

ILLINOIS POLLUTION CONTROL BOARD
September 7, 1995

CITY OF YORKVILLE,)
)
 Petitioner,)
)
 v.) PCB 95-142
) (Variance-Water)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

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

On May 10, 1995 the Board received a petition for an extension of variance filed by the City of Yorkville (Yorkville). Yorkville is seeking an extension of a variance granted the May 24, 1990 Board order in PCB 90-21. Yorkville was granted relief from 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 35 Ill. Adm. Code Section 611.330(a).) The current variance expired May 24, 1995. Yorkville is asking that the Board extend the variance until May 24, 2000, or until the United States Environmental Protection Agency (USEPA) takes final action with respect to a new radium standard, whichever comes first.

On June 9, 1995, the Board received a response from the Illinois Environmental Protection Agency (Agency) which recommends that the variance be granted with certain conditions. Yorkville waived hearing and the Board received no requests for a hearing, so none was held.

BACKGROUND

Yorkville is located in Kendall County and provides potable water to a population of 4,970, including residential, commercial and industrial customers. (Pet. at 2.)¹ Yorkville's water distribution system consists of two deep wells, pumps and distribution facilities. (Id.) In 1994, water was pumped at an average rate of approximately 530,000 gallons per day. (Id.)

The most recent analysis of petitioner's water supply was conducted in August, 1994. (Rec. at 5.) The results showed a combined radium content of 14.0 pCi/L at Tap #2, and a combined radium content of 12.6 pCi/L at Tap #3. (Id.) These levels exceed the current federal and state 5 pCi/L combined standard

¹The Petition for Variance shall be referred to as (Pet. at __.) and the Agency Recommendation shall be referred to as (Rec. at __.).

for radium.

Yorkville is seeking an extension of the variance for its water distribution system until May 24, 2000 or until the USEPA adopts a new radium standard, whichever first occurs. If the USEPA enacts the proposed 20 pCi/L standard for radium-226 and radium-228, as the parties contend, then Yorkville will be in compliance without incurring additional cost. (Pet. at 9.)

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, 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

- 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 prohibit communities from extending water service 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 Yorkville 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 an essential consideration in a restricted status variance determination, whether or not variance is being requested from those standards. Granting a variance from restricted status, then, 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. (415 ILCS 5/35(a)(1992).) The burden is upon the petitioner to show that its claimed 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).) Only with such a 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, 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, a petitioner is required, except in certain circumstances, to commit to a plan which is reasonably calculated to achieve compliance with the term of the variance.

Is it 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 a variance grant or denial.

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. 45501). 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. (56 Fed.Reg. 33050, 33100 (July 18, 1991). Under the USEPA's calendar, these standards were scheduled to be published by April 1995. Due to lack of funding, however, the publishing deadline was extended to September 15, 1995.

COMPLIANCE PLAN

After being informed that radium levels were above the standard, Yorkville investigated options which would bring radium concentrations into compliance. (Pet. at 4-5.) At the recommendation of its consultants, Yorkville first explored the Iso-Clear system, a promising new treatment that ultimately proved infeasible because a filter unit could not withstand the demands of a full-scale operation. (Pet. at 5.)

Yorkville also attempted to purchase water from the neighboring city of Plano. Negotiations, however, broke down several times, and no agreement was ever reached.

Yorkville then investigated blending as a feasible compliance option. This option required the construction of a shallow well, from which water would then be blended with the city's deep wells, thereby diluting the radium concentrations. Over a 15-month period, Yorkville's consultants explored several sites, finally settling upon one which required Yorkville to enter into protracted negotiations with the owner of the site.

Yorkville spent nearly \$150,000 for radium testing, consultants' reports, locating potential well sites for blending, and purchasing a shallow well site for blending. (Pet. at 7.) Yorkville further states that all actions with respect to the shallow well site are completed, short of final design and construction. (Pet. at 7.)

ENVIRONMENTAL IMPACT

The Agency states that, while radiation at any level creates some risk, the risk associated with this level is very low. (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. (*Id.*) The Agency concludes 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. (Rec. at 9.)

Yorkville incorporated by reference the testimony of and exhibits presented by Richard E. Toohey, Ph.D. and Dr. James Stebbings, and based on that testimony, stated that there will be little, if any, adverse environmental or health impact caused by a grant of the requested variance. (Pet. at 3.)

HARDSHIP

Yorkville asserts that denial of the variance would

constitute an arbitrary or unreasonable hardship because the grant of the variance would cause little if any adverse environmental impact. (Pet. at 8.) In contrast, Yorkville argues, a denial of the variance extension would terminate the significant development which it currently is experiencing, and which has necessitated the expansion of the water supply system. (Rec. at 8.)

Denial of Yorkville's variance request would also require the city to expend hundreds of thousands of dollars to blend deep well water with shallow well water to come into compliance with a standard which may be changed soon to a point where said expenditures would be unnecessary. (Pet. at 9.) Thus, the adverse economic impact would far outweigh any health effects associated with the consumption of Yorkville's water. (Id.)

Petitioner 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". However, according to Yorkville, that provision 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. (Pet. at 9.)

The Agency believes that the grant of the variance would impose "no significant health risk for a limited population served by new water main extensions". (Rec. at 9.) Denial of the requested variance, the Agency believes, would result in an arbitrary or unreasonable hardship due to resulting denials of construction and operating permits. (Id.) Thus, the Agency supports a grant of the variance.

CONSISTENCY WITH FEDERAL LAW

Both Yorkville and the Agency agree that the Board may grant the requested variance consistent with federal law. (Pet. at 12; Rec. at 10.) The requested variance would allow for water main extensions, but is not a variance from the national primary drinking water regulations. (Pet. at 12.) Further, according to the Agency, granting variance from the effects of restricted status affects state, not federal, laws and regulations. (Rec. at 10.)

CONCLUSION

Yorkville is requesting an extension of an existing variance granted by the Board in 1990. Despite substantially conforming to the conditions of the prior variance, Yorkville is not currently in compliance with the drinking water standard for radium. At a cost of nearly \$150,000 petitioner completed preliminary work for the construction of a shallow well in

anticipation of combining it with deep well water which would achieve compliance with the current radium standard of 5 pCi/L.

Yorkville 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 the standards are adopted as proposed, Yorkville would be in compliance. USEPA is under court order to promulgate the new radium drinking water standards by September 15, 1995. (Miller v. Browner, No. 89-6328-HO, 56 Fed. Reg. 33050, 33126 (July 1, 1991).) The Agency agrees with Yorkville that no significant injury to the public is likely from contamination at the present radium levels. (Rec. at 8.)

Yorkville has shown that a hardship would result 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, Yorkville has submitted a compliance plan that would be implemented. Yorkville 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 the date of USEPA action on the radium standards, or May 24, 2000, 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 Yorkville, a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), 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) May 24, 2000.
- (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 its 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 analyses shall be reported to the Compliance Assurance Section, Drinking Water Quality Unit, Bureau of Water, P.O. Box 19276, 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 petitioner's 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 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, petitioner will send to each user of its public water supply a written notice to the effect that petitioner has 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(b), Restricted Status, as it relates to the MCL standard in question.
- (I) Until full compliance is reached, petitioner shall take all reasonable measures with existing equipment to minimize the level of contaminants in its finished drinking water.
- (J) 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.

IT IS SO ORDERED.

If petitioner chooses to accept this variance subject to the above order, within forty-five days of the grant of variance, 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 Illinois Pollution Control Board, in PCB 95-142, September 7, 1995.

Petitioner: _____

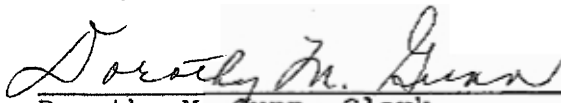
By: Authorized Agent

Title: _____

Date: _____

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1994)) 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 September, 1995, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board