. Adm. Code 611.851(b), in its first set of water bills, or within three months after the date of this order, whichever occurs first, and ever three months thereafter, Edelstein will send to each user of its public water supply a written notice to the effect that Edelstein is not in compliance with the standard in question. The notice shall state the average content of the contaminants in samples taken since the last notice period during which samples were taken.
- (I) Pursuant to 35 Ill. Adm. Code 611.851(b), 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, Edelstein will send to each user of its public water supply a written notice to the effect that Edelstein has been granted by the Illinois Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 601.106(b), Restricted Status, as it relates to
 the MCL standard in question.
- (J) Until full compliance is achieved, Edelstein shall take all reasonable measures with its existing equipment to minimize the level of contaminants in its finished drinking water.
- (K) Edelstein shall provide written progress reports to the Agency at the address below, every six months concerning steps taken to comply with paragraphs C, D, E, F, G, H, and I. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph. Progress reports shall be sent to:

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

IT IS SO ORDERED.

If Edelstein chooses to accept this variance subject to the above order, within forty-five days of the grant of the variance, Edelstein must execute and forward the attached certificate of acceptance and agreement to:

Stephen C. Ewart
Division of Legal Counsel
Illinois Environmental Protection Agency
P.O. Box 19276
2200 Churchill Road
Springfield, Illinois 62794-9276

Once executed and received, that certificate of acceptance and agreement shall bind Edelstein to all terms and conditions of the granted variance. The 45-day period shall be held in abeyance during any period that this matter is appealed. Failure to execute and forward the certificate within 45-days renders this variance void. The form of the certificate is as follows:

CERTIFICATION

I (We), _____, hereby accept and agree to be bound by all the terms of the Order of the Pollution Control Board in PCB 96-213, June 20, 1996.

Petitioner

Authorized Agent

Title

Date

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1994)) provides for the appeal of final Board orders within 35 days of the date of service of this order. The Rules

of the Supreme Court of Illinois establish filing requirements. (See *also* 35 Ill. Adm. Code 101.246 "Motions for Reconsideration".)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the ____ day of _____, 1996, by a vote of _____.

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board