

ILLINOIS POLLUTION CONTROL BOARD
January 19, 1995

CITY OF BATAVIA,)
)
Petitioner,)
)
v.) PCB 94-276
) (Variance)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

OPINION AND ORDER OF THE BOARD (by G. T. Girard):

On September 28, 1994, the Board received a petition for an extension of variance filed by the City of Batavia (Batavia). Batavia is seeking an extension of a variance granted by the Board in PCB 89-183 (City of Batavia v. IEPA, 114 PCB 21 (August 9, 1990))¹ from the Board's drinking water rules at 35 Ill. Adm. Code 602.105(a) and 602.106(b) to the extent that those rules apply to the maximum concentration limit (MCL) for radium-226 and radium-228 (as set forth at Ill. Adm. Code Section 611.330(a)). The current variance expires November 1, 1994. Batavia is asking that the Board extend the variance until November 1, 1997 or until the USEPA takes final action with respect to a new radium standard, whichever comes first.

On October 28, 1994, the Board received a response from the Illinois Environmental Protection Agency (Agency) which recommends that the variance be granted with certain conditions. Batavia waived hearing and the Board received no requests for a hearing, so no hearing was held.

BACKGROUND

Batavia is located in Kane County, Illinois and provides potable water to approximately 20,200 residential customers as well as industrial, governmental and commercial utility customers. Batavia employs approximately 4,000 people. (Ag. Rec. at 3.) Batavia's water supply and distribution system is divided into a west side system, providing water to the west side and an east side system providing water to the east side. The two sides are separated by the Fox River and connected by two river crossing mains. (*Id.*) As a condition of the variance granted in 1990 to Batavia, the west side system was to be

¹ The Board's 1990 opinion and order will be cited hereinafter as "114 PCB ____"; the petition for variance will be cited as "Pet. at ____"; the Agency recommendation will be cited as "Ag. Rec. at ____".

upgraded to achieve compliance with the radium standard. (114 PCB 29.) The work has been completed as required by that condition. (Pet. at 2; Ag. Rec at 5.) Cost of compliance to date has been \$4,020,192. (Pet. at 4.)

The water supply system consists of two deep aquifer wells, three shallow wells, a treatment plant, reservoir and distribution facilities on the west side. (Ag. Rec. at 3.) The east side system consists of two deep aquifer wells and a distribution system. (*Id.*) Approximately 1.17 million gallons per day is provided by east side wells. (Pet. at 4.) Water from the east side wells (deep wells No. 4 and No. 5) does not comply with the radium standards. (Pet. at 4.) The most recent analyses (June 29, 1995) indicate a combined radium content at Well No. 4, Tap No. 3 of 12.3 picocuries per liter (pCi/L) and at Well No. 5, Tap No. 4 a content of 9.0 pCi/L. (Ag. Rec. at 5.) The Agency also indicates that at Well No. 2, Tap No. 1 a radium content of 6.6 pCi/L was shown. (*Id.*) The MCL for combined radium-226 and radium-228 is 5 pCi/L. (35 Ill. Adm. Code 611.330(a).)

Batavia is seeking an extension of the variance for its entire system until November 1, 1997 or until the USEPA adopts a new radium standard. Batavia believes that during normal periods of demand, Batavia can supply all its customers with compliant water. (Pet. at 4.) However, during periods of peak usage, "compliance on a regular basis cannot be assured". (*Id.*)

REGULATORY FRAMEWORK

The instant variance request concerns two features of the Board's public water supply regulations: "Standards for Issuance" and "Restricted Status", which are found at 35 Ill. Adm. Code 602.105 and 602.106. In pertinent part they 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 1/2, pars. 1001 et seq.) (Act), or of this chapter.

Section 602.106 Restricted Status

- (a) Restricted status shall be defined as the Agency determination pursuant to Section 39(a) of the Act and Section 602.105, that a public water supply facility may no longer be issued a construction

permit without causing a violation of the Act or this chapter.

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 is important to recognize 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.

Standards for radium in drinking water were first adopted as National Interim Primary Drinking Water Regulations 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. Shortly thereafter, Illinois adopted the same limits which are now found at 35 Ill. Adm. Code Section 611.330. 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 USEPA.

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 19, 1991, USEPA announced a proposal to modify both radium standards (56 Fed. Reg. 33050, July 18, 1991). USEPA proposed 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 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. Under the USEPA's calendar, these standards were scheduled to be published by April 1995.

COMPLIANCE PLAN

Batavia has already spent \$4,020,192 to date on a compliance plan. As a result, a part of the water system is now in compliance with the combined radium standard. (Pet. at 4.) Batavia states that it is committed to continuing to construct improvements to the west side system to insure that the radium standard is continued to be met in that part of the system. (Pet. at 7) Batavia intends to seal off the portion of Well No. 3 that extends into the Mt. Simon deep aquifer. (*Id.*) This will reduce the level of radium in Well No. 3 and will cost approximately \$22,000. (*Id.*)

For the east side of Batavia's system, Batavia states that it believes it is first "appropriate to wait and see what action U.S.EPA takes with respect to the radium standard in April of 1995." (Pet. at 7.) Batavia states that if the USEPA proposes a more stringent standard than the proposed 20/20, Batavia will achieve compliance by blending radium-free shallow well water with the deep well water. (*Id.*) Batavia will construct a water main from the shallow wells on the west side directly to the wellhead for Wells No. 4 and 5 and then directly blend the water at the wellhead. (*Id.*) Batavia will also construct a third interconnecting water main to provide additional shallow well water for incidental blending to provide adequate water during peak usage periods. (Pet. at 7-8.) The cost of this plan is estimated at \$100,000. (Pet. at 8.)

ENVIRONMENTAL IMPACT

The Agency states that while radiation at any level creates some risk, the risk associated with this level is very low. (Ag. Rec. at 7.) Further, information regarding effects of combined radium levels was presented in testimony before the Board at the Aurora variance hearing (PCB 85-54) on June 25, 1985, by Richard E. Toohey, Ph.D., and at the hearings on the Agency rule change proposal in R85-14. (Ag. Rec. at 7.) Finally the Agency states that an increase in the allowable concentration for the contaminants in question should cause no significant health risk for a limited population served by new water main extensions for the time period of this recommended variance. (Ag. Rec. at 8.)

Batavia incorporated by reference the testimony by Richard E. Toohey, Ph.D and Dr. James Stebbings and stated that based on

that testimony "Batavia believes that there will be little, if any, adverse impact caused by a grant of this variance extension." (Pet. at 5.) Batavia is also committed to continuing the improvements to the west side system and to blend water to reduce the radium levels. (Pet. at 8.)

HARDSHIP

Batavia asserts that denial of a variance would constitute an arbitrary or unreasonable hardship because the grant of the variance will cause little if any adverse environmental impact. (Pet. at 8-10.) Batavia argues that in contrast, denial of the variance extension would result in the termination of the significant development taking place in Batavia that requires the extension of the water supply system. Development in Batavia has been very active, with 437 total building permits in 1992, 290 in 1993 and 143 by August of 1994. (Pet. at 9.)

Batavia also argues that denial would require Batavia to incur hundreds of thousands of dollars in completing a treatment system that will blend deep aquifer water with shallow aquifer water to achieve compliance with the combined radium standard of 5 pCi/l, which may no longer be in effect. (Pet. at 9.) Batavia asserts that the adverse economic impact would far outweigh any health effects associated with the consumption of Batavia's water for the limited period covered by the requested variance extension. (Pet. at 9.)

Batavia acknowledges that Section 35(a) of the Act states that "the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and the costs of compliance are substantial and certain". That provision, according to Batavia, however, does not preclude such a finding in this case in that USEPA has proposed a revised standard of 20 pCi/l and is under a court order to promulgate a new standard by April 15, 1995. (Pet. at 9.)

The Agency believes that the grant of the variance would impose no "significant injury" to the public or to the environment. (Ag. Rec. at 8.) The Agency stated that "denial of the recommended variance would be an arbitrary and unreasonable hardship to petitioners." (Ag. Rec. at 8.) Thus, the Agency supports a grant of the variance.

CONSISTENCY WITH FEDERAL LAW

Batavia and the Agency agree that the Board may grant the requested variance consistent with federal law. (Pet. at 10; Ag. Rec. at 10.) The requested variance will allow the extension of water mains but it is not a variance from the national primary drinking water regulations. (Pet. at 10.) Further, granting

variance from the effects of restricted status affects State and not federal law and regulations according to the Agency. (Ag. Rec. at 10.)

CONCLUSION

Batavia is requesting an extension of an existing variance granted by the Board in 1990. Batavia has substantially complied with the conditions of the prior variance, however, Batavia is currently not in compliance with the drinking water standard for radium. Batavia completed the construction of improvements to the west side water system at a cost in excess of four million dollars, as required by condition 8 of the 1990 variance. Batavia has shown that the Illinois drinking water standards for radium are based on the federal standards which are presently under review by USEPA. In June 1991, USEPA proposed raising the radium drinking water standards to a higher level, and if those standards are adopted as proposed, Batavia would be in compliance. USEPA is under a court order to promulgate the new radium drinking water standards by April 1995. The Agency agrees with Batavia that no significant injury to the public is likely from contamination at the present radium levels.

Batavia has shown that a hardship would exist if a variance from Section 602.105(a) and Section 602.106(b) was not granted by the Board. If the federal standard for radium in drinking water is not raised, Batavia has submitted a compliance plan that would be implemented. Batavia has demonstrated that a variance is warranted. Therefore, the Board will grant a variance from the Board's rules at 35 Ill. Adm. Code Sections 602.105(a) and 602.106(b) to the extent that those rules apply to the maximum concentration of radium-226 and radium-228, as regulated at Section 611.330. The variance will terminate two years following the date of USEPA action on the radium standards, or November 1, 1997, whichever is earlier.

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

ORDER

The Board hereby grants the petitioner, City of Batavia, a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(a), Restricted Status, but only as the rules relate to the contaminants in question, subject to the following conditions:

- (A) For purposes of this recommendation, the date of USEPA action shall consist of the earlier date of the:
 - (1) date the regulation is promulgated by the U. S.

Environmental Protection Agency ("USEPA") which amends the maximum contaminant level ("MCL") 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) The variance shall terminate on the earliest of the following dates:
- (1) Two years following the date of USEPA action; or
 - (2) November 1, 1997.
- (C) In consultation with the 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 their 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 for radiological analysis so as to determine the concentration of the contaminants in question. The results of the analysis shall be reported to the Compliance Assurance Section, Division of Public Water Supplies, 2200 Churchill Road, IEPA, Springfield, IL 62794-9276, within 30 days of receipt of each analysis. At the option of the petitioner, 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.
- (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 petitioners' 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 Program
Permit Section
2200 Churchill Road

Springfield, IL 62794-9276

- (E) Within three months of the issuance of each construction permit 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, DPWS, within 30 days, of each of the following actions: 1) advertisements for bids, 2) names of successful bidders, and 3) whether petitioners 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 two years following USEPA action. One year will be necessary to prove compliance.
- (G) 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 will send to each user of its public water supply a written notice to the effect that the petitioner is not in compliance with the standard in question. The notice shall state the average content of the contaminants in samples taken since the last notice period during which samples were taken.
- (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 variance order, whichever occurs first, and every three months thereafter, the petitioner will send to each user of its public water supply a written notice to the effect that petitioners have been granted by the Illinois 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 MCL standard in question.
- (I) Until full compliance is reached, the petitioner shall take all reasonable measures with existing equipment to minimize the level of contaminants in its finished drinking water.
- (J) The petitioner shall provide written progress reports to the Agency's DPWS, FOS every six months concerning steps taken to comply with paragraphs C, D, E, F, G, and H. Progress reports shall quote each of said

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

If the petitioner chooses to accept this variance subject to the above order, within forty-five days of the grant of the variance, the petitioner must execute and forward the attached certificate of acceptance and agreement to:

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

Once executed and received, that certificate of acceptance and agreement shall bind the petitioner 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:

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 94-276, January 19, 1995.

Petitioner _____

Authorized Agent _____

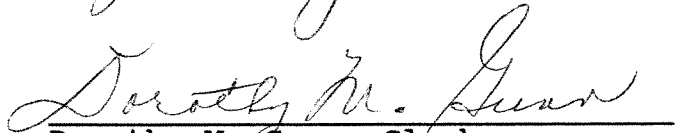
Title _____

Date _____

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1989, ch. 111 1/2 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.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 19th day of January, 1995, by a vote of 6-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board