# ILLINOIS POLLUTION CONTROL BOARD October 17, 1996

VILLAGE OF ROCKDALE,	)	
	)	
Petitioner,	)	
	)	PCB 97-13
V.	)	(Variance - Public Water Supply)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

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

This matter is before the Board on the Village of Rockdale's (Rockdale) petition for variance filed on July 16, 1996. Rockdale is seeking a variance from the requirements of 35 Ill. Adm. Code 602.105(a), "Standards for Issuance" and 35 Ill. Adm. Code 611.106(a) "Restricted Status", to the extent these requirements involve 35 Ill. Adm. Code 611.330(a) and (b) which establishes the maximum contaminant level (MCL) for combined radium-226 and radium-228 of 5.0 picocuries per liter (pCi/L), and gross alpha particle activity level of 15.0 pCi/L, respectively. The Village requests a five-year variance.

On August 12, 1996 the Illinois Environmental Protection Agency (Agency) filed its variance recommendation. The Agency recommends that a five-year variance be granted subject to certain conditions. Rockdale waived hearing and no hearing was held.

The Board's responsibility in this matter arises from the Illinois Environmental Protection Act (Act). (415 ILCS 5/1 et seq. (1994).) The Board is charged with the responsibility of granting variance from Board regulations whenever it is found that immediate compliance with the regulations would impose an arbitrary or unreasonable hardship upon the petitioner. (415 ILCS 5/35(a).) The Agency is required to appear at hearings on variance petitions (415 ILCS 5/4(f)), and is charged, among other things, with the responsibility of investigating each variance petition and making a recommendation to the Board as to the disposition of the petition. (415 ILCS 5/37(a).)

For the following reasons, the Board finds that Rockdale has presented adequate proof that immediate compliance with the Board's regulations for "Standards for Issuance" and "Restricted Status" would impose an arbitrary or unreasonable hardship. Accordingly, the request for a variance from the Board's "Standards of Issuance" and "Restricted Status" is granted, beginning on the date of this opinion and subject to the conditions set forth in the attached order.

## **BACKGROUND**

Rockdale is a municipality located in Will County, Illinois. (Pet. at 1.)<sup>1</sup> Rockdale provides a potable water supply and distribution system to a population of approximately 640 residential representing approximately 1,700 residents and 44 industries and businesses employing approximately 900 people. (Pet. at 3.) Rockdale's water supply and distribution system consists of one deep well, two shallow wells, pumps and distribution facilities. (*Id.*) Rockdale is not part of a regional public water supply. (*Id.*)

In a letter dated June 10, 1986, the Agency first advised Rockdale that its water supply showed a gross alpha particle activity level of 23.0 pCi/L, exceeding the 15.0 pCi/L MCL. (Rec. at 6, Pet. at 4.) However, the most recent gross alpha particle activity level analyses, completed on April 12, 1996, showed a level of 1.0 pCi/L, which does not exceed the 15.0 pCi/L MCL. (Rec. at 5, 6.) Therefore, the Agency found that Rockdale is currently in compliance with the gross alpha particle activity level. (Rec. at 2, 6.)

The Agency first advised Rockdale that its water supply exceeded the MCL for combined radium in a letter dated August 23, 1985. (Pet. at 4.) The Agency's analyses showed a level of 11.8 pCi/L for combined radium content, exceeding the 5.0 pCi/L MCL. (*Id.*) The most recent analyses of Rockdale's water supply completed at Tap 2, Well 2 was on April 24, 1995. (Rec. at 5.) This sample revealed that the water supply has a combined radium content of 5.9 pCi/L. (*Id.*) This level exceeds the 5.0 pCi/L combined standard for radium-226 and radium-228. (*Id.*)

On July 23, 1996, the Agency notified Rockdale that it violated the Environmental Protection Act (Act) by not providing public notice to the users of the water supply that the water exceeded the MCL levels for radium-226 and radium-228. (415 ILCS 5/18 (1994), 35 Ill. Adm. Code 611.852.) (Rec. at 4.) However, on July 29, 1996, the Mayor of Rockdale, James Jimenez, signed a Letter of Commitment with the Agency that Rockdale will comply with the Act by sending its customers notice that the water supply exceeds the MCL levels for radium-226 and radium-228. (Rec. at 4-5.)

Rockdale is requesting a variance to allow for expansion or extension of its water supply and distribution system. Rockdale foresees extending its water mains to serve the following: (1) Banner Western, an existing industrial facility; (2) Berryman Transfer, an existing industrial facility; and (3) the American Legion Hall. (Pet. at 4.) Rockdale has not filed a previous variance petition. (Pet. at 7.)

#### REGULATORY FRAMEWORK

In determining whether any variance is to be granted, the Act requires the Board to ascertain 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

<sup>&</sup>lt;sup>1</sup> Rockdale's Petition for Extension of Variance will be cited as (Pet. at \_\_\_); the Agency's Recommendation will be cited as (Rec. at \_\_\_.).

5/35(a).) Furthermore, the burden is upon 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, 135 Ill.App.3d 343, 481 N.E.2d 1032 (1st Dist. 1977).) The petitioner must establish this burden in order for the claimed hardship rise to the level of arbitrary or unreasonable hardship.

Rockdale does not seek a variance from the MCL of 5.0 pCi/L for combined radium. (Pet. at 13.) The radium standard will remain applicable to Rockdale's water supply irrespective of the action taken by the Board. Rather, the instant variance request concerns two features of the Board's public water supply regulations: Standards for Issuance and Restricted Status. These features are found at 35 Ill. Adm. Code 602.105 and 602.106, respectively, and in pertinent part 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...or of this chapter.

(35 Ill. Adm. Code 602.105.)

#### 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.
- b) The Agency shall publish and make available to the public, at intervals of nor more than six months, a comprehensive and up-to-date list of supplies subject to restrictive status and the reasons why.

#### (35 Ill. Adm. Code 602.106.)

The principal effect of these regulations is that public water suppliers are prohibited from extending water service due to their inability to obtain the requisite permits, unless and until their water meets all the standards for finished water supplies. A 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 actions for violating those standards. The underlying standards remain applicable to the petitioner regardless of whether the variance is granted or denied.

Standards for combined radium in drinking water were first adopted as National Interim Primary Drinking Water Regulations by the United States Environmental Protection Agency (USEPA) in 1976. The standard adopted was 5.0 pCi/L for the sum of two isotopes of

radium: radium-226 and radium-228 ("combined radium"). Shortly thereafter Illinois adopted the same limits. Although characterized as "interim" limits, these standards are the MCLs under both federal and Illinois law, and will remain so unless modified by the USEPA. In anticipation of USEPA's revision of the radium standard, the Illinois legislature amended the Act at Section 17.6 in 1988 to provide that any new federal radium standard will immediately supersede the current Illinois standard. The state standard is therefore inexorably tied to the federal standard, and cannot be greater than or less than the federal limit.

Since their original promulgation, the current radium standards have been under review at the federal level. The USEPA has been evaluating the interim radium standards pursuant to Sections 1412(b)(1)(B) and 1412(b)(2) of the Safe Drinking Water Act that require USEPA to propose and promulgate the National Revised Primary Drinking Water Regulations. On October 5, 1983 USEPA announced its intention of revising the interim radionuclides standards in an Advanced Notice of Proposed Rulemaking (ANPR). (48 Fed.Reg. 45502). In that notice, USEPA stated that it would perform a comprehensive reassessment of the interim standards in order to optimize public health protection without unnecessary economic burdens on states and communities. It later republished this ANPR in September 1986, establishing MCL goals for radionuclides and providing information related to establishing MCLs for radionuclides. (51 Fed.Reg. 34836).

On July 18, 1991 the USEPA published a rulemaking proposal which included a revision of the interim standards for radium-226 and radium-228. (56 Fed.Reg. 33050). USEPA proposes to replace the 5.0 pCi/L combined radium standard with separate MCLs of 20.0 pCi/L each for radium-226 and radium-228. In proposing the revised MCLs, USEPA gave consideration to available technologies and associated costs, analytical capabilities and health risks associated with the contaminants. USEPA determined that alternatives at the 10<sup>-4</sup> lifetime risk level, approximately 20.0 pCi/L for both radium-226 and radium-228, are protective to human health. Hence, the USEPA concluded that it was not cost effective to set MCLs for radium at the technically feasible level of 5.0 pCi/L.

This change in the radium standard was to be promulgated by April 1995, but the deadline was later extended to September 1995. However, Congress prohibited funds for the promulgation of final radionuclide standards for fiscal year 1994 and 1995. Mr. Joseph Harrison, Chief of the Safe Drinking Water Division, USEPA Region V, announced that in light of the projected proposal for the relaxed standard, the USEPA would not force any municipality to spend funds to comply with the federal combined standard.

#### COMPLIANCE PLAN

Rockdale does not have any existing controls for reducing its combined radium levels. (Pet. at 5.) Rockdale proposes to use other wells for blending purposes to achieve compliance. (Pet. at 5, Rec. at 6.) The estimate construction costs is \$66,000, and the estimated implementation time is eighteen to twenty-four months. (Pet. at 5, 6.) In addition, Rockdale intends to retain an outside consultant to assist in reviewing and evaluating the radium levels in

the water. (Pet. at 6.) The outside consultant will also prepare recommendations for achieving compliance with the radium standards. (*Id.*)

Rockdale points to the uncertain status of the federal standard for combined radium, and states that the most appropriate course of action is to seek a variance that is linked to the adoption or non-adoption of revised radium standards. (Pet. at 12.) Rockdale believes that a variance would relieve it from expending significant public funds to design and construct facilities which may become unnecessary by the time it is completed. (*Id.*)

#### ARBITRARY OR UNREASONABLE HARDSHIP

Rockdale states that denial of its request for a variance would pose an arbitrary or unreasonable hardship because significant development would be delayed or precluded. (Pet. at 10, 12.) In addition, Rockdale states that denial of its requested variance would be an arbitrary or unreasonable hardship because it would require the Agency to keep Rockdale on its restricted status list. Placing Rockdale on restricted status requires the Agency to reject construction and operating permits until compliance with the standards is achieved, which in turn means that no new water main extensions could be constructed, and further development would be obstructed. (Pet. at 3, 10, 12.)

## ENVIRONMENTAL IMPACT

In its recommendation, the Agency stated its belief that granting the requested variance would impose no significant injury to the public or the environment. (Rec. at 7-10.) The Agency asserts that the proposed variance should cause no significant health risk for the population served by any new water main extensions for the time period of the recommended variance. (Rec. at 10.) The Agency relies on testimony presented by Richard E. Toohey, Ph.D., of Argonne National Laboratory, at hearings held on July 30 and August 2, 1985 in R85-14, Proposed Amendments to Public Water Supply Regulations, 35 Ill.Adm.Code 602.105 and 602.106. (Rec. at 8.)

#### CONSISTENCY WITH FEDERAL LAW

The parties believe the Board can grant the requested variance consistent with the Safe Drinking Water Act, PL 93-523, as amended by PL 96-502, 42 U.S.C. 300(f) and the USEPA drinking water regulations (40 CFR 141 (1993)). The requested variance, which would allow construction of water main extensions, would not be a variance from federal drinking water regulations, but only a variance from the state's regulations regarding Restricted Status and Standards of Issuance. Since only state criteria are relevant in this request for variance, there is no conflict with federal law. The parties point out that granting the variance will not insulate Rockdale from possible enforcement actions for violations of the radium standards. However, the USEPA has indicated that it will not intervene in variances which trigger final design and construction of compliance equipment by the date on which USEPA revises the MCL for radium set forth at 40 CFR 141.15(a). (Rec. at 8-9.)

## **ANALYSIS**

The issue the Board before the is whether petitioner would incur an arbitrary or unreasonable hardship which outweighs the environmental and health impact if its request for variance is denied. In determining what constitutes an arbitrary or unreasonable hardship, the Board notes that a speculative change in law is not grounds for establishing arbitrary or unreasonable hardship. However, in some circumstances a prospective change in law may be appropriately reflected in the conditions upon which a variance is granted. (City of Genoa v. IEPA (December 20, 1990) PCB 90-166, 117 PCB 135).)

In the case at bar, the Board finds it appropriate to condition the granting of a variance based on the USEPA's expected decision to revise the radium standards in October 1996. By basing its decision on the expected USEPA revision, the Board is ensuring that Rockdale will achieve compliance with the standard USEPA will mandate. The Board's condition also ensures that Rockdale will not need to prematurely return to this Board to request another variance. The Illinois legislature linked state standard changes with federal standard changes. (415 ICLS 5/17.6) The Board believes it is consistent with legislative intent to allow delay in compliance until the regulatory scheme stabilizes at the federal level. As a result, the Board is disinclined to require a municipality to expend substantial funds in order to conform to a standard that is being federally reviewed and expected to be relaxed in the future.

Rockdale states that numerous residential and commercial developments would be halted if the variance request is denied, resulting in loss of tax income for the city and loss of job opportunities for Rockdale residents. (Pet. at 3, 10-11.) Normally, consequences of variance denial such as the loss of job opportunities, city income and taxes, and the loss of sales and enhanced property taxes, are considered merely the expected consequences of restricted status, and do not, by themselves, constitute arbitrary or unreasonable hardship. (Willowbrook Motel v. Pollution Control Board (July 14, 1983) PCB 1-149, 53 PCB 007; affirmed in Willowbrook Motel v. Pollution Control Board, 135 Ill.App.3d 343, 481 N.E.2d 1032 (1st Dist. 1977) (emphasis added.) However, if the claimed hardship outweighs a nominal injury to the public or the environment, the Board can find that an arbitrary or unreasonable hardship would result. (Marathon Oil Company v. IEPA and IPCB, 610 N.E.2d 789 (5th Dist. 1993).)

The Board finds that Rockdale's radium level of 5.9 pCi/L is not a significant divergence from the radium standard, and that the proposed variance would cause no significant health risk for the population served by water main extensions for the time period of the recommended variance. The Board agrees with the parties that a granting of the requested variance would not result in a significant injury to the public or to the environment for the limited time period requested.

The Board notes that, during the term of the variance, Rockdale will be required to monitor its radium levels, and report its findings to the Agency. The Board's order below will require Rockdale to secure means to notify its users of its non-compliance, and provide the Agency with its notification measures.

#### **CONCLUSION**

Based on the above findings, the Board holds that Rockdale's alleged hardship, due to the ongoing scrutiny of the federal radium standard, and due to the loss of economic and fiscal income should a variance be denied, outweighs the nominal environmental impact of the requested variance. Therefore, the Board finds the hardship to be an arbitrary or unreasonable one. Accordingly, the Board grants Rockdale a variance subject to the conditions stated below.

The Board notes that Rockdale is in compliance with the MCL for gross alpha particle activity levels, and therefore only grants a variance from regulations concerning combined radium-226 and radium-228.

Today's action is solely a grant of variance from standards of issuance and restricted status. The effect of this variance is to allow Rockdale to extend water service to new customers. As Rockdale acknowledged in its petition, Rockdale is not granted variance from compliance with the combined radium standard, nor does today's action insulate Rockdale in any manner from enforcement for violation of that standard.

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

# ORDER

The Village of Rockdale (Rockdale) is hereby granted a variance from 35 Ill. Adm. Code 602.105(a), "Standards of Issuance" and 602.106(b), Restricted Status, only as they relate to the standards for combined radium-226 and radium-228 in drinking water as set forth in 35 Ill. Adm. Code 611.330(a), subject to the following conditions:

- (A) For purposes of this order, the date of United States Environmental Protection Agency (USEPA) action shall consist of the earlier date of the:
  - (1) Date of promulgation by the USEPA of the regulation 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 MCL is demonstrated; or
  - (2) Date of publication of notice by USEPA that no amendments to the 5.0 pCi/L combined radium standard or the method for demonstrating compliance with the 5.0 pCi/L will be promulgated.
- (B) The variance shall terminate on the earliest of the following dates:
  - (1) Five years from the date of this order; or
  - (2) Two years following the date of USEPA action.

(C) In consultation with the Illinois Environmental Protection Agency (Agency), Rockdale shall continue a sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance terminates, Rockdale shall collect quarterly water samples from its distribution system at locations approved by the Agency. Rockdale shall composite quarterly samples from 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 its own option, Rockdale may have the quarterly samples analyzed when collected. The results of the analyses shall be sent to:

Illinois Environmental Protection Agency Compliance Assurance Section Drinking Water Quality Unit, Bureau of Water P.O. Box 19276 Springfield, Illinois 62794-9276

- (D) Within 30 days of receiving the most recent quarterly sample, Rockdale shall also send to the address in paragraph (C) the running average results of the most recent four quarterly samples.
- (E) Within three months of USEPA action, Rockdale shall apply to the Agency at address below for all permits necessary for construction, installation, changes, or additions to its 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, Illinois 62794-9276

- (F) Within three months of the issuance of each construction permit by the Agency, petitioner shall advertise for bids, to be submitted with 60 days, from contractors to do the necessary work described in the construction permit. Rockdale shall accept appropriate bids within a reasonable time. Rockdale shall notify the Agency, Division of Public Water Supplies (DPWS), within 30 days, of each of the following actions: 1) advertisements for bids; 2) names of successful bidders; and 3) whether Rockdale 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 MCL in question,

- shall be completed no later than two years following USEPA action. One year will be necessary to prove compliance.
- (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 order, whichever occurs first, and every three months thereafter, Rockdale will send to each user of its public water supply a written notice to the effect that Rockdale 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.
- (I) 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, Rockdale will send to each user of its public water supply a written notice to the effect that Rockdale has been granted by the Illinois Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 601.106(b), Restricted Status, as it relates to the MCL standard in question.
- (J) Until full compliance is achieved, Rockdale shall take all reasonable measures with its existing equipment to minimize the level of contaminants in its finished drinking water.
- (K) Rockdale shall provide written progress reports to the Agency at the address below, every six months concerning steps taken to comply with paragraphs C, D, E, F, G, H, and, I. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph. Progress reports shall be sent to:

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

IT IS SO ORDERED.

Board Member K.M. Hennessey abstained.

If Rockdale chooses to accept this variance subject to the above order, within forty-five days of the grant of the variance, Rockdale 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, Illinois 62794-9276

Once executed and received, that certificate of acceptance and agreement shall bind Rockdale 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 the certificate is as follows:

	<u>CERTIFIC</u>	CATION	
I (We),agree to be bound l 97-13, October 17,		, her Order of the Pollution Cont	eby accept and rol Board in PCB
Petitioner			
Authorized Agent			
Title			
Date			
the appeal of final Board of	orders within 35 days o llinois establish filing i	on Act (415 ILCS 5/41 (199 of the date of service of this requirements. (See also 35 )	order. The Rules
		s Pollution Control Board, h day of,	
	Doro	othy M. Gunn, Clerk	<del></del>

Illinois Pollution Control Board