

ILLINOIS POLLUTION CONTROL BOARD  
October 6, 1994

CITY OF SPRING VALLEY, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 94-211  
 ) (Variance)  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

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

This matter is before the Board on the August 5, 1994 filing by petitioner City of Spring Valley (Spring Valley) of a petition for variance. Spring Valley seeks relief from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(a), "Restricted Status", to the extent those rules relate to violation by the Spring Valley's public water supply of the 5 picocuries per liter ("pCi/l") combined radium-226 and radium-228 standard. Spring Valley requests a five-year variance.

On August 22, 1994, the Illinois Environmental Protection Agency (Agency) filed its variance recommendation. The Agency recommends that the variance be granted subject to certain conditions. Spring Valley waived hearing and none has been held.

For the following reasons, the Board finds that Spring Valley has presented adequate proof that immediate compliance with the Board's regulations for "Standards for Issuance" and "Restricted Status" would result in the imposition of an arbitrary or unreasonable hardship. Accordingly, the variance is granted, subject to conditions set forth in the attached order.

BACKGROUND

Spring Valley is a municipality located in Bureau County. (Pet. at 1.) Spring Valley provides public services including potable water supply and distribution for 2,000 residential and 100 industrial and commercial utility customers representing approximately 5,500 residents and 100 industrial and commercial customers employing approximately 2,000 persons as of 1994. (Pet. at 5.)

Spring Valley's water system includes two deep wells, pumps and distribution facilities. (Pet. at 5.) If the requested variance is granted, the Spring Valley anticipates extending service to the commercial development at the intersection of Illinois Route 89 and U.S. Route 6 for the planned location of a McDonald's Restaurant, and to the potential expansion of a new commercial development at the same location. (Pet. at 5.)

Spring Valley was first advised that its water supply exceeded the maximum allowable contaminant level for combined radium in a letter dated December 8, 1986. (Pet. at 6; Rec. at 5.) The Agency's analysis showed combined radium-226 and radium-228 content of 9.4 pCi/l (Pet. at 6.) The most recent analyses of February 16, 1994 showed a combined radium-226 and radium-228 content of 6.7 pCi/l in well no. 10, tap 2, and a combined radium-226 and radium-228 content of 5.6 pCi/l in well no. 11, tap 3. (Rec. at 4.)

This is Spring Valley's second request for a variance involving the combined radium limitations of 35 Ill. Adm Code 611.330. Spring Valley was granted a variance from restricted status by the Board on January 5, 1989. (Pet. at 6, 8; Rec. at 4, 5.) That variance expired on June 15, 1992. (Pet. at 6; Rec. at 4.)

#### REGULATORY FRAMEWORK

The instant variance request concerns two features of the Board's public water supply regulations: "Standard for Issuance" and "Restricted Status". These features are found at 35 Ill. Adm. Code 602.105 and 602.106, which 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 (Ill. Rev. Stat. 1989, ch. 111 ½, 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.

The principal effect of these regulations is to provide that public water supply systems are prohibited from extending water service, by virtue of not being able to obtain the requisite permits, unless and until their water meets all of the standards for finished water supplies. Spring Valley requests that it be allowed to extend its water service while it pursues compliance with the radium standard, as opposed to extending service only after attaining compliance.

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) (1992).) 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 343, 481 N.E.2d, 1032.) Only with such showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship.

A further feature of a variance is that it is, by its nature, 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.

It is to be noted that grant of variance from "Standards for Issuance" and "Restricted Status" does not absolve a petitioner from compliance with the drinking water standards at issue, nor does it insulate a petitioner from possible enforcement action brought for violation of those standards. The underlying standards remain applicable to the petitioner regardless of whether variance is granted or denied.

Standards for radium in drinking water were first adopted as national Interim Primary Drinking Water Regulations (NIPDWRs) by the USEPA in 1976. The standards adopted were 5 pCi/l for the sum of the two isotopes of radium, radium-226 and radium-228 ("combined radium"), and 15 pCi/l for gross alpha particle activity. Shortly thereafter Illinois adopted the same limits. Although characterized as "interim" limits, these standards nevertheless are the maximum allowable concentrations under both federal and Illinois law, and will remain so unless modified by the USEPA.<sup>1</sup>

Over much of the fifteen years since their original promulgation, the current radium and gross alpha particle activity standards have been under review at the federal level. The USEPA first proposed revision of the standards in October

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<sup>1</sup> In anticipation of USEPA revision of the radium standard, the legislature amended the Environmental Protection Act at Section 17.6 in 1988 to provide that any new federal radium standard immediately supersedes the current Illinois standard.

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.) Most recently, on June 19, 1991, USEPA announced a proposal to modify both standards.<sup>2</sup> 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. Under USEPA's calendar, these standards were scheduled to be published by April 30, 1995. However, the U.S. Congress passed and President Clinton signed Public Law 103-124 (October 28, 1993) which included a prohibition for use of any funds by USEPA in promulgating a new standard for radon in drinking water. This congressional action has suspended any USEPA regulatory activity for radionuclides until 1995.

#### COMPLIANCE PLAN

Spring Valley proposes no method for achieving compliance, stating that USEPA is expected to finalize its proposed regulations raising the standards for radium isotopes 226 and 228 within the next year to 20 pCi/l. (Pet. at 8; Ex. 2.) This new standard would bring Spring Valley into full compliance with all the provisions of the Federal Safe Drinking Water Act, P.L. 93-523. (Pet. at 8.)

#### HARDSHIP

Spring Valley correctly points out that a grant of the requested variance only prohibits the Agency from legally denying construction or operating permits based on Spring Valley's violation of the standards, and does not make less strict the standards that petitioner must meet. (Pet. at 4, 10.) Spring Valley asserts that a substantial expenditure of public funds for treatment facilities, which may become obsolete in the near future as a result of USEPA's proposed relaxation of the current standards, is not in the public interest and does not grant a corresponding benefit to the public. (Pet. at 9.) Spring Valley also asserts that a failure to obtain a variance will negatively impact prospective home purchasers as well as business developers and Spring Valley's tax base, because all construction within Spring Valley's service area requiring the extension of the water supply system would be prohibited. (Pet. at 9.) Spring Valley contends that the potential hardship from the denial of the variance outweighs the injury to the public from the grant of the petition, causing arbitrary and unreasonable hardship to Spring Valley. (Pet. at 9.)

The Agency believes that a denial of the variance would be

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<sup>2</sup> Publication occurred at 56 Fed. Reg. 33050, July 18, 1991.

an arbitrary and unreasonable hardship to the petitioner. (Rec. at 8, 10.) Denial of a variance from the two rules imposing restricted status on Spring Valley would result in an arbitrary or unreasonable hardship because denial would require that the Agency: (1) include Spring Valley on the restricted status list, and (2) deny construction and operating permits until compliance is achieved. The second action would prevent further development from taking place in Spring Valley, while the first might mislead developers and other persons who check this list. (Rec. at 9.)

The Agency believes that the hardship resulting from denial of the variance from the effect of being on restricted status would outweigh the injury to the public from grant of the variance. The Agency observes that this grant of the variance from restricted status should affect only those users who consume water drawn from any newly extended water lines and states that an increase in the allowable concentration for these contaminants should cause no significant health risk for this limited population. (Rec. at 7.) 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. (Rec. at 10.)

#### ENVIRONMENTAL IMPACT

Although Spring Valley has not undertaken a formal assessment of the environmental effects of its requested variance, it contends that there will be minimal or no adverse impact caused by the granting of the variance. (Pet. at 9.) The Agency agrees with Spring Valley's assertion. (Rec. at 6.) The Agency cites the testimony presented by Richard E. Toohey, Ph.D., of Argonne National Laboratory, at the July 30 and August 2, 1985 hearings for the Proposed Amendments to Public Water Supply Regulations (R85-14), 35 Ill. Adm. Code 602.105 and 602.106 in support of the assertion that the variance will not result in any adverse environmental impact. (Rec. at 7.) The Agency also refers to updated testimony presented by Dr. Toohey in the Board's hearing on a variance requested by the City of Braidwood in PCB 89-212. (Rec. at 7.)

While the Agency believes that radiation at any level creates some risk, the risk associated with the Village's water supply is very low. (Rec. at 6, 7.) The Agency states that an increase in the allowable concentration should cause no significant health risk for the limited population served by new water main extensions for the time period of this recommended variance." (Rec. at 7.)

#### CONSISTENCY WITH FEDERAL LAW

The Agency states that the requested variance may be granted consistent with the Safe Drinking Water Act (42 U.S.C. 300(f))

and corresponding regulations (40 CFR Part 141) because the variance does not grant relief from compliance with the federal primary drinking regulations. (Rec. at 9.)

#### 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 the City of Spring Valley pursuant to Section 35(a) of the Act. The Board will grant this variance for a period of five years subject to conditions similar to those recommended by the Agency. If, during the course of the following five years, the standard for combined radium activity as set forth in 35 Ill. Adm. Code 611.330(a) and (b), are changed due to the long awaited and now uncertain action by the USEPA, this variance may no longer be applicable. In recognition of this situation, as recommended by the Agency, the variance will contain suitable time frames to account for the effects of any USEPA alteration (or notice of refusal to alter) of the radium standards.

Today's action is solely a grant of variance from "Standards of Issuance" and "Restricted Status". Spring Valley is not granted variance from compliance with the combined radium standard, nor does today's action insulate Spring Valley in any manner against enforcement for violation of these standards.

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

#### ORDER

The City of Spring Valley is hereby granted a variance from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(b), "Restricted Status", as they relate to the standards for combined radium-226 and radium-228 in drinking water as set forth in 35 Ill. Adm. Code 611.330(a), subject to the following conditions:

- (1) For purposes of this order, the date of USEPA action shall consist of the earlier date of the:
  - a) Date of promulgation by the U.S. Environmental Protection Agency (USEPA) of any regulation 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 contaminant level is demonstrated; or
  - b) Date of publication of notice by USEPA that no amendments to the 5 pCi/l combined radium standard or the method for demonstrating compliance with

the 5pCi/l standard will be promulgated.

- (2) Variance shall terminate on the earliest of the following dates:
- a) Two years following the date of USEPA action; or
  - b) October 6, 1999; or
  - c) When analysis pursuant to 35 Ill. Adm. Code 611.720(d) and 611.731(a), or any compliance with standards then in effect, shows compliance with standards for radium in drinking water then in effect.
- (3) Compliance shall be achieved with any standards for radium then in effect no later than the date on which this variance terminates.
- (4) In consultation with the Illinois Environmental Protection Agency (Agency), petitioner shall continue its sampling 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 from each location separately and shall analyze them annually by a laboratory certified by the State of Illinois radiological analysis so as to determine the concentration of radium-226 and 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 result to:
- Illinois Environmental Protection Agency  
Compliance Assurance Section  
Division of Public Water Supplies  
2200 Churchill Road  
Springfield, Illinois 62794-9276
- (5) Pursuant to 35 Ill. Adm. Code 611.851(b) (formerly 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 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 35 Ill. Adm. Code 602.105(a) Standards of Issuance and 35 Ill. Adm. Code 602.106(a) Restricted Status, as they relate to the radium

standard.

- (6) Pursuant to 35 Ill. Adm. Code 611.851(b) (formerly 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 will send to each user of its public water supply a written notice to the effect that petitioner is not in compliance with the standard in question. The notice shall state the average content of the contaminants in question in samples taken since the last notice period during which samples were taken.
- (7) Until full compliance is achieved, petitioner shall take all reasonable measures with its existing equipment to minimize the level combined radium-266 and radium-228, in its finished drinking water.
- (8) Petitioner shall provide written progress reports to the Agency at the address below every six months concerning steps taken to comply with the paragraphs of this order. 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

Within forty-five days of the date of this order, petitioner shall execute and forward to:

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

a Certificate of Acceptance and agreement to be bound 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 Certificate is as follows.

I (We), \_\_\_\_\_,  
 hereby accept and agree to be bound by all terms and conditions  
 of the order of the Pollution Control Board in PCB 94-211,



October 6, 1994.

\_\_\_\_\_  
Petitioner

\_\_\_\_\_  
Authorized Agent

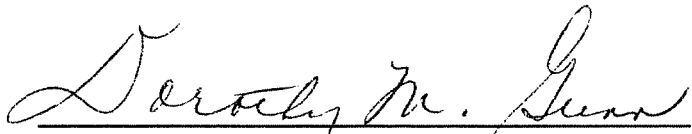
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1992)) provides for 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".)

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 6<sup>th</sup> day of October, 1994, by a vote of 6-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board