ILLINOIS POLLUTION CONTROL BOARD April 6, 1995

SILVER GLEN ESTATES,)
Petitioner,)
v.) PCB 95-6
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,) (Variance-PWS))
Respondent.)

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

This matter comes before the Board upon filing by Silver Glen Estates (Silver Glen) on February 14, 1995 of an amended petition for variance. Silver Glen seeks relief from 35 Ill. Adm. Code 602.105(a) "Standards for Issuance", and 602.106(a), "Restricted Status", but only as these rules relate to the radium-226 and radium-228 standard of 35 Ill. Adm. Code 611.330(a) and the gross alpha particle activity standard of 35 Ill. Adm. Code 611.330(b). Silver Glen requests variance for five years or when analysis pursuant to 35 Ill. Adm. Code 605.104(a) shows compliance with the standards for radium-226, radium-228, and gross alpha particle activity, whichever occurs first.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 et seq. (1992).) The Board is charged there with the responsibility of granting variance from Board regulations whenever it is found that compliance with the regulations would impose an arbitrary or unreasonable hardship upon the petitioner. (415 ILCS 5/35(a).) The Illinois Environmental Protection Agency (Agency) is required to appear in hearings on variance petitions. (415 ILCS 5/4(f).) The Agency is also charged, among other matters, 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).)

The Agency filed its variance recommendation (Rec.) on March 16, 1995. The Agency recommends grant of the variance with conditions. Silver Glen waived hearing, and none has been held.

As presented below, the Board finds that Silver Glen has met its burden of demonstrating that immediate compliance with 35 Ill. Adm. Code 218.586(d)(3) would impose an arbitrary or unreasonable hardship. Accordingly, the variance request will be granted subject to conditions as discussed below.

The Board notes that on April 4, 1995 Silver Glen filed a motion for expedited decision of this matter. Inasmuch as the Board today grants Silver Glen's request for variance, the motion for expedited decision is hereby denied as moot.

BACKGROUND

Silver Glen Estates is a housing development located in Kane County. At issue is a small, privately-owned public water utility operated by Silver Glen. The water utility currently serves 71 homesites, representing a population of approximately 284 persons. (Pet. at 3.)

The Silver Glen water supply and distribution system is owned by the homeowners who live in Silver Glen Estates. Supply is obtained from a deep well. The water is provided to all residential users as needed and charges, as established by resolution, are made to all users. (Rec. at 3.)

Silver Glen plans to extend water mains to serve 32 new homesites (128 anticipated persons) in a residential housing development. (Pet. at 3.) Silver Glen requests the instant variance to allow the extension of the distribution system as necessary to serve these new homesites.

The most recent analysis of radium in Silver Glen's water was made on March 25, 1994 on a sampling composited from four consecutive quarterly samples. (Rec. at 4.) The combined radium-226 and radium-228 level was 9.4 pCi/L, which exceeds the current 5.0 pCi/L standard. (Id.) An earlier composite sample contained combined radium at 8.4 pCi/L. (Pet. at 3.)

REGULATORY FRAMEWORK

The instant variance request concerns two features of the Board's public water supply regulations, standards for issuance and restricted status, as found at 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. 111½, 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 cumulative effect of these regulations is to prohibit community water supply systems 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. Silver Glen requests that it be allowed to extend its water service while it continues to pursue compliance with the combined radium and gross alpha standards, 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 (1985), 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.

It should be noted that 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 action brought for violation of those standards. The underlying standards remain applicable to the petitioner regardless of whether variance is granted or denied.

^{1 &}quot;Community water supply" is defined at Section 3.05 of the Act (415 ILCS 5/3.05) as "a public water supply which serves or is intended to serve at least 15 service connections used by residents or regularly serves at least 25 residents". It is uncontested that the Silver Glen system is a community water supply by this definition.

Standards for 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 standards adopted were 5 pCi/L for the sum of the two isotopes of radium, radium-226 and radium-228. A 15 pCi/l standard was also adopted for gross alpha particle activity. Shortly thereafter, Illinois adopted the same standards. Although characterized as "interim" limits, the standards nevertheless are the maximum allowable concentrations under both federal and Illinois law, and will remain so unless modified by the USEPA².

Since their original promulgation, the current radium and gross alpha particle activity standards have been under review at the federal level. 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 19, 1991, USEPA announced a proposal to modify radionuclide standards generally (56 Fed. Reg. 33050, July 18, 1991). USEPA proposed to replace the 5 pCi/L combined radium standard with separate standards of 20 pCi/L each for radium-226 and radium-228. The gross alpha particle activity standard was 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.

Pursuant to a consent decree entered in federal court³, the standards proposed in June 1991 were to become effective in April 1995. However, the earliest anticipated date is now September, 1995. (Rec. at 8.) In the interim, USEPA has announced that, in light of the projected proposal for the relaxed standards, it would not force any municipality to spend funds preparing a final design or constructing a treatment system to comply with the federal standards. (Rec. at 8.) The Board and the Agency have also been reluctant to force compliance in this uncertain regulatory environment.

COMPLIANCE PROGRAM

According to the Agency, Silver Glen has been actively investigating compliance alternatives. (Rec. at 5.) Silver Glen currently believes that the compliance would best be achieved via

² In anticipation of USEPA revision of the radium standard, the Illinois legislature amended the Act at Section 17.6 (415 ILCS 5/17.6) in 1988 to provide that any new federal radium standard immediately supersedes the current Illinois standard.

³ <u>Miller v. Browner</u>, No. 89-6328-HO (D.C. Or., 1990).

a reverse osmosis system. The estimated implementation time for reverse osmosis is 24 months, and the cost is \$150,000 to \$200,000. (Id.)

In addition, Silver Glen is currently developing a second well. (Pet. at 3.) Once the radiological quality of this well becomes known, replacement and blending or mixing possibilities may arise.

Silver Glen also anticipates retaining an outside consultant to assist in evaluating and resolving compliance options. (Pet. at 4.)

<u>HARDSHIP</u>

Silver Glen contends that denial of the requested variance would constitute an arbitrary or unreasonable hardship. Silver Glen observes that requiring compliance with the current standards, in light of the USEPA's proposal to alter the standards, would require substantial expenditure of funds for treatment facilities that "may become obsolescent in the near future, is not in the public interest and does not grant a corresponding benefit to the public". (Pet. at 6.)

Silver Glen also observes that failure to grant the variance would cause further construction at Silver Glen to cease. Silver Glen contents that prospective home purchasers and business developers would be negatively impacted. (Pet. at 6.)

Silver Glen concludes that its hardship would rise to the level of being arbitrary or unreasonable because the hardship would outweigh any injury of the public from grant of the variance. (Pet. at 6.)

The Agency is also of the opinion that the hardship resulting from denial of the variance, which would have the effect of putting petitioner on restricted status, would outweigh the injury to the public from grant of the variance. (Rec. at 9.)

ENVIRONMENTAL IMPACT

Although Silver Glen 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 4.) The Agency agrees with Silver Glen's assertion. (Rec. at 6-7.) Both Silver Glen and the Agency cite testimony presented by Richard E. Toohey, Ph.D., of Argonne National Laboratory, at the Board's July 30 and August 2, 1985 hearings in In re: Proposed Amendments to Public Water Supply Regulations, 35 Ill. Adm. Code 602.105 and 602.106 (R85-14) in support of the assertion that the variance will not

result in any adverse environmental impact (Pet. at 4; Rec. at 6). 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, it also believes that the risk associated with Silver Glen's water supply is very low. (Rec. at 6.) 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" (Rec. at 8). 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 to the public from grant of the variance. 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 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. at 10-11.)

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 water regulations. (Rec. at 10).

CONCLUSION

Based upon the record, the Board finds that immediate compliance with the Boards standards for issuance and restricted status regulations would impose an arbitrary or unreasonable hardship on Silver Glen. The Board also agrees with the parties

that granting this variance does not pose a significant health risk to those persons served by any new water main extensions. Hence, the Board will grant this variance for the requested period of time.

The Board notes that compliance by Silver Glen may be affected by pending USEPA action to promulgate new standards for radionuclides in drinking water. New radionuclide standards from USEPA could significantly alter Silver Glen's need for a variance. 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 radionuclide standards.

Today's action is solely a grant of variance from standards of issuance and restricted status. Silver Glen is not granted variance from compliance with the combined radium or gross alpha particle standards, nor does today's action insulate Silver Glen in any manner against enforcement for violation of these standards.

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

ORDER

Silver Glen Estates is hereby granted variance from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(a), "Restricted Status", as these provisions relate to the standards for combined radium and gross alpha particle activity as set forth in 35 Ill. Adm. Code 611.330(a) and 611.330(b), respectively, subject to the following conditions:

- (1) The variance terminates on the earliest of the following dates:
 - a) Two years following the date of USEPA action; or
 - b) April 6, 2000; or
 - c) When analysis pursuant to 35 Ill. Adm. Code 611.720(d), or any compliance demonstration method then in effect, shows compliance with the radionuclide standards in question.
- (2) For purposes of this order, the date of USEPA action is the earlier date of:
 - a) The date a regulation is promulgated by the USEPA that amends the maximum contaminant level for combined radium, either of the isotopes of radium, or gross alpha particle activity, or amends the

method by which compliance with these maximum contaminant levels is demonstrated; or

- b) The date of publication of notice by the USEPA that no amendments to the 5 pCi/L combined radium standard or the 15 pCi/L gross alpha particle standard, or the method for demonstrating compliance with these standards, will be promulgated.
- (3) In consultation with the Agency, Silver Glen shall continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance expires, Silver Glen shall collect quarterly samples of its water from its distribution system at locations approved by the Agency. Silver Glen shall composite the 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 the contaminants in question. The results of the analyses shall be reported to

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

within 30 days of receipt of each analysis. At the option of Silver Glen, the quarterly samples may be analyzed when collected. 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.

(4) Within three months after USEPA action, Silver Glen shall apply to the Agency at the address below for all permits necessary for the construction, installation, changes, or additions to its water supply needed for achieving compliance with the maximum concentration level of any of the contaminants in question as then in effect.

Illinois Environmental Protection Agency Public Water Supply Program Permit Section P.O. Box 19276 2200 Churchill Road Springfield, IL 62794-9276

- (5) After each construction permit is issued by the Agency, and within six months after USEPA action, Silver Glen shall advertise for bids, to be submitted within 60 days, from the contractors to do the work described in the construction permit. Silver Glen shall accept appropriate bids within a reasonable time. Silver Glen shall notify the Agency at the address in (4), within 30 days, of each of the following actions: a) advertisement for bids, (b) names of successful bidders, and c) whether Silver Glen accepted the bids.
- (6) Construction allowed on said construction permits must 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 concentration levels in questions must be completed no later than two years following USEPA action.
- (7) 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, Silver Glen shall send to each user of its public water supply a written notice to the effect that Silver Glen is not in compliance with the standards 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.
- (8) 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 variance order, whichever occurs first, and every three months thereafter, Silver Glen shall send to each user of its public water supply a written notice to the effect that Silver Glen 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 it relates to the standards in question.
- (9) Until full compliance is reached, Silver Glen shall take all reasonable measures to operate its existing equipment as necessary to minimize the level of radium-226, radium-228, and gross alpha particle activity in its finished drinking water.
- (10) Silver Glen shall provide written progress reports to Agency's Division of Public Water Supplies, Field Operations Service every six months concerning steps taken to comply with paragraphs (3) through (9), above. Progress reports shall quote each of said paragraphs

and immediately below each paragraph state what steps have been taken to comply with that paragraph.

IT IS SO ORDERED.

Date

If petitioner chooses to accept this variance subject to the above order, 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
P.O. Box 19726
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 is as follows:

CERTIFICATION

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

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