

ILLINOIS POLLUTION CONTROL BOARD  
November 8, 1990

CITY OF OTTAWA, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 90-100  
 ) (Variance)  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

MR. JOHN A. HAYNER APPEARED ON BEHALF OF PETITIONER;

MS. BOBELLA GLATZ APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board upon the filing by the City of Ottawa ("Ottawa") on May 17, 1990 of a Petition for Extension of Variance ("Pet."). Amended Petitions were filed on June 6, 1990, July 6, 1990, and October 16, 1990. Ottawa requests extension of the two-year variance granted by the Board on April 27, 1989 in PCB 88-180. Ottawa seeks relief from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(b), "Restricted Status", to the extent those rules relate to violation by Ottawa's public water supply of the 5 picocuries per liter ("pCi/l") combined radium-226 and radium-228 standard of 35 Ill. Adm. Code.Subtitle F<sup>1</sup>. Variance is requested to extend until September 5, 1992.

The Illinois Environmental Protection Agency ("Agency") filed its Variance Recommendation ("Rec.") on July 30, 1990. The Agency recommends that variance be granted, subject to conditions.

Ottawa originally waived hearing. However, on June 8, 1990 an interested citizen, Mr. Michael T. James, filed a request for hearing. Hearing was held on August 13, 1990 in the Ottawa City Council Chambers. Mr. James presented both oral and written comments (R. at 44-50). Ottawa filed a response to Mr. James' comments on August 28, 1990 ("Resp").

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<sup>1</sup> The standard for combined radium was formerly found at 35 Ill. Adm. Code 604.301(a); effective September 20, 1990 it was recodified to 35 Ill. Adm. Code 611.330(a) (see Illinois Register, Volume 14, Issue 40, October 5, 1990).

Based on the record before it, the Board finds that Ottawa has presented adequate proof that immediate compliance with the Board regulations at issue would impose an arbitrary or unreasonable hardship. Accordingly, the variance will be granted, subject to conditions as set forth in this Opinion and Order.

#### BACKGROUND

Ottawa is a municipality located in LaSalle County. Among other services, Ottawa provides drinking water to 6,000 residential and 500 industrial and commercial utility customers representing a population of approximately 18,000 persons. Ottawa's water supply system includes four deep wells, storage tanks, pumps, and distribution facilities. The wells are identified by number as Wells 8, 10, 11, and 12.

Ottawa was initially notified of noncompliance with the combined radium standard by letter from the Agency dated October 4, 1985. Combined radium concentrations have subsequently been determined from various positions within the water supply system, including both the well-heads and within the distribution system subsequent to blending. The most recent distribution system analyses show the blended concentration for the period from July 1, 1989 to July 1, 1990 to have been 6.6 pCi/l combined radium (Resp. ¶3). For an earlier 12-month period reported on March 28, 1990 the distribution system concentration was 6.8 pCi/l (Rec. ¶10).

Well 12 is a recently-constructed well developed as part of Ottawa's program to provide a low-radium source of water for blending with water from the older wells. However, Ottawa desires to conduct further work on the well with the intent of further lowering the radium concentration in the well. This intent is to be achieved by casing those portions of the well from which the highest radium water are produced.

As regards water from the individual wells, Well 11 appears to have a concentration less than the 5 pCi/l standard, and Wells 8 and 10, plus Well 12 in its current configuration, appear to have combined radium concentration in the range of 10 to 12 pCi/l (R. at 36-7). Well 12, when cased as intended, is expected to produce waters with a combined radium concentration less than 5 pCi/l (R. at 37).

#### REGULATORY FRAMEWORK

In recognition of a variety of possible health effects occasioned by exposure to radioactivity, the USEPA has promulgated a maximum concentration limit for drinking water of 5 pCi/l of combined radium-226 and radium-228. Illinois subsequently adopted this same limit as the maximum allowable

concentrations under Illinois law. Pursuant to Section 17.6 of the Illinois Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 ½, par. 1017.6), any revision of the 5 pCi/l standard by the USEPA will automatically become the standard in Illinois.

The action that Ottawa requests here is not variance from the maximum allowable concentration for radium. Regardless of the action taken by the Board in the instant matter, this standard will remain applicable to Ottawa. Rather, the action Ottawa requests is the temporary lifting of prohibitions imposed pursuant to 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. 1981, ch. 111 ½, 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.

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 Illinois regulations not found in federal law. It is this prohibition which Ottawa requests be lifted. Moreover, grant of the requested variance would not absolve Ottawa from compliance with the combined radium standard, nor insulate Ottawa from possible enforcement action brought for violation of those 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 (Ill. Rev. Stat. 1989, ch. 111 ½, par. 1035(a)). 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. IPCB (1977), 135 Ill.App.3d, 481 N.E.2d, 1032). Only with such 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 (Monsanto Co. v. IPCB (1977), 67 Ill. 2d 276, 367 N.E.2d, 684), and compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter (Id.). 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.

#### PREVIOUS AND EXISTING VARIANCE

Ottawa has been granted two two-year variances from the same regulations as issue here. The first variance was granted on March 5, 1987 in PCB 86-179 (76 PCB 98 et seq.) and expired on March 5, 1989. The second variance was granted on March 9, 1989 in PCB 88-180 (97 PCB 117 et seq.) and is set to expire on March 5, 1991<sup>2</sup>.

Ottawa contends, and the Agency does not contest, that it has generally complied with conditions imposed in the previous and existing variances, including sampling to determine radium levels in the existing wells and finished water, applying for necessary Agency permits, following required bidding procedures, publishing public notice and maximizing the use of Well 11, all as documented in the required bi-monthly progress reports submitted to the Agency (Pet. ¶22).

A condition not met is timely completion of Well 12 and subsequent demonstration of compliance. Pursuant to condition F of the current variance, Well 12 was to have been "completed no later than March 5, 1990" (98 PCB 261). Drilling of the well was in fact finished in July, 1989 (Pet. ¶5). However, numerous unforeseen difficulties and delays have prevented Ottawa from achieving compliance via Well 12, and hence having "completed" the well in this sense (Pet. ¶3-23). Principal among these has been that the upper portion of the production zone in Well 12 provides waters which raises the average concentration of the well water to above 5 pCi/l.

#### COMPLIANCE PROGRAM

Ottawa's continues, as it did under the terms of the prior variances, to seek compliance via blending. Initially, however, it will be necessary do additional work on Well 12 and perhaps to also do some rehabilitation to Well 8 and/or Well 10. In each

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<sup>2</sup> Shortly after grant of the PCB 88-180 variance, Ottawa moved for modification of one of the conditions imposed upon the variance. Ottawa's motion was granted by Board Order April 27, 1989 (98 PCB 259 et seq.). The term of the variance was not altered by this action.

case the work is premised on the observation that the high-concentration waters are entering the wells near the top of the production zone. Thus, Ottawa believes that it can lower the overall radium concentration of the waters as produced by casing off the high-radium zone in Well 12 and increasing production from the lower portion of the producing zone in Wells 8 and/or 10. Blending of the waters from Wells 8, 11, and 12<sup>3</sup> is then expected to provide distribution system waters of less than 5 pCi/l (R. at 29).

Ottawa anticipates that the casing of Well 12 will be completed within approximately one year, and requests that the variance extend a year thereafter to allow for a compliance demonstration (July 6 Amend. Pet. ¶2). Ottawa further requests that rehabilitation work on Wells 8 and 10 be deferred until USEPA decides what, if any, revised radium standards will be promulgated. Ottawa observes that rehabilitation of Wells 8 and 10 would not be necessary if the standards are to be set at 10 pCi/l or above (Oct. 16 Amend. Pet., ¶8).

#### HARDSHIP

Despite its continuing efforts at providing an alternative water supply via Well 12, rehabilitation of Wells 8 and 10, and blending, Ottawa is not yet able to provide a water supply which consistently achieves a standard of 5 pCi/l of combined radium. Therefore, Ottawa would presumably again be placed on restricted status following expiration of its current variance in March 1991. When on restricted status, Ottawa would be unable to extend service to new customers. This would act to the detriment of customers who need public water supply for functional use of property.

#### PUBLIC INTEREST

Although Ottawa has not undertaken a formal assessment of the environmental effect of its requested variance, it contends that there will be little or no adverse impact caused by the granting of variance (Pet. ¶10). The Agency contends likewise (Rec. ¶16). In support of its contention, the Agency references testimony presented by Richard E. Toohey, Ph.D. of Argonne National Laboratory at the hearing held on July 30 and August 2, 1985 in R85-14, Proposed Amendments to Public Water Supply Regulations, 35 Ill. Adm. Code at 602.105 and 602.106, and to updated testimony presented by Dr. Toohey in the Board's hearing on the Braidwood variance, PCB 89-212 (Rec. ¶15).

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<sup>3</sup> Well 10 is currently scheduled for stand-by use only (R. at 29).

The Agency believes that while radiation at any level creates some risk, the risk associated with Ottawa's water is low (Rec. ¶14). 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 of the public from grant of that variance. In light of the cost to the Petitioner of treatment of its current water supply, 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, and the possibility of compliance with the MAC standard due to blending or a new deep well, etc., 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. Grant of variance may also, in the interim, lessen exposure for that portion of the population which will be consuming more effectively blended water. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the standards.

(Rec. ¶26 and ¶27)

#### CONCLUSION

The Board finds that, in light of all the facts and circumstances in this case, denial of variance would impose an arbitrary or unreasonable hardship upon Ottawa. The Board also agrees with the parties that no significant health risk will be incurred by persons who are served by any new water main extensions, assuming that compliance is timely forthcoming. In reaching these conclusions, the Board notes that it gives weight to Ottawa's compliance efforts to date and to the small amount of the radium exceedance.

The Board also notes that promulgation of a new radium standard by the USEPA might significantly alter Ottawa's compliance circumstance, even perhaps removing the need for a variance from restricted status. While it is well-established that a speculative change in the law is not grounds for establishing arbitrary or unreasonable hardship (e.g., Citizens Utilities Company of Illinois v. IPCB (1985), 134 Ill.App.3d,

111,115), the Board believes that in some situations a prospective change in law may appropriately be reflected in the conditions upon which a variance is granted. In the instant case the Board believes that it is appropriate to condition the grant of variance in such manner as to best assure that Ottawa will achieve compliance with whatever standard is ultimately applicable and that Ottawa will not need to prematurely return to this Board to request another variance extension. With these ends in mind, the Board will make expiration of the variance dependent upon the date of USEPA alteration (or notice of refusal to alter) of the radium standard. Ottawa will have one year thereafter to make the improvements (if any) necessary to achieve compliance and one additional year for a compliance demonstration.

Ottawa is to bear in mind that today's action is solely a grant of variance from restricted status. Ottawa is not being granted variance from compliance with the combined radium standard, nor does today's action insulate Ottawa in any manner against enforcement for violation of that standard.

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

ORDER

Petitioner, City of Ottawa, is hereby granted variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, as they relate to the standard for radium in drinking water of 35 Ill. Adm. Code.Subtitle F, subject to the following conditions:

- (A) For the purposes of this Order, the date of USEPA action shall consist of the earlier of the:
  - (1) effective date on any regulation promulgated by the U.S. Environmental Protection Agency ("USEPA") which amends the maximum concentration level for combined radium, either of the isotopes of radium, or the method by which compliance with a radium maximum concentration 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) Variance shall terminate on the earliest of the following dates:
  - (1) Two years following the date of USEPA action; or
  - (2) November 8, 1995; or

- (3) When analysis pursuant to 35 Ill. Adm. Code 611.720(d), or any compliance demonstration method then in effect, shows compliance with any standards for radium in drinking water then in effect.
- (C) Compliance shall be achieved with any standards for radium then in effect no later than the date on which this variance terminates.
- (D) In consultation with the Illinois Environmental Protection Agency ("Agency"), Petitioner 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, Petitioner shall collect quarterly samples of water from its distribution system at locations approved by the Agency. Petitioner 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 radium-228. At the option of Petitioner 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 result to:

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

- (E) Petitioner shall apply to the Agency at the address below for all permits necessary for construction of installations, changes, or additions to Petitioner's public water supply needed for achieving compliance with the maximum allowable concentration for combined radium, or with any standards for radium in drinking water then in effect:

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

- (F) Within three months after each construction permit is issued 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. Petitioner shall accept appropriate bids



within a reasonable time. Petitioner shall notify the Agency at the address in condition (D) of each of the following actions: 1) advertisement for bids, 2) names of successful bidders, and 3) whether Petitioner accepted the bids.

- (G) 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 maximum allowable concentration of combined radium, or with any standards for radium in drinking water then in effect, shall be completed no later than one year following the date of USEPA action or November 8, 1994, whichever is earlier.
- (H) Pursuant to 35 Ill. Adm. Code 611.851(b) (formerly 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, Petitioner shall send to each user of its public water supply a written notice to the effect that Petitioner 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(b) Restricted Status, as they relate to the radium standard.
- (I) Pursuant to 35 Ill. Adm. Code 611.851(b) (formerly 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, Petitioner shall send to each user of its public water supply a written notice to the effect that Petitioner is not in compliance with standard for radium. The notice shall state the average content of radium in samples taken since the last notice period during which samples were taken.
- (J) Until full compliance is achieved, Petitioner 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.
- (K) Petitioner shall provide written progress reports to the Agency at the address below every six months concerning steps taken to comply with paragraphs A-J. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph.

Illinois Environmental Protection Agency

Division of Public Water Supply  
Field Operations Section  
2200 Churchill Road  
Springfield, Illinois 62794-9276.

Within 45 days of the date of this Order, Petitioner shall execute and forward to Stephen C. Ewart, Division of Legal Council, Illinois Environmental Protection Agency, 2200 Churchill Road, Post Office 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 and 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 Pollution Control Board in PCB 90-100,  
November 8, 1990.

\_\_\_\_\_  
Petitioner

\_\_\_\_\_  
Authorized Agent

\_\_\_\_\_  
Title

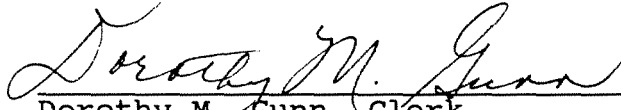
\_\_\_\_\_  
Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1989 ch. 111 ½ 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.

Board Members Jacob D. Dumelle and Bill Forcade dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and Order was adopted on the 8<sup>th</sup> day of November, 1990, by a vote of 5-2.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board