

ILLINOIS POLLUTION CONTROL BOARD  
December 7, 1995

TOWN OF CORTLAND,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 96-36
	)	(Variance-Public Water
ILLINOIS ENVIRONMENTAL	)	Supply)
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

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

This matter is before the Board on a Petition for Extension of Variance filed with the Clerk of the Board on August 9, 1995. Cortland seeks a variance from 35 Ill. Adm. Code 602.105(a), "Standards for Issuance", and 602.106(a), "Restricted Status", as these relate to the combined radium requirements under 35 Ill. Adm. Code 611.301(b). Cortland was granted a five-year variance on August 9, 1990, in PCB 90-43. (Pet. at 1.) Cortland seeks a five-year extension of that variance to allow the continued operation, and possible expansion, of its water supply and distribution system. The Illinois Environmental Protection Agency (Agency) filed its recommendation on September 11, 1995, advising that the variance be granted, subject to certain conditions. Cortland waived hearing and none was held.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 *et seq.*). The Board is charged therein to "determine, define and implement the environmental control standards applicable in the State of Illinois" (Section 5(b) of the Act) and to "grant . . . an adjusted standard for persons who can justify such an adjustment" (Section 28.1(a) of the Act). More generally, the Board's responsibility in this matter is based on the system of checks and balances integral to Illinois environmental governance; the Board is charged with the rulemaking and principal adjudicative functions, and the Agency is responsible for carrying out the principal administrative duties.

**BACKGROUND**

Cortland is a town in DeKalb County, Illinois which currently provides a chlorinated potable water supply and distribution system to approximately 434 residents, and 36 industrial, governmental and commercial customers. (Pet. at 1.) The average daily water use for 1994 was about 94,000 gallons, or 34.3 million gallons per year. (Pet. at 4.)

Cortland's water distribution system is comprised of one deep well which obtains water from the Galesville Aquifer, and two shallow wells. (Pet. at 3-4.) Based on water quality studies in the adjacent communities of Sycamore and DeKalb, Cortland expected its deep well water to reduce the radium levels, resulting in compliance with the applicable standards. (Pet. at 4.) However, results of Cortland's quarterly water sampling from 1990 to the present reveal an average total of 6.72 for combined radium which exceeds the current standard of 5 pCi/L.

#### **REGULATORY FRAMEWORK**

The United States Environmental Protection Agency (USEPA) has promulgated an MCL for drinking water of 5 mg/l of radium. (Rec. at 3.) Illinois subsequently adopted the same limit. (35 Ill. Adm. Code 611.330.) Pursuant to Section 17.6 of the Illinois Environmental Protection Act (Act), any revisions to the 5 mg/l standard by the USEPA will automatically become the standard in Illinois.

Cortland is not seeking a variance from the MCL for radium, which remains applicable to its potable water supply. Rather, Cortland is requesting a variance from the prohibitions imposed at 35 Ill. Adm. Code 602.105(a) and 602.106(a) 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 or of this Chapter.

#### 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.

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 Cortland 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 for compliance with the underlying standards in the proposed compliance plan are an essential consideration in determining whether a restricted status variance will be granted. Thus, grant of variance from restricted status will be conditioned upon a schedule of compliance with the underlying 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. (Caterpillar Tractor Co. v. Pollution Control Board, 48 Ill.App.3d 655, 363 N.E.2d 419 (3rd Dist. 1977).) 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 within the term of the variance.

#### PAST COMPLIANCE EFFORTS

Upon notification of its noncompliance status, Cortland initiated a groundwater investigation and hired a consultant to research compliance alternatives. (Pet. at 7.) The most desirable method to achieve compliance was to develop a deep well in the Galesville aquifer. (Id.) Drilling began in the summer of 1992 and completed that fall. (Id. at 8.) Blending of Cortland's three wells, however, resulted in higher levels of radium than prior to construction of the new well. (Id.)

#### ALTERNATIVE COMPLIANCE OPTIONS

Currently, Cortland has neither control equipment in place for radium levels, nor access to a radium free supply of water with which to blend its well water. (Pet. at 5.) However, Cortland has researched and envisions the following alternatives in order to achieve compliance:

- (1) Construction of a new well; or,
- (2) Extending a water main to DeKalb or Sycamore.

(Pet. at 9.) In terms of alternative (1), Cortland is currently seeking funds for well #4 from the Bond Council, local banks and Illinois Rural Bond Bank. (Id.) Cortland's consultants are also investigating additional groundwater resources. (Id.) Alternative (2), extension of a water main to DeKalb or Sycamore, is expected to increase the service cost to customers without providing any guarantee that radium levels would be reduced. (Id.) Cortland therefore chose the first alternative and plans to begin construction of well #4 in 1996. (Id.)

#### IMPACT MINIMIZATION

Shortly after first discovering its water supply was not in compliance with the combined radium levels, Cortland began pursuing compliance. By hiring consultants, researching compliance alternatives, and constructing well #3, Cortland has spent nearly \$400,000 in its efforts to achieve compliance as required by the variance granted in PCB 90-43. During the course of the requested variance, Cortland will continue to:

1. pursue a radium-free water supply source by developing Well #4;
2. blend and mix water to achieve the lowest possible test results for radium activity;
3. test for radium in its water supply;
4. submit quarterly reports to the Agency regarding testing and compliance results; and,
5. notify its customers of the variance and the radiological levels in its water supply.

(Pet. at 10.)

#### 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(a), Restricted Status, would result in an arbitrary or unreasonable hardship for Cortland. (Pet. at 10, Rec. at 9.) First, a denial would require the Agency to refuse construction and operating permits until compliance is achieved. (Rec. at 9.) In turn, no new water main extensions could be issued permits which would prevent further development from occurring in Cortland. (Id. at 10.) This would have a severely adverse economic impact on Cortland. (Pet. at 10.) Specifically, Cortland is experiencing active residential and commercial development that would be impeded should a variance be denied. (Id.)

Secondly, granting the requested variance from Sections 602.105(a) and 602.106(a) would relieve the Agency from listing Cortland on the Agency's six-month comprehensive list of restricted public water supplies, as required pursuant to Section 602.106(b) of the Board's Rules. (Rec. at 10.) Publication in this restricted list would mislead developers and other persons about the compliance status of Cortland's water supply, and could stifle the area's economic growth. (Id.)

#### ENVIRONMENTAL IMPACT

Although Cortland made no formal assessment of the environmental effect of the requested variance, it contends that the blended water from its wells will result in only a minimal amount of radium entering its potable water system. (Pet. at 5.) Further, Cortland incorporated by reference the testimony of and exhibits presented by Richard E. Toohey, Ph.D. and Dr. James Stebbings at the 1985 hearings in R85-14, In the Matter of: Proposed Amendments to Public Water Supply Regulations, 35 Ill. Adm. Code 602.105 and 602.106. (Id.) Based on that testimony, Cortland asserts that there will be little, if any, adverse environmental or health impact caused by a grant of the requested variance. (Id.)

The Agency states that, while radiation at any level creates some risk, the risk associated with levels found in Cortland's water supply is very low. (Rec. at 7.) In addition, the MCL for combined radium is currently under review by the USEPA, which has recommended a standard of 20 pCi/L for each isotope. (Id.) It had been anticipated that a new standard will be adopted in September 1995. (Id.) Mr. Joseph F. Harrison, chief of the Safe Drinking Water Division, USEPA, announced that as a result of the proposed relaxed standard, no municipalities would be required to spend funds preparing for final design and construction of a treatment system to achieve compliance with the current standard. (Id. at 8.) 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. (Id. at 9.)

The Agency observes granting an extension of the variance from restricted status should affect only those users who consume water drawn from any newly extended water lines, and states that the variance should not affect the status of the rest of Elburn's population drawing water from existing water lines, except if the variance, by its conditions, hastens compliance. (Rec. at 12.) Finally, the Agency recommends that the variance terminate on August 9, 2000, or two years following the date of USEPA action, whichever comes first. (Id. at 13.)

### CONSISTENCY WITH FEDERAL LAW

Both Cortland and the Agency state that Cortland 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 USEPA 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 11, Rec. at 10-11.) Specifically, granting a variance from the effects of restricted status means that only the State's criteria for variances are relevant. (Rec. at 11.)

Both parties recognize that Cortland remains subject to the possible enforcement actions for violating standards for the contaminant in question. (Pet. at 12, Rec. at 11.)

### TERMS OF VARIANCE

Cortland requests that the term of variance be from August 9, 1995 to August 9, 2000. (Pet. at 1.) The Agency recommends that an extension of the variance be granted until the earliest of the following dates: two years following the date of the USEPA action or August 9, 2000. (Rec. at 13.)

### CONCLUSION

After considering all the facts and circumstances of this case, the Board finds that Cortland has presented adequate proof that immediate compliance with 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(a), Restricted Status, would impose an arbitrary or unreasonable hardship upon Cortland. The Board therefore will allow Cortland until August 9, 2000 to achieve compliance, subject to conditions listed in this opinion and order.

Cortland filed its petition requesting an extension of its prior variance on August 9, 1995, the day the variance expired. Cortland requests that a five year extension be granted, beginning on the date of filing, and ending August 9, 2000. The term of variance usually begins on the date the Board renders its decision, except upon a showing of unusual or extraordinary circumstances. (See, e.g. DMI, Inc. v. IEPA (December 19, 1991), PCB 90-277, 128 PCB 245-249.) Filing for an extension of a variance on the date of its expiration does not constitute unusual or extraordinary circumstances; however, as Cortland acknowledges, the requested variance will not shield Cortland from enforcement for violation of the underlying radium standard. Furthermore, granting the variance retroactively for the short period of four months allow the original variance and its extension to run consecutively. In turn, this alleviates the

requirement, pursuant to Section 602.106(b), that the Agency retroactively include Cortland on its six-month list of restricted water supplies for such a short period of time. Such a listing could lead to confusion among those consulting the list. For these reasons the Board finds that a short retroactive grant of the requested variance is warranted.

The Board agrees with the parties that granting this variance will pose no significant health risk to either the persons served by Cortland'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 City of Cortland (Cortland), is hereby granted variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(a), Restricted Status, but only as they relate to the 5 pCi/L radium standard of 35 Ill. Adm. Code 611.330(a), subject to the following conditions:

- (1) For purposes of this variance, the date of the United States Environmental Protection Agency (USEPA) action shall consist of the earlier date of the:
  - (a) date the regulation is promulgated by the 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 MCL is demonstrated; or
  - (b) 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.
- (2) This variance shall terminate on the earliest of the following dates:
  - (a) August 9, 2000; or
  - (b) two years following the date of USEPA action.
- (3) In consultation with the Illinois Environmental Protection Agency (Agency), Cortland shall continue its sampling program to determine as accurately as possible the level of radium in its wells and finished water. Until this variance terminates, Cortland shall collect

and analyze quarterly samples of its water from its entry point into the distribution system at locations approved by the Agency. Cortland 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. Results of the analyses shall be reported within 30 days of receipt of each analysis to:

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

If Cortland elects, 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.

- (4) Within 3 (three) months of USEPA action, Cortland shall apply to the Agency at the address below for all permits necessary for the construction, installation, changes, or additions to Cortland'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, Illinois 62794-9276

- (5) Within 3 (three) months of the issuance of each construction permit by the Agency, Cortland shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. Cortland shall accept appropriate bids within a reasonable time, and shall notify the Agency, Division of Public Water Supplies (DPWS) within 30 days, of each of the following actions:
- (a) advertisements for bids;
  - (b) names of successful bidders; and,
  - (c) whether Cortland accepted the bids.
- (6) Construction allowed on said construction permits shall commence within a reasonable time of bids being



accepted, but in any event, 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.

- (7) 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, Cortland shall send to each user of its public water supply a written notice to the effect that Cortland 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.
- (8) 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, Cortland shall send to each user of its public water supply a written notice to the effect that Cortland 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(a), Restricted Status, as it relates to the MCL standard in question.
- (9) Until full compliance is reached, Cortland shall take all reasonable measures with existing equipment to minimize the level of contaminants in its finished drinking water.
- (10) Cortland shall provide written progress reports to the Agency's DPWS, FOS every six months concerning steps taken to comply with paragraphs 3, 4, 5, 6, 7, 8 and 9. 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 Cortland chooses, to accept this variance subject to the above order, within 45 days of the date of this order, an officer of Cortland properly authorized to bind Cortland to all the terms and conditions of the variance, shall execute and forward the attached Certificate of Acceptance and Agreement to:

Stephen C. Ewart  
Division of Legal Counsel  
Illinois Environmental Protection Agency

2200 Churchill Road  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Once executed and received, the Certification of Acceptance and Agreement shall bind petitioner 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. 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 96-36, December 7, 1995.

Petitioner: \_\_\_\_\_

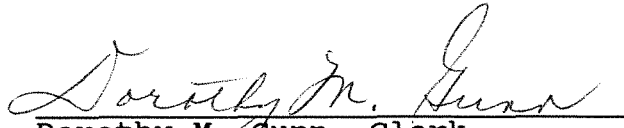
By: Authorized Agent

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 7<sup>th</sup> day of December, 1995, by a vote of 6-0.

  
\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board