ILLINOIS POLLUTION CONTROL BOARD
November 16, 1995

VILLAGE OF PLAINFIELD,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 96-56
	)	(Variance - PWS)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

OPINION AND ORDER OF THE BOARD (by E. Dunham):

This matter is before the Board on the September 11, 1995 filing by petitioner, Village of Plainfield (Village), of a petition for variance. The Village seeks relief from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(a), "Restricted Status", but only to the extent those rules involve 35 Ill. Adm. Code 611.330(a) (radium-226 and radium-228) and 611.330(b)(gross alpha particle activity). The Village requests an extension of the variance granted in Village of Plainfield v. IEPA (November 29, 1990) PCB 90-162. The prior variance will expire on November 29, 1995. The Village is requesting an extension of the prior variance for five years or until analysis pursuant to 35 Ill. Adm. Code 611.371 shows compliance with the standard regulating the contaminant, whichever comes first.

On October 16, 1995, the Illinois Environmental Protection Agency (Agency) filed its variance recommendation. The Agency recommends that the variance be granted, subject to certain conditions. The Village waived hearing and none was held.

For the following reasons, the Board finds that the Village 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

The Village is located in Will County, Illinois. (Pet. at 5.) The Village provides chlorinated and fluoridated potable water supply and distribution for a population of approximately 6400 persons. (Pet. at 5.) The distribution consists of three deep wells, well pumps, elevated storage, and distribution facilities. (Pet. at 5.) The water is supplied to all residential, commercial and industrial users as needed at rates established by ordinance. (Pet. at 6.) The Village is not part of a regional public water supply. (Ag. Rec. at 3.) During the last year water was pumped at an average rate of approximately

820,000 gallons per day. (Pet. at 6.)

The water from the deep wells contains levels of combined radium-226 and radium-228 which exceed the current standard of 5 pCi/l set forth at 35 Ill. Adm. Code 611.330(a). (Pet. at 6.) Data from deep well Nos. 3 & 4 show that the current combined radium averages 9.9 pCi/l in each well. (Pet. at 8.)

The Village currently has no equipment to control the radium levels. (Pet. at 8.) The Village had intended to obtain compliance with the radium standard through the construction of a new shallow well or wells to provide water for blending. (Pet. at 8.) However, it was determined that there are no significant sources of shallow groundwater suitable for municipal use in the immediate vicinity. (Pet. at 8.)

REGULATORY FRAMEWORK

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, 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 public water supplies. The Village requests that it be allowed to extend the water service <u>while</u> it pursues compliance with the combined radium standard and the gross alpha particle standard, as opposed to extending service only <u>after</u> 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) (1994).) 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 (1st Dist. 1977), 135 Ill. App. 3d 343, 481 N.E.2d 1032.) Only with such a 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 and compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter. (Monsanto Co. v. IPCB (1977), 67 Ill. 2d 276, 367, N.E. 2d 684). 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.

A grant of variance from "Standards for Issuance" and "Restricted Status" does not absolve a petitioner from compliance with the drinking water standards at issue, and does not 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 combined radium and gross alpha particle activity 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 contaminant levels under both federal and Illinois law, and will remain so unless modified by the USEPA.[1]

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 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

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

19, 1991, USEPA announced a proposal to modify both standards.[2] 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. The gross alpha particle activity standard is proposed to be replaced by an adjusted gross alpha particle activity standard; the latter would still have a 15 pCi/l value, but would no longer include alpha particle activity associated with radium or uranium decay.

This change was to be promulgated by April 1995, but this deadline was extended to September 1995. However, Congress has prohibited funds to promulgate final radon standards for fiscal years 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.

COMPLIANCE PLAN

The Village has expended over $200,000 in its search for a reliable supply of shallow groundwater to blend with the deep well water and reduce the concentration of radium. (Pet. at 18.) This search determined that there are no shallow aquifers suitable for municipal use in the immediate vicinity. (Pet. at 18.) The Village has two alternatives for compliance: 1) purchasing water from a neighboring community; or 2) the installation of radium removal equipment at each well. (Pet. at 18.)

The Village has held discussions with Citizens Utility Company and the City of Joliet concerning the purchase of water. (Pet. at 18.) The Village maintains that the cost of service from the potential suppliers is too high. (Pet. at 18.) Plainfield believes its only alternative is to use ion-exchange softening of the deep well water supply. (Pet. at 18.) The Village has made provisions to construct a treatment facility near well No. 5. (Pet. at 18.) However, the Village recognizes that ion-exchange softening has drawbacks of adding sodium to the water supply and concentrating radioactive waste in the brine, as well as being more costly to implement. (Pet. at 18.)

HARDSHIP

The Village contends that denial of the variance extension would constitute an arbitrary or unreasonable hardship in that

[2]Publication occurred at 56 Fed. Reg. 33050, July 18, 1991.

the granting of the variance will cause little or no adverse environmental impact and denial of the variance would delay or preclude significant development in and around Plainfield. (Pet. at 19.) The Village anticipates that the next few years will continue to be a period of significant growth with numerous developments. (Pet. at 19.) The Village maintains that the loss of any of these developments would have a serious economy impact on the Village which would far outweigh any health effects associated with the consumption of Plainfield's water for the limited time of the variance. (Pet. at 20.) The Village notes that the promulgation of a new radium standard by the USEPA may significantly alter the Village's compliance status. (Pet. at 21.)

The Agency agrees that denial of the variance would impose an arbitrary or unreasonable hardship on the Village. (Ag. Rec. at 10.)

ENVIRONMENTAL IMPACT

Although the Village has not undertaken a formal assessment of the environmental effects of the requested variance, it contends that there will be minimal or no adverse impact caused by the granting of the variance. (Pet. at 12.) The Village and the Agency cite 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 and the updated testimony presented by Dr. Toohey in the Board's hearing for a variance requested by the City of Braidwood in City of Braidwood v. IEPA, (June 21, 1990), PCB 89-212, in support of the assertion that the variance will not result in any adverse environmental impact. (Pet. at 12, Ag. Rec. at 8.)

While the Agency believes that radiation at any level creates some risk, the risk associated with the Village's water supply is very low. (Ag. Rec. at 8.) The Agency states that "an increase in the allowable concentration for the contaminants in question should cause no significant health risk for the limited population served by new water main extensions for the time period of this recommended variance." (Ag. Rec. at 10.) In summary, the Agency states as follows:

> 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 the extension. In light of 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, the Agency concludes that denial of a variance would impose an arbitrary or unreasonable hardship upon

petitioner.

> The Agency observes that the grant of the 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. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the standards.
>
> (Ag. Rec. at 12 - 13.)

CONSISTENCY WITH FEDERAL LAW

The Agency states that the requested variance may be granted consistent with the Safe Drinking Water Act (SDWA), PL 93-523, as amended by PL 96-502, 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. (Ag. Rec. at 11.) The Agency states that granting a variance from the effects of restricted status affects State and not federal law and regulations; a variance from the effect of restricted status would allow water main extensions, under the Act and Board regulations. (Ag. Rec. at 11.) The Agency further states that the recommended variance is not a variance from USEPA's national primary drinking water regulations and does not suspend the effect of the SDWA. (Ag. Rec. at 11.) The Agency asserts that a federal variance is not at issue, and there should be no risk to the State of Illinois of loss of primacy. (Ag. Rec. at 12.) The Agency states that petitioner will remain subject to the possibility of enforcement for violations of the MCL for the contaminants in question under state and federal law. (Ag. Rec. at 12.) The Agency concludes that because continuing progress is being made towards compliance while awaiting final promulgation of the standard, it is unlikely that the USEPA will object to the issuance of the recommended variance. (Ag. Rec. at 12.)

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 Village of Plainfield. The Board also agrees with the parties that granting this variance does not pose a significant health risk to those persons served who will be affected by the variance, assuming that compliance is timely forthcoming.

The Board notes that timely compliance by the Village may be affected by pending USEPA action to promulgate new standards for

radionuclides in drinking water. USEPA has recommended a standard of 20 pCi/l for both radium-226 and radium-228. This proposed standard was published on July 18, 1991 (56 Fed. Reg. 33,050 (1991)), and the public hearings on the standard began on September 6, 1991. (Ag. Rec. at 9.) Congress has prohibited funds to promulgate final radon standards for fiscal years 1994 and 1995. (Ag. Rec. at 9.) It is anticipated that the new standard as amended will be adopted when the necessary funding is allocated for this program. New radionuclide standards from USEPA could significantly alter the Village's need for a variance or alternatives for achieving compliance. 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. The Village is not granted a variance from compliance with the combined radium standard, and today's action does not insulate the Village 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 Village of Plainfield 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), and gross alpha particle activity as set forth in 35 Ill. Adm. Code 611.330(b) subject to the following conditions:

(A) For purposes of this order, the date of U.S. Environmental Protection Agency (USEPA) action shall consist of the earlier date of the following:

(1) Date of promulgation by the 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

(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) Two years following the date of USEPA action; or

(2) November 16, 2000; or

(3) When analysis pursuant to 35 Ill. Adm. Code 611.720, or any compliance with standards then in effect, shows compliance with standards for radium in drinking water then in effect.

(C) In consultation with the Illinois Environmental Protection Agency (Agency), petitioner shall continue a sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance expires, petitioner shall collect quarterly samples of water from the distribution system at the locations approved by the Agency. Petitioner shall composite the quarterly samples from each location and shall analyze them annually by a laboratory certified by the State of Illinois for radiological analysis so as to determine the concentration of radium-226, radium-228 and gross alpha particle activity. The results of the analyses shall be reported within 30 days of receipt of each analysis to:

Illinois Environmental Protection Agency
Compliance Assurance Section
Drinking Water Quality Unit
Bureau of Water
P. O. Box 19276
Springfield, Illinois 62794-9276

The running average of the most recent four quarterly sample results shall be reported to the above address within 30 days of receipt of the most recent quarterly sample.

(D) Within three months of USEPA action, petitioner shall apply to the Agency at the address below for all permits necessary for the construction, installation, changes or additions to petitioner's 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 System
Permit Section
2200 Churchill Road
P. O. Box 19276

Springfield, IL 62794-9276

(E) Within three months of USEPA action and after each construction permit is issued by the Agency, petitioner shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. The petitioner shall accept appropriate bids within a reasonable time. Petitioner shall notify the Agency, Division of Public Water Supplies, within 30 days, of each of the following actions: 1) advertisements for bids, 2) names of the successful bidders, and 3) whether petitioner accepted the bids.

(F) 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 three years following USEPA action. One year will be necessary to prove compliance.

(G) 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.

(H) Pursuant to 35 Ill. Adm. Code 611.851(b) (formerly 35 Ill. Adm. Code 606.201), in the 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 MCL standard in question.

(I) Until full compliance is achieved, petitioner shall take all reasonable measures with its existing equipment to minimize the level of contaminants in its finished drinking water.

(J) Petitioner shall provide written progress reports to the Agency at the address below every six months concerning steps taken to comply with the paragraphs C, D, E, F, G and H 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

IT IS SO ORDERED.

If the Village of Plainfield chooses to accept this variance subject to the above order, within forty-five days of the date of this order, the Village of Plainfield shall execute and forward to:

Stephen C. Ewart
Division of Legal Counsel
Illinois Environmental Protection Agency
2200 Churchill Road, P.O. Box 19276
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 and of no force and effect as a shield against enforcement of rules from which this variance is granted. The form of the certificate is as follows:

I (We), _____, hereby accept and agree to be bound by all terms and conditions of the order of the Illinois Pollution Control Board in PCB 96-56, November 16, 1995.

_____
Petitioner

_____
Authorized Agent

_____
Title

_____
Date

Section 41 of the Environmental Protection Act, (415 ILCS 5/41 (1994)), provides for appeal of final orders of the Board 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, Motion 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 _____, 1995, by a vote of _____.

_____
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board