

ILLINOIS POLLUTION CONTROL BOARD
May 23, 1991

VILLAGE OF GARDNER,)
)
 Petitioner,)
)
 v.) PCB 91-21
) (Variance)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by J. C. Marlin):

This matter comes before the Board on the February 1, 1991 filing by the Village of Gardner ("Gardner") of a Petition for Variance ("Pet."). Gardner 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 Gardner's public water supply of the 5 picocuries per liter ("pCi/l") combined radium-226 and radium-228 standard and the 15 pCi/l gross alpha particle activity standard of 35 Ill. Adm. Code Subtitle F.¹ Variance is requested for three years.

The Illinois Environmental Protection Agency ("Agency") filed its Variance Recommendation ("Rec.") on March 8, 1991.² The Agency recommends that variance be granted, subject to conditions. Hearing was waived and none has been held.

Based on the record before it, the Board finds that Gardner 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 consistent with this Opinion and as set forth in the attached Order.

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). The standard for gross alpha particle activity was formerly found at 35 Ill. Adm. Code 604.301(b); effective September 20, 1990 it was recodified to 35 Ill. Adm. Code 611.330(b). (See, Illinois Register, Volume 14, Issue 40, October 5, 1990).

² The Agency's filings were accompanied by motions to file instanter. The motions were granted on March 14, 1991.

BACKGROUND

Gardner is a municipality located in Grundy County. Among other services, Gardner provides potable water supply and distribution to a population of approximately 1322 residents and 33 industries and businesses (Pet. ¶6). Gardner's water supply system is a well system drawn from four wells, two deep and two shallow, plus pumps and distribution facilities (Id. ¶8). The deepest well is the main source of the elevated combined radium and gross alpha concentrations (Id. ¶12).

The most recent analyses of Gardner's water supply reported a combined radium concentration of 15.5 pCi/l (Rec. ¶11) and a gross alpha particle concentration of 21.1 pCi/l (Id.). That analyses was dated July 17, 1990.

REGULATORY FRAMEWORK

In recognition of a variety of possible health effects occasioned by exposure to radioactivity, the United States Environmental Protection Agency ("USEPA") has promulgated a maximum concentration limit for drinking water of 5 pCi/l of combined radium-226 and radium-228 and 15 pCi/l of gross alpha particle activity. Illinois subsequently adopted these same limits 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 Gardner requests here is not variance from the maximum allowable concentrations for either radium or gross alpha particle activity. Regardless of the action taken by the Board in the instant matter, these standards will remain applicable to Gardner. Rather, the action Gardner 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 Gardner requests be lifted. Moreover, grant of the requested variance would not absolve Gardner from compliance with the combined radium or gross alpha particle activity standards, nor insulate Gardner 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. 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.

PREVIOUS VARIANCE AND COMPLIANCE PROGRAM

Gardner originally filed for a variance on April 2, 1985 (PCB 85-42) but this petition was withdrawn on June 27, 1985. Following withdrawal of the petition, on September 30, 1987, Gardner entered into a Letter of Commitment with the Agency. In the Letter of Commitment Gardner obligated itself to achieve full compliance on or before July 10, 1991 (Pet. ¶13). Gardner will be unable to achieve compliance on that date for the reasons specified below.

Gardner has complied with the Letter of Commitment to the extent that it has hired a professional engineer, filed an Interim Compliance Report and a Detailed Compliance Report, enacted an ordinance and sealed off certain drains (Pet. ¶24). Gardner has not complied with the deadlines contained in the

Letter of Commitment because the analyses of the prospective methods of compliance has taken longer than expected (Rec. ¶18). Gardner has considered several alternatives, and the costs of those alternatives, for achieving compliance. Those alternatives include cooperative water systems (at least \$1.1 million), deep well blending (at least \$150,000 per well), ion exchange treatment (at least \$1.2 million), reverse osmosis treatment (at least \$1.8 million), and shallow well blending (at least \$1.8 million) (Pet. ¶15 and ¶24). At this time, Gardner has not determined which alternative will be implemented but prefers the deep well blending option as the most cost efficient solution. Gardner has hired outside consultants for review and evaluation of the alternatives and for preparation of recommendations (Pet. ¶17).

During the term of the proposed variance, Gardner proposes to continue the quarterly sampling program and to, when feasible, blend water using the new deep well(s). In addition, Gardner plans on a schedule which will begin construction no later than one year from the grant of the variance and complete construction no later than two years from grant of the variance (Pet. ¶26). Before construction begins Gardner proposes to 1) immediately hire professional assistance to complete investigation of compliance options, 2) complete the investigation within three months of the grant of the variance, 3) apply for all necessary construction permits within six month from the grant of the variance, and 4) advertise for bids within three months after the issuance of each construction permit (Pet. ¶26).

HARDSHIP

Gardner contends that denial of variance would constitute an arbitrary or unreasonable hardship. It notes, among other matters, that:

Failure to obtain a variance means that all construction within the petitioner's service area requiring the extension of the water supply system, could not resume. This hurts prospective home purchasers as well as business developers and Petitioner's tax base. (Pet. ¶28).

The Petitioner could be forced to proceed with the design and construction of treatment facilities at its well site which will probably be duplicitous or unnecessary when blended water from its new well or wells becomes available. (Pet. ¶29).

The Agency also contends that denial of variance would constitute an arbitrary or unreasonable hardship (Rec. ¶20).

PUBLIC INTEREST

Although Gardner 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. ¶ 23). 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 hearings 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 Gardner's water is very low (Rec. ¶14). 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 MCL 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. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the standards.

(Rec. ¶29 and ¶30)

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 Gardner. 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 notes that timely compliance by Gardner may be affected by pending USEPA action to promulgate new standards for radionuclides in drinking water. USEPA recently proposed to publish its Notice of Proposed Rulemaking ("NPRM") in June 1991, and expects to issue final action on new radionuclide standards in April, 1993 (56 Fed. Reg. 18014, April 22, 1991). New radionuclide standards from USEPA could significantly alter Gardner's need for a variance or Gardner's alternatives for achieving compliance. In recognition of this situation, the Board's variance will contain suitable timeframes to account for the effects of any USEPA alteration (or notice of refusal to alter) of the radium or gross alpha standards. Aside from these changes in the schedule, the dates and conditions of this variance follow the proposal of the Agency contained in its Recommendation (Rec. ¶31).

Gardner is to bear in mind that today's action is solely a grant of variance from standards of issuance and restricted status. Gardner is not being granted variance from compliance with either the radium or gross alpha particle standard, nor does today's action insulate Gardner in any manner against enforcement for violation of these standards.

The variance is granted, with conditions, for a period of four years from the grant of variance or for two years after USEPA action or until compliance is shown, whichever is earliest.

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

ORDER

Petitioner, Village of Gardner, is hereby granted variance for its water system from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, as they relate to the standards for radium and gross alpha particle activity 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 standards for radium and gross alpha particle activity in drinking water then in effect; or
 - (2) May 23, 1995, or
 - (3) Two years following the date of USEPA action.
- (C) Compliance shall be achieved with any standards for radium and gross alpha particle activity 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, radium-228, and gross alpha particle activity. 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
P.O. Box 19276
2200 Churchill Road
Springfield, Illinois 62794-9276
- (E) Within three months of USEPA action or 24 months after this grant of variance, whichever is sooner, Petitioner shall apply to the Agency at the address below for all permits necessary for construction of installations, changes or additions to the Petitioners's public water supply needed for achieving compliance with the maximum allowable concentration for combined radium and gross

alpha particle activity, 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 3 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. The Petitioner shall accept appropriate bids within a reasonable time. Petitioner shall notify the Agency, at the address in condition (E), within 30 days 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. In any case, construction of all installations, changes or additions necessary to achieve compliance with the maximum allowable concentration of combined radium and gross alpha particle activity, or with any standards for radium and gross alpha particle activity in drinking water then in effect, shall begin no later than 6 months after USEPA action. Petitioner shall complete construction no later than three years from the grant of 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 and gross alpha particle activity standards.
- (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 the standards for radium and gross alpha particle activity. The notice shall state the average content of radium and gross alpha particle activity 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-226 and radium-228, and gross alpha particle activity 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 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 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 91-21 May __,
 1991.

 Petitioner

 Authorized Agent

 Title

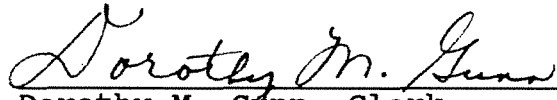
Date

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 Member B. 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 23rd day of May, 1991, by a vote of 5-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board