

ILLINOIS POLLUTION CONTROL BOARD
August 9, 1990

CITY OF BATAVIA,)	
)	
Petitioner,)	
)	
v.)	PCB 89-183
)	(Variance)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

OPINION AND ORDER OF THE BOARD (by J. Theodore Meyer):

This matter is before the Board on a petition for extension of variance filed by the City of Batavia (Batavia) on November 9, 1989. Batavia seeks variance from 35 Ill.Adm.Code 602.105(b) "Standards of Issuance" and 35 Ill.Adm.Code 602.106(b) "Restricted Status", but only as those rules relate to 35 Ill.Adm.Code 604.301(a), combined radium-226 and radium-228. Batavia requests a four year extension of the variance granted by the Board on August 20, 1987, in PCB 87-79. On April 19, 1990, the Illinois Environmental Protection Agency (Agency) filed its recommendation that the variance extension request be denied. Batavia filed a response to the Agency recommendation on April 27, 1990. Hearing on the variance request was waived, and no hearing was held.

PROCEDURAL HISTORY

This is Batavia's fourth request for variance from public water supply regulations. On April 4, 1985, in docket PCB 85-11, the Board granted Batavia a variance from the maximum allowable concentration (MAC) for combined radium. Because the United States Environmental Protection Agency (USEPA) contended that a variance from the MAC itself was improper, Batavia subsequently asked the Board to amend the PCB 85-11 variance to a variance from the restricted status regulations only. The Board granted that relief on May 22, 1986, in docket PCB 86-36. Both of these variances were to expire on January 1, 1990. In docket PCB 87-79, Batavia asked for extension of one of the interim conditions in its PCB 86-36 variance. Specifically, Batavia requested an extension of the deadline to apply to the Agency for construction permits from June 22, 1987, to June 22, 1988. The Board granted that relief on August 20, 1987. As with the two previous variances, the variance granted in PCB 87-79 required Batavia to achieve compliance with the radium standard by January 1, 1990, and contained interim deadlines for progress on the compliance plan.

Batavia filed the instant petition for variance extension on

November 9, 1989, and filed additional information on December 11, 1989, and on February 7, 1990. On March 5, 1990, Batavia filed an amended petition, seeking an extension of the PCB 87-79 variance until January 1, 1994. The Board then entered several orders requesting additional information, and Batavia responded to those requests on March 14 and April 2, 1990. As noted above, the Agency filed its recommendation in opposition to the request on April 19, 1990, and Batavia filed a response to the Agency recommendation on April 27, 1990. On June 4, 1990, Batavia filed a motion for leave to file supplemental exhibits. The Board granted that motion on June 7, 1990, and ordered Batavia to submit the exhibits by July 9, 1990. The Agency filed responses to the supplemental information on June 22 and June 28, 1990, noting that the supplemental exhibits removed some of its objections to the grant of variance. On July 16, 1990, after moving for an extension of time, Batavia filed its final supplemental exhibit.

BACKGROUND

Batavia is located in Kane County, Illinois. It owns and operates its water distribution system which provides potable water to approximately 17,000 people, including residential, commercial, and industrial users. The system consists of four deep wells, numbered 2, 3, 4, and 5, elevated and ground level storage tanks, pumps, and distribution facilities. Wells 2 and 3 feed into a common reservoir from which water is pumped primarily to the west side of town (west of the Fox River). Wells 4 and 5 and the reservoir for wells 2 and 3 all feed into the distribution system. The combined radium levels are as follow:

<u>Well Number</u>	<u>Combined Radium Level (pCi/l)</u>	<u>Date Collected</u>
2	13.5	9/8/87
	14.3	12/14/88
3	28.4	6/17/87
	30.0	12/14/88
	13.3	2/1/90
4	8.1	8/14/87
	9.5	12/14/88
	6.8	2/1/90
5	7.9	8/14/87
	7.5	2/22/89
	5.0	2/1/90

Assuming the highest combined radium reading from each well, the average radium level for Batavia's system is 14.29 pCi/l. The average radium level for wells 2 and 3 is 20.82 pCi/l. (Agency Rec. at 4-5.) Batavia submitted results of additional tests on

samples taken on March 22 and April 4, 1990. Those test show radium levels of 13.3 to 14.1 pCi/l for the common reservoir for Wells 2 and 3, 12.7 pCi/l for the west side elevated tank, and 6.9 pCi/l for the east side elevated tank. The MAC for combined radium is 5 pCi/l. (35 Ill. Adm. Code 604.301(a).) Batavia was first advised that its water system exceeded the combined radium standard on January 25, 1984 and was placed on the Agency's restricted status list. Batavia was removed from restricted status by the variance granted on April 4, 1985, in PCB 85-11.

COMPLIANCE PLAN

Batavia's compliance plan involves blending the radium-tainted deep well water with radium-free shallow well water to achieve the 5 pCi/l MAC for combined radium. This plan necessitates the drilling of several new wells and the construction of new treatment, storage, and distribution facilities. The Board approved this compliance plan in the prior variances, and imposed interim deadlines on the progress of the plan. In brief, Batavia was to secure professional assistance in preparing plans and specifications for the improvements by December 22, 1987, and submit applications for all necessary construction permits to the Agency by June 22, 1988. Batavia was to advertise for bids within three months after each construction permit was issued by the Agency. Construction of all improvements was to be completed no later than January 1, 1990. Batavia has not complied with any of these conditions, however, stating that it has been unable to obtain the property necessary for the new wells and treatment facilities.

Batavia intends to continue with its blending program, although it contends that if the United States Environmental Protection Agency (USEPA) changes the current maximum concentration limit (MCL) for radium in drinking water, some of the work would not need to be done.¹ Batavia states that if USEPA revises the radium standard to 5 pCi/l for radium 226 and 5 pCi/l for radium 228, there will be no need to extend water mains through the west side of the city and across the Fox River to the east side of town, thus saving approximately \$401,000. (Amended Pet. at 3.) It is difficult for the Board to ascertain the compliance schedule proposed by Batavia, however, because at least two schedules are discussed in Batavia's various filings. These two schedules vary widely: for instance, the amended petition states that the well and treatment sites will be purchased by October 1991, while Batavia's February 7, 1990 addendum to the petition estimates that

¹ Pursuant to Section 17.6 of the Environmental Protection Act, any revision of the 5 pCi/l standard for combined radium by USEPA will automatically become the standard in Illinois. Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1017.6.

condemnation proceedings will be completed by September 1990.² The Board will accept the schedules set forth in the February 7 addendum, because those schedules are much more detailed and provide for separate schedules for west side and east side construction, depending upon any action by USEPA on the radium standard.

The Agency states that it has no objection to the compliance plan presented by Batavia. However, the Agency does note some concern "that it may not be appropriate to await final [USEPA] standards prior to initiating construction, should the Board decide to grant variance." (Agency Rec. at 11.) In response, Batavia maintains that it intends to initiate construction as soon as possible, with hopes that the initiation of construction and promulgation of final standards by USEPA will coincide. At any rate, Batavia states that it is actively pursuing the necessary steps to construction, and that if construction can be started prior to the promulgation of new standards, construction will start. (Response to Agency Rec. at 1-2.)

ENVIRONMENTAL EFFECTS

Batavia contends that "[a]s indicated in the granting of previous variances, the health risks at these low dosages of radium are minimal." (Amended Pet. at 5.) The Agency provides risk assessment calculations which it maintains demonstrate that no significant danger exists for the time period of this variance. The Agency notes that Batavia's radium level is only very slightly above the level of 20 pCi/l, and that because of intermediate mixing, no segment of Batavia's population is subjected to radium levels of 30 pCi/l or higher. Thus, the Agency concludes that the present levels of combined radium do not present any significant health risk either to the limited population served by new water main extensions or to the population currently being served by Batavia. (Agency Rec. at 4-6, 9-10.)

In its recommendation, the Agency refers to a contract which it entered into with Dr. William Hallenbeck to update his prior reports on health effects of radium, in connection with City of Braidwood v. Illinois Environmental Protection Agency, PCB 89-212. However, at the time of filing of the recommendation, the Agency had not received Dr. Hallenbeck's testimony. (Agency Rec. at 10.) The Board notes that on June 21, 1990, it denied Braidwood's

² According to subsequent filings by Batavia, all property necessary for testing and construction of facilities has now been obtained, thus eliminating any further time necessary to proceed with condemnation proceedings.

request for a radium variance.³ In that opinion, the Board discussed the statement submitted by Dr. Hallenbeck, and the testimony of Dr. Richard Toohey, on the issue of health effects of radium. In sum, Dr. Hallenbeck testified that based upon Braidwood's excess radium level of 25.6 pCi/l (30.6 pCi/l - 5 pCi/l), the most probable value for excess cancer cases per year is 0.02 (two excess cancer cases per every 100 years). In contrast, Dr. Toohey testified that the additional health risk from grant of variance in the Braidwood case would be negligible, with the risks varying from 0.012 to zero, depending on which model was used in calculating the risk. (City of Braidwood v. Illinois Environmental Protection Agency, PCB 89-212 (June 21, 1990), slip op. at 10-11.)⁴ Based upon Batavia's and the Agency's statements in this proceeding, the Board finds that the environmental impact of granting the requested variance would be minimal.

CONSISTENCY WITH FEDERAL LAW

The Agency believes that the Board may grant Batavia's requested variance consistent with the requirements of the Safe Drinking Water Act (42 U.S.C. 300(f)) and corresponding regulations because the requested relief is not variance from a national primary drinking water regulation. (Agency Rec. at 11-12.)

HARDSHIP

Batavia contends that both the city and the general public will suffer a great hardship if variance is not granted, because it will be unable to obtain permits for water main extensions. Batavia maintains that this hardship is not speculative, and lists several residential and commercial developments which have been approved by the city and are ready for submission of applications for water main extensions. Additionally, Batavia states that it is negotiating for several other developments and major retailers, and that voters have approved a referendum for construction of a new junior high school which will also need water main extensions. Batavia contends that these projects are crucial to the city's efforts to decrease its reliance on state and other outside sources of funding. Batavia admits that it did not fulfill several of the conditions imposed in the earlier variances, but maintains that it has proceeded towards compliance, and points out that it has retained an engineering firm, completed exploration and test drilling, and has now obtained the property needed to implement the

³ The Board notes that it denied Braidwood's petition for variance on the grounds that Braidwood's hardship was self-imposed, and not on environmental factors.

⁴ The Board encourages the Agency to use this updated testimony in future recommendations on radium variances.

compliance plan.

The Agency notes that Batavia did not comply with the conditions of the prior variances which would have required that Batavia have obtained permits, completed construction, and been in compliance with the combined radium standard by January 1, 1990. The Agency points out that Batavia did not petition for extension of the deadlines when it became apparent that they would not be met, but waited until just before the expiration of the previous variance. Thus, the Agency believes that Batavia cannot demonstrate sufficient hardship to justify grant of variance, and recommends that the variance be denied.

Section 36(b) of the Act provides that a variance can be extended only if satisfactory progress has been shown. The Board finds that this case presents a close call as to whether Batavia has demonstrated satisfactory progress, and thus whether there is arbitrary or unreasonable hardship. On the one hand, Batavia failed to meet at least three important deadlines, including the deadline for ultimate compliance, without informing the Board of the problems which it was experiencing or moving for extension as soon as it became apparent that it would not meet the deadlines. On the other hand, Batavia did continue with its exploration, test drilling, and property negotiations throughout the course of the prior variance. After careful consideration of the facts of the case, the Board finds that Batavia's compliance efforts resulted in satisfactory progress. The Board is particularly persuaded by the fact that all necessary property has finally been obtained.

CONCLUSION

The Board finds that, in light of all the facts of this case, denial of the requested variance would impose an arbitrary or unreasonable hardship on Batavia, and that the environmental impact of granting the variance would be minimal. Therefore, the Board will grant the requested variance. However, the Board emphasizes that this proceeding presented an extremely close case on the issues of satisfactory progress and arbitrary or unreasonable hardship. Batavia is cautioned that the Board will not look favorably upon further requests for extension or modification.

The Board has imposed several restrictions on the grant of this variance. Only those projects which Batavia has approved or which have received building permits as of this date may connect to any extension of water mains under this variance. No permits for water main extensions for these projects may be issued by the Agency until Batavia actually awards the contract for construction of the "west side" compliance plan. Additionally, this variance will automatically terminate on December 31, 1992, if Batavia has not completed construction of the "west side" improvements. The Board also notes that it has somewhat tightened the timeframes for compliance set forth in Batavia's February 7 addendum. For

example, the Board believes that preliminary engineering for the east side work should be done before January of 1992, when Batavia hopes that USEPA will promulgate final revisions to the combined radium standard. USEPA publishes proposed rules months before final action, and there is no reason that preliminary work cannot proceed before any revisions are finally effective.

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

ORDER

1. Petitioner, the City of Batavia, is hereby granted variance from 35 Ill. Adm. Code 602.105(a) "Standards of Issuance" and 602.106(b) "Restricted Status", but only as those sections relate to the 5 pCi/l combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a). This variance is subject to the conditions set forth below.
2. Only those projects which Batavia has approved or which have received building permits as of August 9, 1990 may connect to any water main extensions under this variance.
3. Compliance with the maximum allowable concentration (MCL) of combined radium, or with any standards for radium in drinking water then in effect, shall be achieved no later than November 1, 1994.
4. This variance shall terminate on the earliest of the following dates:
 - A) Thirty-four months following the effective date of any regulation promulgated by the United States Environmental Protection Agency (USEPA) which amends the MCL for combined radium, either of the isotopes of radium, or the method by which compliance with a radium maximum concentration level is demonstrated; or
 - B) When analysis pursuant to 35 Ill. Adm. Code 605.104(a), or any compliance demonstration method then in effect, shows compliance with any standards for radium in drinking water then in effect; or
 - C) November 1, 1994.
5. Notwithstanding the provisions of condition 4, this variance will terminate on December 31, 1992, if Batavia has not completed construction on the "west side" compliance plan referenced in condition 8.
6. In consultation with the Illinois Environmental Protection Agency (Agency), Batavia 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, Batavia shall collect quarterly samples of its water from its distribution system at locations approved by the Agency. Batavia 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 of radium-228. At Batavia's option, 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 analysis to:

Illinois Environmental Protection Agency
Compliance Assurance Section
Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62794-9276

7. No permits for water main extensions for the projects included in this variance (see condition 2) shall be issued by the Agency until Batavia actually awards the contract for construction of the "west side" compliance plan referenced in condition 8.
8. Batavia shall begin work on the "west side" compliance plan immediately, pursuant to the following schedule:
 - A) By November 1, 1990, Batavia shall apply to the Agency for all permits necessary for construction of all "west side" installations, changes, or additions to the public water supply needed for achieving compliance with the MCL for combined radium, or with any other standards for radium in drinking water then in effect. The permit application(s) shall be sent to:

Illinois Environmental Protection Agency
Division of Public Water Supply
Permit Section
2200 Churchill Road
Springfield, Illinois 62794-9276.

- B) Within 30 days after each construction permit is issued by the Agency, Batavia shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. Batavia shall accept appropriate bids within a reasonable time. Batavia shall notify the Agency at the address in condition 3 of each of the following actions: 1) advertisement for bids; 2) names of successful bidders, and 3) whether Batavia accepted the bids.

- C) Construction allowed on the 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 of combined radium, or with any standards for radium in drinking water then in effect, shall begin no later than August 1, 1991. Construction shall be completed by December 31, 1992.
9. For purposes of this Order, "the date of USEPA action" shall consist of the earlier of the:
- A) the effective date of any regulation promulgated by USEPA which amends the MCL for combined radium, either of the isotopes of radium, or the method by which compliance with a radium MCL is demonstrated; or
 - B) date of publication of notice by 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.
10. Work on the "east side" compliance plan shall be governed by the following schedule:
- A) Within 30 days after the date of USEPA action, Batavia shall apply to the Agency for all permits necessary for construction of all "east side" installations, changes, or additions to the public water supply needed for achieving compliance with the MCL for combined radium, or with any other standards for radium in drinking water then in effect. The permit application(s) shall be sent to the address in condition 8(A).
 - B) Within 30 days after each construction permit is issued by the Agency, Batavia shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. Batavia shall accept appropriate bids within a reasonable time. Batavia shall notify the Agency at the address in condition 3 of each of the following actions: 1) advertisement for bids; 2) names of successful bidders, and 3) whether Batavia accepted the bids.
 - C) Construction allowed on the 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 of combined radium, or with any standards for radium in drinking water then in effect, shall begin no later than nine months after the date of USEPA action. Construction shall be completed 22 months after the date

of USEPA action.

11. Pursuant to 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, Batavia shall send to each user of its public water supply a written notice to the effect that Batavia has been granted, by the Pollution Control Board, a variance from 35 Ill. Adm. Code 602.105(a) "Standards of Issuance" and 602.106(b) "Restricted Status", as they relate to the combined radium standard.
12. Pursuant to 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, Batavia shall send to each user of its public water supply a written notice to the effect that Batavia is not in compliance with the standard for combined radium. The notice shall state the average content of combined radium in samples taken since the last notice period during which samples were taken.
13. Until full compliance is achieved, Batavia 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.
14. Batavia shall provide written progress reports to the Agency every six months concerning steps taken to comply with conditions 6 through 13. Progress reports shall quote each of the conditions and then state what steps have been taken to comply with each condition. Progress reports shall be sent to:

Illinois Environmental Protection Agency
 Division of Public Water Supply
 Field Operation Section
 2200 Churchill Road
 Springfield, Illinois 62794-9276.

12. Within 45 days of the date of this Order, Batavia shall execute and forward to Bobella Glatz, Enforcement Programs, IEPA, 2200 Churchill Road, P.O.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 appealed. Failure to execute and forward the certification within 45 days renders this variance null and void. The form of the 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 89-183, dated August 9, 1990.

Petitioner

Authorized Agent

Title

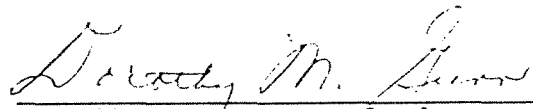
Date

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.

IT IS SO ORDERED.

J.D. Dumelle dissented, and B. Forcade was not present.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 9th day of August, 1990, by a vote of 5-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board