

ILLINOIS POLLUTION CONTROL BOARD
November 29, 1990

| | | |
|------------------------|---|------------|
| VILLAGE OF PLAINFIELD, |) | |
| |) | |
| Petitioner, |) | |
| |) | |
| v. |) | PCB 90-162 |
| |) | (Variance) |
| ILLINOIS ENVIRONMENTAL |) | |
| PROTECTION AGENCY, |) | |
| |) | |
| Respondent. |) | |

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

This matter comes before the Board upon the filing by the Village of Plainfield ("Plainfield") on August 15, 1990 of a Petition for Extension of Variance ("Pet.") as it relates to modification of the variance granted by the Board on December 15, 1988 in PCB 88-134 (see 100 PCB 109 et seq.). The regulations at issue are 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 Plainfield's public water supply of the 5 picocuries per liter ("pCi/l") combined radium-226 and radium-228 standard of 35 Ill. Adm. Code.Subtitle F¹.

The variance granted in PCB 88-134 is not due to expire by its own terms until April 15, 1992. However, Plainfield believes that the compliance schedule established in PCB 88-134, including both internal dates and the compliance deadline, is unachievable. The instant request is therefore to modify both the internal dates and compliance date of the compliance schedule².

The Illinois Environmental Protection Agency ("Agency") filed its Variance Recommendation ("Rec.") on November 5, 1990³.

¹ The standard for combined radium was formerly found at 35 Ill. Adm. Code 604.301(a); effective September 20, 1990 it was recodified to 35 Ill. Adm. Code 611.330(a) (see Illinois Register, Volume 14, Issue 40, October 5, 1990).

² The variance granted in PCB 88-134 was for both combined radium and gross alpha particle activity. Plainfield's current request relates to combined radium only; Plainfield contends that it is now in compliance with the standard for gross alpha particle activity (see Pet. at p. 1).

³ The Agency Recommendation is accompanied by a motion to file *instanter*. That motion is hereby granted.

The Agency recommends that the variance request be granted, subject to conditions. Plainfield has waived hearing and none has been held.

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

BACKGROUND

Plainfield is a municipality located in northwestern Will County. Among other services, Plainfield provides drinking water to a population of approximately 4,500 persons. Plainfield's water supply system includes two deep wells, pumps, and distribution facilities. The wells are identified by number as Wells No. 3 and No. 4.

Plainfield was initially notified of noncompliance with the combined radium standard by letter from the Agency dated December 19, 1985. Plainfield reports the following subsequent results of analyses conducted on water from Wells No. 3 and No. 4 (in pCi/l):

| <u>Sample Date</u> | <u>Well No. 3</u> | | <u>Well No. 4</u> | |
|--------------------|-------------------|---------------|-------------------|---------------|
| | <u>Ra-226</u> | <u>Ra-228</u> | <u>Ra-226</u> | <u>Ra-228</u> |
| 09/16/86 | 8.0 | 4.2 | 7.7 | 3.5 |
| 06/03/87 | 8.1 | 3.7 | 7.7 | 4.8 |
| 09/04/87 | 8.3 | 1.4 | 6.9 | 1.9 |
| 10/14/87 | 8.7 | 2.4 | 7.6 | 3.8 |
| 02/10/88 | 8.2 | 2.7 | 7.1 | 3.6 |
| 05/23/88 | 2.7 | 4.0 | 2.6 | 1 |
| 08/05/88 | 8.7 | 3.1 | 7.6 | 3.2 |
| 10/28/88 | 7.1 | 4.0 | 7.1 | 4.5 |
| 01/19/89 | 6.7 | 2.7 | 6.0 | 3.7 |
| 04/17/89 | 6.6 | 2.5 | 6.3 | 2.7 |
| 07/19/89 | 2.1 | 2.1 | 1.1 | 1.1 |
| 10/06/89 | 7.8 | 2.8 | 6.4 | 1.6 |
| 01/11/90 | 2.0 | 3.0 | 3.0 | 6.0 |
| 04/06/90 | 5.6 | 5.3 | 6.8 | 5.9 |

Excluding the apparently aberrant results of May 1988, July 1989, and January 1990, Plainfield calculates the average concentration of combined radium for Wells No. 3 and No. 4 at 10.8 pCi/l and 10.7 pCi/l, respectively (Pet. at p. 6).

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 ½, par. 1017.6), any revision of the 5 pCi/l standard by the USEPA will automatically become the standard in Illinois.

The action that Plainfield 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 Plainfield. Rather, the action Plainfield 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:

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.

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 Plainfield requests be lifted. Moreover, grant of the requested variance would not absolve Plainfield from compliance with the combined radium standard, nor insulate Plainfield 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. 111

½, 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. IPCB (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

Plainfield continues, as it does under the terms of the current variance, to seek compliance via blending of water from a new shallow well with its present deep-well water. However, Plainfield contends its has been not yet been able to locate an adequate supply of shallow-well water due to circumstance beyond its control (Pet. at p. 3). Included in Plainfield's efforts to date has been the sampling of a local sand and gravel unit through drilling of four test wells, from which it was concluded that the unit was not suitable for construction of a municipal well (Pet. at p. 15); and construction of a sand and gravel test well, testing of which showed that water production was not adequate to justify the construction of a permanent well (Pet. at p. 16). As of the filing of its Petition, Plainfield was in the process of completing and preparing to test yet another shallow well (Pet. at p. 16).

Plainfield notes that it is willing to continue its search for a shallow-well water supply by extending its investigations to areas that are further from the existing developed portions of the village (Pet. at p. 18).

HARDSHIP

Plainfield contends that, despite its continuing efforts at compliance, it will not be able to comply with the compliance schedule set forth in its current variance. In particular, Plainfield notes that it was not able to comply with the August 15, 1990 date for application for construction permits found at Paragraph (D), and contends that it will not be able to comply with the date of April 15, 1991 set for beginning of construction and the date of April 15, 1992 set for completion of

construction, as found at Paragraph (F) (Pet. at p. 2-3)⁴. This failure has occurred in spite of an expenditure of over \$200,000⁵ to date on various aspects of its compliance program, including the various failed well tests noted above (Pet. at p. 14-7). Therefore, Plainfield would presumably again be placed on restricted status following expiration of its current variance. When on restricted status, Plainfield would be unable to extend service to new customers. This would act to the detriment of customers who need public water supply for functional use of property.

Plainfield lists housing, retail, and industrial developments which are in various stages of planning within the Plainfield community, and which will require water service when completed (Pet. at p. 19). Plainfield contends that the loss of any of these developments would have a serious economic impact upon Plainfield (Pet. at p. 19).

Moreover, Plainfield contends that should the USEPA revise the radium standard in such manner as to make it less stringent, compliance could be achieved at a much lower cost than required for compliance with the current standard (Pet. at p. 9). It would thus constitute a hardship for Plainfield to expend monies now that in the near future might otherwise not be required to be spent.

PUBLIC INTEREST

Although Plainfield 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 grant of variance (Pet. p. 13). The Agency contends likewise (Rec. ¶16). 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. ¶15).

The Agency believes that while radiation at any level creates some risk, the risk associated with Plainfield's water is low (Rec. ¶14). In summary, the Agency states:

⁴ Plainfield contends that it has otherwise complied with all aspects of its current variance (Pet. at p. 3).

⁵ Plainfield notes that its entire general revenue funds projection for 1989-90 is approximately \$2.5 million (Pet. at p. 20).

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 contaminant 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. ¶27 and ¶28)

CONCLUSION

The Board finds that, in light of all the facts and circumstances in this case, denial of variance would impose an arbitrary or unreasonable hardship upon Plainfield. 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.

The Board also notes that promulgation of a new radium standard by the USEPA might significantly alter Plainfield's compliance circumstance, even perhaps removing the need for variance. While it is well-established that a speculative change in the law is not grounds for establishing arbitrary or unreasonable hardship (e.g., Citizens Utilities Company of Illinois v. IPCB (1985), 134 Ill.App.3d, 111,115), the Board believes that in some circumstances a prospective change in law may appropriately be reflected in the conditions upon which a variance is granted. In the instant case the Board believes that it is appropriate to condition the grant of variance in such manner as to best assure that Plainfield will achieve compliance with whatever standard is ultimately applicable and that Plainfield will not need to prematurely return to this Board to

request another variance extension. With these ends in mind, the Board will make expiration of the variance dependent upon the date of USEPA alteration (or notice of refusal to alter) of the radium standard.

The Board notes that Plainfield requests that it be allowed up to one year after USEPA action before applying to the Agency for the permits necessary to achieve compliance, and up to three years thereafter to actually achieve compliance (Pet. at p. 1-2). The Agency recommends a substantially tighter timeframe (Rec. ¶29). In light of the time that Plainfield has already had to study and prepare solutions to its radium problem, the Board finds the Agency's recommended compliance schedule to be appropriate and Plainfield's requested schedule to be unjustifiably long. The Board accordingly conditions the grant of variance in accordance with the compliance schedule recommended by the Agency. Under this schedule, should Plainfield still need to take steps to come into compliance after USEPA action, Plainfield will have one year thereafter to make the improvements necessary to achieve compliance and one additional year for a compliance demonstration.

Plainfield is to bear in mind that today's action is a grant of variance solely from Standards of Issuance and Restricted Status. Plainfield is not being granted variance from compliance with the radium standard, nor does today's action insulate Plainfield in any manner against enforcement for violation of that standard.

DETERMINING COMPLIANCE WITH THE RADIUM STANDARD

Plainfield requests that the Board address the satellite issue of whether the radium standard must be met on an average or maximum basis (Pet. at p. 9-12). The Board notes that this question was asked and answered in Village of North Aurora v. IEPA, PCB 89-66. Plainfield is directed to the North Aurora Opinion of February 8, 1990 at pages 8-10 for a full exposition of this matter. Briefly, the Board there found that compliance with the combined radium standard under current regulations requires a showing based on samples averaged over a year.

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

ORDER

Petitioner, Village of Plainfield, is hereby granted variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, as they relate to the standard for radium in drinking water of 35 Ill. Adm. Code.Subtitle F, 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) When analysis pursuant to 35 Ill. Adm. Code 611.720(d), or any compliance demonstration method then in effect, shows compliance with any standards for radium in drinking water then in effect;
 - (2) Two years following the date of USEPA action; or
 - (3) November 29, 1995.
- (C) Compliance shall be achieved with any standards for radium then in effect no later than the date on which this variance terminates.
- (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 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 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

- (E) Within three months of USEPA action or within 27 months of grant of this variance, whichever occurs first, 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 three months 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. 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 6 months after USEPA action. If there is no USEPA action within two years of grant of this variance, Petitioner shall begin construction no later than three years after grant of this variance.
- (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 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 radium standard.

- (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, 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 radium. The notice shall state the average content of 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 B-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.

Within 45 days of the date of this Order, Petitioner shall execute and forward to Stephen C. Ewart, Division of Legal Counsel, 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 90-162
November 29, 1990.

Petitioner

Authorized Agent

Title

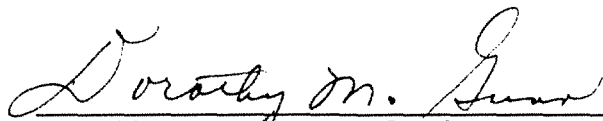
Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1989 ch. 111 ½ 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 B. Forcade and J.D. Dumelle dissent.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 29th day of November, 1990, by a vote of 5-2.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board