

Minonk was notified on October 4, 1985 that its water supply exceeded the maximum allowable concentrations for radium-226 and 228. The Agency's report indicated a concentration of 6.4 pCi/l for radium-226 and 2.0 pCi/l for radium-228. (Pet. par. 11.) Minonk was placed on restricted status on January 12, 1986 and is on the 1990 Restricted Status List. (Rec. par. 11.) On July 11, 1989, Minonk collected a sample from its distribution system and sent it to a private laboratory for analysis. The result was 7.1 pCi/l for radium-226 and 3.3 pCi/l for radium-228. (Pet. par. 12.) Minonk split the sample and sent it to two laboratories for analysis for gross alpha. The analyses indicated a gross alpha particle activity level of 9.7 pCi/l and 15.8 pCi/l. (Pet. attachment 2.)

BACKGROUND

Minonk, in Woodford County, owns and operates potable water supply and distribution for approximately 828 residential and 60 business customers, as well as 6 churches and 2 schools. The water supply system consists of three deep wells, drawing from the same aquifer, ground storage reservoir, pumps and distribution facilities with elevated tank.

Minonk listed several reasons for its failure to achieve compliance with the Board's public water supply rules. First, Minonk states that it unsuccessfully attempted to find an alternative water supply from 1981 to 1984, as required by PCB 81-32. Second, Minonk indicated it was not notified until October 4, 1985 that its water supply exceeded the radium standards. Subsequent to 1985, Minonk believed that the limitation on radium might be raised to a level where its water supply would be in compliance. In support of its belief, Minonk noted the Agency proposal in R85-14 that the radium limit be raised from 5 pCi/l to 20 until January 1, 1989. Minonk also noted that the United States Environmental Protection Agency (USEPA) in January, 1989 stated that the radium limit may be revised to 5 pCi/l for radium-226 and 5 pCi/l for radium-228. This would have an effect on the proportion of the total water supply to be treated for radium removal by Minonk. (Pet. par. 14(c).) Lastly, Minonk authorized its engineer to do a preliminary report on the costs of treatment processes. The report titled Radium Removal Alternatives was completed in June of 1989. However, Minonk "lacks the financial resources to construct the treatment plant." (Pet. at par. 14(d).)

REGULATORY FRAMEWORK

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

subsequently adopted the same limit as the maximum allowable concentration under Illinois law. Pursuant to Section 17.6 of the Illinois Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 $\frac{1}{2}$, par. 1017.6), any revisions to the 5 pCi/l standard by the USEPA will automatically become the standard in Illinois.

The action that Minonk request here is not variance from these maximum allowable concentrations. Regardless of the action taken by the Board in the instant matter, these standards will remain applicable to Minonk. Rather, the action Minonk requests is the temporary lifting of prohibitions imposed pursuant to 35 Ill. Adm. Code 602.105 and 602.106.

Board regulations 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 Board regulations not found in federal law. It is the prohibition which Minonk requests be lifted. However, we emphasize that, since the duration of restricted status is linked to the length of time it takes the water supply to come into compliance with underlying standards, the timeframes 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 on 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. Ill. Rev. Stat. 1987, ch. 111 $\frac{1}{2}$, par. 1035(a). Further, the burden is not upon the Board to show that the harm to the public outweighs petitioner's hardships; the burden is upon 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, (First Dist. 1985).

Moreover, 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 276, 367 N.E.2d 684 (1977). Accordingly, except in certain special circumstances a variance petitioner is required, as a condition to a grant of variance, to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance.

COMPLIANCE PROGRAM

Minonk proposes to achieve compliance by constructing a treatment plant which will use the reverse osmosis procedure to remove radium from its water supply. Minonk has taken several steps toward the possibility of constructing such a plant. Those steps include approval of \$300,000 General Bond Obligation referendum and authorizing the sale of such bonds. The proceeds from that sale are now on deposit and available to Minonk. Minonk also applied to the Department of Commerce and Community Affairs (DCCA) for a Community Development Assistance Program Grant. However, Minonk was not approved for the grant in 1989. Minonk, in its amended petition, listed the following "steps to be taken during the variance period":

1. Continue the quarterly sampling program and testing for radium and gross alpha.
2. Minonk will issue public notification every three months as required to comply with the Board's rules.
3. By May, 1990, pilot testing of the proposed reverse osmosis equipment and pretreatment equipment will be started. The same type of equipment will be used for the pilot testing program as would be used for the full scale treatment process, to confirm the proposed treatment process design criteria.
4. July, 1990 - Apply to DCCA for a grant under the Community Development Assistance Program (CDAP) to assist in financing the construction of the reverse osmosis treatment plant.
5. November, 1990 - Approval of the CDAP grant.
6. February, 1991 - Release of funds from CDAP grant.
7. February, 1991 - Start design and plans and specifications of the water treatment plant.

8. June, 1991 - Complete plans and specifications and apply for Agency construction permit.
9. September, 1991 - Agency construction permit approved, and advertise for bids from contractors and suppliers.
10. October, 1991 - Award contract construction and being operation of the water treatment plant.
11. September, 1992 - Complete construction and begin operation of the water treatment plant.
12. September, 1993 - Complete one year compliance sampling and testing program to prove compliance with the Pollution Control Board standards.
13. Petitioner will submit progress reports to Agency every six months during the variance period concerning completion of each of the steps listed in the paragraphs above. (Amended pet. at 5-7)

Minonk, with its consulting engineers, has developed a compliance plan which relies on one single component to insure its success. The single component is receipt of grant funds from DCCA. Without the grant funds Minonk cannot proceed with construction of the treatment plant necessary to remove radium from its water supply. Minonk has already been turned down for a CDAP Grant once and it cannot guarantee that it will receive a grant in 1990. Therefore, the Board finds that Minonk's compliance plan is speculative. (See Citizens Utilities Company of Illinois v. IEPA, PCB 88-151, March 8, 1990 p. 17 and 18.)

HARDSHIP

Minonk specifies two reasons why immediate compliance would impose an arbitrary or unreasonable hardship. First, Minonk notes that the cost of construction of a treatment plant to use the reverse osmosis procedure would be \$677,000 (Pet. par. 19.) Because, Minonk points out that the capacity of the facility could be smaller if the radium standard is amended, Minonk states:

Hence, the substantial expenditure of public funds for treatment facilities which may become obsolescent in the near future is not in the public interest and does not grant a corresponding benefit to the public. (Pet. par. 19.)

Secondly, Minonk asserts that failure to obtain a variance will create a economic hardship in that construction within Minonk's service area, which would require expansion of the water supply system, could not be undertaken. Minonk states that:

This problem is especially acute at the present time because new I-39 is currently under construction along the west side of the City. Petitioner will be excluded from growth opportunities that will occur in other communities along this corridor if developers are discouraged because the petitioner is on Restricted Status. (Pet. at par. 30.)

The federal standard for radium has been under review for some time. Additionally, in anticipation of a federal revisions of the radium standard, the Act has been amended at Section 17.6 to provide that any new federal radium standard immediately supersedes the current Illinois standard. Nevertheless, it remains uncertain as to when and how the radium standard will actually be modified. (City of Geneva v. IEPA, PCB 89-107, March 23, 1990, p. 5). Thus, to delay compliance while awaiting new standards could result in indefinite delays.

Minonk has been recording gross alpha particle activity levels beyond the standards set forth in Board regulations since 1981. Minonk received a variance in 1981 and was ordered to investigate methods for compliance. In 1989, Minonk has again petitioned the Board for a variance from gross alpha concentrations as well as radium-226 and radium-228 concentrations. The record indicates that for over eight years Minonk has known of its non-compliance and has been on restricted status since 1986.

Minonk now claims hardship because of the construction of I-39 and Minonk's inability to extend its water system to allow for new construction. The record does not indicate what steps, if any, beyond searching out alternative water supplies and an engineering report, that Minonk has taken in an attempt to achieve compliance. The construction of I-39 has been underway for several years. Minonk could have foreseen the need for economic growth with the development of I-39 and could have better prepared for that growth by bringing its public water system into compliance with Board regulations. The Board finds that because Minonk has had over eight years to achieve compliance, any hardship which Minonk may experience "from this denial of variance is largely self-imposed." (Citizens Utilities Company of Illinois v. IEPA, PCB 88-151, March 8, 1990 p. 16.)

PUBLIC INJURY

Although Minonk has not undertaken a formal assessment of the environmental effect of its variance request, it contends that a grant of variance will not cause any significant harm to the environment or to the people served by the potential watermain extensions for the limited time of the requested variance. (Pet. par. 22). The Agency does not rebut this, stating that while radiation at any level creates some risk, the risk associated with Minonk's water is low (Rec. par. 14). In support of these contentions, Minonk and the Agency reference testimony presented by Richard E. Toohey, Ph.D and James Stebbins, Ph.D, both of Argonne National Laboratory, at the 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.

The Board agrees that there ordinarily would be little risk during the term of the variance to persons newly receiving Minonk's noncomplying water. This assumes, however, that compliance would occur during the term of the variance, an assumption that cannot be relied upon because of the speculative nature of the compliance plan. We also agree that grant of a variance from restricted status per se does not provide direct relief to persons presently served by the water supply, except insofar as grant of variance by its conditions may hasten compliance. (See City of Joliet v. Illinois Environmental Protection Agency, PCB 86-121, November 6, 1986 at 6).

ASSESSMENT OF FEDERAL LAW

Both Minonk and the Agency agree that the Board may grant the variance consistent with the Safe Drinking Water Act. However, the Agency is concerned that, if the variance were granted and the compliance plan mirrored Minonk's proposed plan, the "USEPA would not consider a Board variance order to be a compliance order, and might not defer federal enforcement in the matter." (Rec. par. 20).

AGENCY RECOMMENDATION

The Agency has recommended that this variance be denied. The Agency has no objection to the outlined proposal for compliance proposed by Minonk; however, it believes that the plan is speculative due to the fact that it rests on Minonk's receipt of a Community Development Assistance Program Grant to finance the construction of the reverse osmosis treatment plant. The Agency has communicated to Minonk that it believes such a plan would be speculative because the community is not committing to the construction of the reverse osmosis treatment plant. (Rec. par. 21.) In a meeting held between Minonk and the Agency, Minonk indicated that it will not commit to construction of the

reverse osmosis treatment plant without the monies necessary for construction having been obtained and in hand. (Rec. par. 21.) Because Minonk cannot be certain when or if a grant will be received, the Agency recommends that the variance be denied.

Minonk has presented a compliance plan which would, if implemented, bring its public water supply into compliance. The Agency, in its recommendation, observes that it has no objection to the compliance method chosen by Minonk and it believes that if such a plant is properly constructed and operated, that it may lower the excessive levels of radium found in the water to a level that would achieve compliance. "Additionally, the Agency does not believe the proposed compliance schedule is unreasonable, if the community will fully commit to the compliance plan". (Rec. par. 22.)

CONCLUSION

The Board has granted variances which required completion of the compliance plan within suitable timeframes in order to insure that a petitioner is proceeding toward attainment of the Board standards. However, in this case, the granting of the variance conditioned on proceeding with the compliance plan as set forth by Minonk would not hasten compliance. As previously stated, the Board finds that Minonk's plan for compliance is speculative and any hardship which it may experience is largely self-imposed. Therefore, based on the record before the Board, the Board denies the requested variance.

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

ORDER

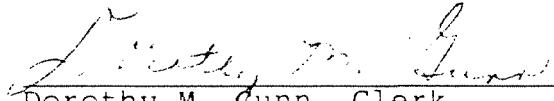
For the foregoing reasons the request for variance from 35 Ill. Adm. Code 602.105(e) (Standards for Issuance) and 602.106(b) (Restricted Status), to the extent that those rules involve 35 Ill. Adm. Code 604.301(a) and (b), by the City of Minonk is denied.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1987, ch. 111 $\frac{1}{2}$, 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 R. Flemal dissented and J. Dumelle and B. Forcade concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 25th day of April, 1990, by a vote of 5-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board