

ILLINOIS POLLUTION CONTROL BOARD
July 7, 1995

VILLAGE OF LAKE IN THE HILLS,)	
)	
Petitioner,)	
)	
v.)	PCB 95-108
)	(Variance-Water)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

STUART D. GORDON, MAUREEN T. MURPHY OF ZUKOWSKI, ROGERS, FLOOD & MCARDLE, APPEARED ON BEHALF OF THE PETITIONER.

STEPHEN C. EWART APPEARED ON BEHALF OF THE RESPONDENT.

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

This matter is before the Board on a March 23, 1995 Petition for Variance filed by Village of Lake in the Hills (Village). Village seeks a variance from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(b), "Restricted Status", to the extent that they relate to barium requirements under 35 Ill. Adm. Code 611.301(b). Village seeks a two-year variance to allow the well from which the contaminant is located to be operated on a standby basis until completion of its water treatment facility. The Illinois Environmental Protection Agency (Agency) filed its recommendation on April 28, 1995, advising that the variance be granted, subject to certain conditions. Village waived hearing and none was held. On June 22, 1995, Village filed a Motion for an Expedited Decision which the Board was granted by Board order dated June 29, 1995.

BACKGROUND

The Village of Lake in the Hills is a municipality located in McHenry County, Illinois. (Pet. at 1.)¹ It owns and operates a water supply and distribution system, providing potable water to 9,500 residents, and 25 businesses which employ about 130 people. (Pet. at 5.) Village is not part of a regional public water supply. (Pet. at 6.)

Petitioner's water system is comprised of one deep well

¹Petitioner's Petition for Variance will be cited as (Pet. at ____). Respondent's recommendation will be cited as (Agency Rec. at ____).

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(well #11), five shallow wells, pumps, and distribution facilities. (Pet. at 1,6.) Well #11 was constructed in answer to an expected increase in population and fire protection needs. (Pet. at 6.) As such, well #11 is used on a standby basis for unforeseen mechanical difficulties or during peak water consumption periods. (Pet. at 2.) The Board notes that Village is currently experiencing a peak water consumption period. (See Exhibits at Petitioner's Motion for an Expedited Decision.)

Village first learned that its new deep well #11 exceeded the maximum allowable concentration limit (MCL) for barium by letters dated November 3, 1994 and December 7, 1994 from the Illinois State Water Survey and from National Environmental Testing, Inc., respectively. (Pet. at Group Exh. 2.) Since notification of the violation, Village has developed a program to reduce the contaminant to levels at or below the MCL, which is explained below. Petitioner is not on restricted status for exceeding any other contaminant. (Agency Rec. at 6.)

REGULATORY FRAMEWORK

The United States Environmental Protection Agency (U.S. EPA) has promulgated a maximum concentration limit for drinking water of 2 mg/l of barium. (Agency Rec. at 7.) Illinois subsequently adopted the same limit. (Agency Rec. at 6.) Pursuant to Section 17.6 of the Illinois Environmental Protection Act (Act), any revisions to the 2 mg/l standard by the U.S. EPA will automatically become the standard in Illinois.

Village is not seeking a variance from the MCL for barium, which remains applicable to its potable water supply. Rather, Village is requesting a variance from the prohibitions imposed at 35 Ill. Adm. Code 602.105(a) and 602.106(b)² until it can achieve compliance. 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 . . . Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1001 et seq.), . . . or of this Chapter.

Section 602.106 Restricted Status

²Although both parties cited to 602.106(a) when referring to publication of the Restricted Status List in their briefs, the requirement occurs at 35 Ill. Adm. Code 602.106(b).

- 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 the Illinois regulations and is not found in federal law. It is from this prohibition which Village requests a variance. However, we emphasize that the duration of restricted status is linked to the length of time it takes the water supply to comply with the underlying standards. As such, the time frames in the proposed compliance plan itself are a concomitant, indeed an essential consideration in a restricted status variance determination, whether or not variance is being requested from those standards. Thus, grant of variance from restricted status will be conditioned upon a schedule of compliance with the 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. (CITE) Further, the burden is on the petitioner to show that its claimed arbitrary or unreasonable hardship outweighs the public interest in attaining compliance with regulations designed to protect human health and the environment. (Willowbrook Motel v. Illinois Pollution Control Board, 135 Ill.App.3d 343, 481 N.E.2d 1032 (1st Dist. 1985).)

Lastly, a variance by its nature is 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, 67 Ill.2d 267, 367 N.E.2d 684 (1977).) Accordingly, except in certain special circumstances, a variance petitioner is required, as a condition to grant of variance, to commit to a plan that is reasonably calculated to achieve compliance with the term of the variance.

ALTERNATIVE COMPLIANCE OPTIONS

Village envisions the following alternatives in order to achieve compliance:

- (a) Blending from the shallow sand and gravel aquifer wells by providing automation to operate wells 9 & 10 that are in reasonable proximity to well #11 any time #11 is utilized on a standby basis. The cost for this automation of the controls is

estimated to be \$20,000 and can be provided within 30 days of the issuance of this variance request.

- (b) Constructing a treatment facility to properly treat the contaminant to reduce it below the 2mg. per liter specified as the maximum contaminant level. The cost for this is estimated to be \$450,000. The estimated time for implementation is 21 months.

(Pet. at 9.)

COMPLIANCE PROGRAM

Petitioner has retained Wight Consulting Engineers, Inc. to review and evaluate Village's potable water supply situation, and prepare recommendations. (Pet. at 10.) Village expects implementation of alternatives (a) and (b) above will meet all applicable standards with a one-time cost of \$47.00 per person for alternative (b). (Pet. at 9.)

Village states that it will undertake the following measures during the variance period to minimize the impact of the discharge in the affected area:

- (1) In consultation with the Agency, continue its sampling program to determine as accurately as possible the level of barium in its wells and finished water. Until this variance expires, testing shall continue.
- (2) Within three months of the grant of the variance, provide proof that construction of the water treatment facility shall begin no later than November, 1995, and be completed no later than two years from the granting of the variance.
- (3) Achieve compliance with the maximum contaminant level in question no later than two years from the grant of this variance.
- (4) 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, send to each user of its public water supply a written notice to the effect that Village has been granted by the Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a), Standard of Issuance, and 35 Ill. Adm. Code 602.106(b), Restricted Status, as they relate to the barium standard.
- (5) 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, send to each user of its public water supply a written notice to the effect that Village is not in compliance with the barium standard. The notice shall state the average content of barium in samples taken since the last notice period during which samples were taken.

- (6) Until full compliance is reached, take all reasonable measures with its existing equipment to minimize the level of barium in its finished drinking water.
 - (7) Provide written progress reports to the Agency's Department of Public Water Supplies every six months concerning steps taken to comply with paragraphs 1 through 6 above. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph.
- (Pet. at 12-14.)

HARDSHIP

Both parties agree that denial of a variance from 35 Ill. Adm. Code 602.105(a), Standards for Issuance, and 35 Ill. Adm. Code 602.106(b), Restricted Status, would result in an arbitrary and unreasonable hardship for petitioner. (Pet. at 14-16, Agency Rec. at 8-9.) First, a denial would require the Agency to refuse construction and operating permits until compliance is achieved. That in turn means alternative (b), adding a treatment facility to the water system, would not begin, and well #11 could be shut down for non-compliance. In effect, the denial of a variance would severely hamper Village's ability to supply its residents with suitable water, and safely provide for the area's fire protection needs.

Secondly, if a variance is granted as to Section 602.105(a), then a variance from Section 602.106(b) is critical to restrain the Agency from publishing that petitioner is on the restricted list for violating those standards. Publication on the restricted list would mislead developers and other persons about the compliance status of petitioner's water supply, and could stifle the area's economic growth.

ENVIRONMENTAL IMPACT

Although Village made no formal assessment of the environmental effect of the requested variance, it contends that blending water from well #11 with water from the other wells will result in only a minimal amount of barium entering its potable water system. (Pet. at 11.) In addition, once the Ion Exchange Softening treatment facility is in place, enough barium will be removed to achieve a level below the federally mandated MCL of 2

mg/l. (Pet. at 10,11.) Therefore, granting of the variance will have no measurable impact on the environment.

The Agency noted that what is known about the health effects of barium--increased blood pressure and abnormal heart rhythms--comes from studies of exposure to large amounts of barium. (Agency Rec. at 7.) One study showed that drinking water with as much as 10 mg/l of barium for 4 weeks did not reveal these symptoms. (Id.) The Agency therefore agrees with Village's assertion, and believes that granting of the requested variance would not impose a significant injury to the public or the environment for the limited time period of the variance. (Agency Rec. at 8, Pet. at 10-12.)

CONSISTENCY WITH FEDERAL LAW

Both Village and the Agency state that Village may be granted variance consistent with the requirements of the Safe Drinking Water Act (42 U.S.C. 300(f) *et. seq.*), as amended by the Safe Drinking Water Act Amendments of 1986 (Pub. 99-339, 100 Stat. 642 (1986)), and the U.S. EPA National Interim Primary Drinking Water Regulations (40 CFR Part 141) because the requested relief would not be a variance from national primary drinking water regulations or a federal variance. (Pet. at 16-17, Agency Rec. at 9-10.) Specifically, granting a variance from the effects of restricted status means that only the State's criteria for variances are relevant. (Agency Rec. at 10.)

Both Village and the Agency recognize that Village remains subject to the possible enforcement actions for violating standards for the contaminant in question. (Pet. at 17, Agency Rec. at 10.)

TERMS OF VARIANCE

Village requests that the term of variance be from the date of the grant to March, 1997, or when analysis pursuant to 35 Ill. Adm. Code 605.104(a) reveals compliance with the barium standard, whichever occurs first. (Pet. at 2.) The Agency recommends that a variance be granted until March 31, 1997 to allow Village to complete its treatment facility and make any necessary adjustments thereafter to achieve and maintain compliance with the Act. (Agency Rec. at 11.)

CONCLUSION

After considering all the facts and circumstances of this case, the Board finds that Village has presented adequate proof that immediate compliance with 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, would impose an arbitrary or unreasonable hardship upon Village. We particularly note not only Village's urgent need to provide its

residents with sufficient amounts of water (See Exhibits at Petitioner's Motion for an Expedited Decision), but also, Village's firm commitment, both financially and otherwise, towards achieving compliance. The Board therefore will allow Village until March 31, 1997 to achieve compliance, subject to conditions listed in this Opinion and Order.

The Board agrees with the parties that granting this variance will pose no significant health risk to either the persons served by Village's potable water supply, or the surrounding environment, assuming that compliance is timely forthcoming. The Board will accordingly grant a variance consistent with this Opinion and Order.

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

ORDER

Petitioner, the Village of Lake in the Hills (Village), is hereby granted variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, but only as they relate to the 2 mg/l barium standard of 35 Ill. Adm. Code 611.301(b), subject to the following conditions:

- (1) This variance shall terminate on the earliest of the following dates:
 - (a) March 31, 1997; or
 - (b) When analyses pursuant to 35 Ill. Adm. Code 605.103, or any compliance demonstration then in effect, show compliance with the barium standard or any standard for barium in drinking water then in effect.
- (2) Compliance with the maximum allowable concentration level of barium, or with any revised standard for barium in drinking water then in effect, shall be achieved no later than March 31, 1997.
- (3) In consultation with the Illinois Environmental Protection Agency (Agency), Village shall continue its sampling program to determine as accurately as possible the level of barium in its wells and finished water. Until this variance terminates, Village shall collect and analyze quarterly samples of its water from its entry point into the distribution system at locations approved by the Agency, in accordance with 35 Ill. Adm. Code 611.680. Village shall use the Agency laboratory or a laboratory certified by the State of Illinois for barium analysis. Results of the analyses shall be

reported within 30 days of receipt of each analysis to:

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

If Village elects to conduct weekly or monthly analyses for barium, it shall report those results to the Agency within 30 days of receipt of said analyses.

- (4) Within 6 (six) months after the grant of variance, Village shall submit a Compliance Report detailing all measures that have been necessary to achieve compliance. If further measures are necessary, Village shall include milestones for each compliance method, including, but not limited to:
 - (a) Dates of applications for all permits necessary for construction of installation changes or additions to the public water supply needed for achieving compliance with federal and State statutes and regulations;
 - (b) Date for advertisements of bids for said construction;
 - (c) Dates for initiation of construction allowed by the construction permits;
 - (d) Dates for completion of said construction; and
 - (e) Dates for achieving compliance with federal and State statutes and regulations.

With this Compliance Report, Village shall submit a statement regarding the financial resources that are or may be available to bring their public water supply into compliance.

- (5) Every 6 (six) months after the date of the Compliance Report, Village shall submit an updated Compliance Report of sufficient detail to demonstrate the progress made in achieving the milestones and goals outlined in the first Compliance Report. The Compliance Report and all subsequent communications shall be submitted to:

Illinois Environmental Protection Agency
Field Operations Services
2200 Churchill Road
P.O. Box 19276

Springfield, Illinois 62794-9276

- (6) 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, Village shall send to each user of its public water supply a written notice to the effect that Village has been granted by the Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a), Standard of Issuance, and 35 Ill. Adm. Code 602.106(b), Restricted Status, as they relate to the barium standard.
- (7) If results of analyses performed on samples pursuant to 35 Ill. Adm. Code 611.648 reveal a violation of the barium MCL, then public notice shall be made pursuant to 35 Ill. Adm. Code 611.851(b).
- (8) Until full compliance is achieved, Village shall take all reasonable measures with its existing equipment to minimize the level of barium in its finished drinking water.
- (9) Within 45 days of the date of this Order, Village shall execute and forward to:

Stephen C. Ewart
Division of Legal Counsel
Illinois Environmental Protection Agency
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 being appealed. Failure to execute and forward the Certificate within 45 days renders this variance void 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 Illinois Pollution Control Board, in PCB 95-108, July 7, 1995.

Petitioner: _____

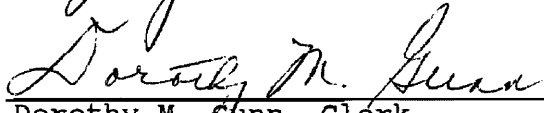
By: Authorized Agent

Title: _____

Date: _____

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 Rule of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246, Motions for Reconsideration.)

I, Dorothy Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 7th day of July, 1995, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board