ILLINOIS POLLUTION CONTROL BOARD April 1, 1987

VILLAGE OF LEMONT,)
Petitioner,))
٧.	PCB 86-207
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)))
Respondent,)
and)
CAROLYN F. PLACEK, KATHERINE H. MURPHY AND GEORGE PODREBARAC,)))
Intervenors.)

JOHN ANTONOPOULUS, VIRTEL & GROSELAK, P.C., APPEARED ON BEHALF OF PETITIONER: AND

WAYNE L. WIEMERSLAGE, STAFF ATTORNEY, APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on a December 3, 1986 petition filed by the Village of Lemont seeking variance, for a period of one year from the provisions of 35 Ill. Adm. Code 602.105(a), Standards for Isssuance, and from 35 Ill. Adm. Code 602.106(b), Restricted Status, but only to the extent those rules involve 35 Ill. Adm. Code 604.301(a) and (b) (combined radium 226 and 228 and gross alpha particle activity). The Illinois Environmental Protection Agency (Agency) filed its recommendation that variance be granted on January 7, 1987. Six objections to the variance were filed. Hearing was held in Lemont on February 9, 1987. At hearing three objectors moved to intervene which motion was granted by the hearing officer. The intervenors are Carolyn F. Placek, Katherine H. Murphy and George Podrebarac ("Intervenors"). This Opinion supports the Board's Order of March 19, 1987 which granted the variance relief requested.

The Village of Lemont has previously sought and obtained a variance for its public water supply. In PCB 80-84, a variance from the gross alpha particle activity limitation was granted until January 1, 1984. On April 21, 1986 the Village requested variance from restricted status for the contaminants in guestion

for a period of five years. This variance request was denied on July 31, 1986. In its denial, the Board noted the Village's lack of compliance with the conditions imposed in the prior variance. The Board also noted that the Village had failed to devise a viable compliance plan over nearly seven years. Accordingly, the Board did not look favorably upon the variance request since it essentially amounted to a request to study the problem and achieve compliance over an additional five years. The Board thus found that denial of the variance would not constitute an arbitrary or unreasonable hardship since any hardship was largely self-imposed by Lemont's dilatory approach to compliance. Thus, the variance request was denied. Subsequently, the Village filed the current petition on December 3, 1986.

BACKGROUND

The Village of Lemont is located in southwestern Cook County, Illinois and has a population of approximately 5300 residents. The Village owns its public water supply which serves approximately 5000 residents from its deep and shallow well water supply. The Village also maintains a complete public water distribution system including deep wells, shallow wells, pumps and distribution facilities.

The Petitioner has three wells with the following depths, ages and pumping capacities:

Well No.	Depth	Placed in Operation	Gallons Per Minute
2	172 ft.	1955	400
3	1662 ft.	1969	940
4	1657 ft.	1978	940

By letter dated October 4, 1986, the Village was advised by the Agency that the maximum allowable concentration of 5 pCi/l for gross alpha activity was exceeded and that the Village was going to be placed on Restricted Status. The Agency reported a gross alpha activity concentration of 19 pCi/l. By letter dated October 4, 1984, the Village was advised by the Agency that the maximum allowable concentration of radium was exceeded and that the Village was placed on Restricted Status. Pet. at 4. The analyses showed a radium-226 count of 12.4 pCi/l and a radium-228 count of 5.6 pCi/l. The combined radium content of the water was thus 18 pCi/l which exceeds the standard of 5 pCi/l.

The Village states that it attempted to comply with its previous variance by establishing a blending program. However, this attempt proved unsuccessful since blending of the flows from the Village's one shallow well with either deep well failed to meet the Village's daily capacity requirements. The Village then began evaluating the installation of softening equipment. The

Village obtained cost estimates from various consultants but was unable to determine how to fund the equipment purchase. The Village states that during 1981 to 1984 it experienced a period of stagnant growth and an inadequate increase in its assessed valuation. Since 1985, however, the Village states that it has experienced substantial growth which will enable it to finance a compliance plan. Current projects to be developed are:

- a) Amber Shires Planned Unit Development of 225 acres with approximately 1,100 units and a projected population of 3,500;
- b) Windmills of Lemont, a Senior Citizen Development with 200 units and a development cost of \$10 million;
- c) Four Winds Hospital, a 30 acre development with estimated construction costs of \$25 million;
- d) Hilltop Estates Subdivision of 150 single-family homes; and
- e) Dudek Industrial Park of approximately 20 Industrial Buildings.

Pet. at 6.

All of the projects are contingent upon water main extensions and when built will generate substantial increases in assessed valuation and income to the community.

The Village notes that since its previous variance request it has retained the services of a professional engineering firm for the purpose of preparing a preliminary water treatment design. The firm has recommended that the Village install an ion exchange system for its two deep wells. Accordingly, the Village has determined to install the ion exchange system and has authorized final engineering and the purchase of the necessary The total capital cost for the system is projected to be \$650,000 with an annual cost of \$158,696. The monthly cost to each water user is projected to be \$7.35. See Attachment to The Village will finance this obligation with a donation of \$100,000 from Four Winds Hospital and has contacted a municipal financial consultant concerning appropriate funding for the remaining cost.

The Village states that it intends to obtain final engineering drawings and to complete the installation of the system as soon as practicable. The Village believes that the system can be installed and functioning in approximately 12 months.

INTERVENORS' OBJECTIONS

The Intervenors object to the grant of this variance on numerous grounds. In particular, the Intervenors doubt the sincerity of the Village to pursue the proffered compliance plan and in support of their contention they question a number of the Village's assertions.

Mr. Podrebarac and Ms. Placek question whether the Village sincerely attempted to establish a blending program and whether the conclusion that such is infeasible is really valid. 108-111, 203-228). They provided some calculations to support In rebuttal, however, the City's their position. (Exh. 15). engineer explained that although at a pumping capacity of 400 gpm the shallow well could blend successfully with the deep wells in terms of complying with the radiological standards, good engineering practice would dictate a number of expenditures before blending would really become a long-term viable The capacity of the shallow well would have to be doubled to provide for increases in population and to provide for the contingency of failure of the existing well. This would necessitate digging an additional well at a very rough cost of The piping necessary to effectuate the blending would also require a large expense. In addition, the shallow well presently used is high in iron and using a large amount of this water would necessitate the installation of an ion exchange softener to maintain water quality. Thus, the cost of blending would be greater than the cost of simply installing the softener for radionuclide removal. R. at 273-78. The Board believes that Mr. Schaeffer adequately explained why blending was not a viable long-term solution. Although the Board appreciates the Intervenors concerns, the Board must remind the Intervenors that under the Environmental Protection Act, a variance petitioner is to submit a compliance plan which will lead to compliance at the expiration of the variance. The determination of what compliance plan to pursue is uniquely within the discretion of each variance petitioner, as long as compliance is achieved. Lemont has demonstrated that the installation of softeners will result in compliance, and while other means might also lead to compliance this fact alone provides no basis for denial of the variance. The proper place for the Intervenors to have voiced their objections concerning the instant compliance plan was in the Village Board room. The Board finds, however, that based on the Village's own testimony blending is currently a feasible way to achieve some reductions in the contaminant levels over the short time frame that this variance is in effect without significant expenditures. Accordingly, a condition of this variance will require that the Petitioner take all reasonable measures with its existing equipment to minimize the levels of radiological contaminants in its finished water. (See Order, Par. 12).

The Intervenors also object to grant of the variance on the basis that 35 Ill. Adm. Code 104.121 was not strictly complied Section 104.121 lists the information to be included in a variance petition "where applicable." The Intervenors allege that for numerous subsections no or minimal information was The Intervenors urge the Board to dismiss the petition as inadequate under 35 Ill. Adm. Code 104.125. However, the Board notes that failure to strictly comply with the requirements of Section 104.121 is not an automatic grounds for dismissal. The informational requirements of Section 104.121 are somewhat loose by their nature and not all subsections will be applicable Just how much information is to be provided in every situation. for a petition to be deemed "adequate" is a matter of great discretion left to the Board. In the normal course of events this determination is made upon filing of the petition and where minimally adequate a petition is allowed to proceed to hearing where normally more information will be brought out. In this instance, although the information provided in the petition was not as detailed as the Intervenors would have liked, the Board finds that the petition and hearing provided sufficient information to enable the Board to determine whether an arbitrary or unreasonable hardship had been demonstrated.

The Intervenors also allege that the petition should be dismissed as inconsistent with federal law. However, this contention misapprehends the request for relief made by the Village in its variance petition. The variance requested is from a state requirement that when a public water supply is in violation of any maximum contaminant level that it be placed on restricted status. Since there is no such requirement imposed by federal law, to grant a variance from the state imposed "restricted status" is thus, not inconsistent with federal law.

The Board commends the intervenors efforts to insure that a safe drinking water supply is made available to the users in Lemont and appreciates their concerns that the Village has not acted quickly, decisively and forthrightly in the past. The Village's failure to comply with the terms of its previous variance and its lack of a concrete compliance plan were the major reasons for the Board's denial of its previous variance request in PCB 86-54. However, the Board believes that the testimony in this proceeding demonstrates that the Village is extremely committed to achieve compliance within 12 months. Final engineering specifications have been authorized, the availability of softening equipment has been investigated, partial financing has materialized and a consultant has been contacted to help arrange the remaining financing. The variance time frame is rather tight and requires total compliance within one year. The Board believes that to grant the variance and have the Village under an enforceable Board Order is preferable to denying the variance and have no order to force compliance. During the variance period, the Village is admonished to strictly

comply with the conditions of this variance. The Board wishes to note that its Order is enforceable by the Intervenors who may bring an action on their own behalf, without an attorney, before the Circuit Court to require compliance with the Order or before the Board for recission of the variance for failure to comply. Such an enforcement action may also result in the payment of fines if non-compliance is established.

ENVIRONMENTAL IMPACT

The Agency states that while radiation at any level creates some risk, the risk associated with this level is very low and cites the testimony of Dr. Richard Toohey in PCB 85-84 and R85-14. The Agency believes that an incremental increase in the allowable concentration for these contaminants even up to a maximum of four times the allowable level should cause no significant health risk for the limited population served by new water main extensions for the time period of the recommended variance, the Agency also notes that compliance will be achieved at the end of the variance period and that the variance is for a relatively short period of time. Rec. at 8-10.

Concerning ion exchange water softening, the Agency states that it is capable of removing more than 90% of the radium. However, a significant health risk may result if the softener is regenerated with salt since this will significantly increase the sodium content of the water. Increased sodium is a health risk for persons who are hypertensive or who have heart problems. Pet. 9-10. The Agency also points out that waste from routine softening is high in total dissolved solids and may be difficult to dispose of legally. The softening process concentrates the radioactivity which may be more of a hazard in the waste stream than in the drinking water. In addition, some of the radioactivity remains in the ion exchange material posing a hazard to maintenance workers. Thus, the Agency actively discourages the use of the ion exchange process for radionuclide removal unless it is the best treatment method for a particular supply.

CONCLUSIONS

The Agency recommends that the Board grant the variance for the period requested. The Board finds that denial of the variance would impose an arbitrary or unreasonable hardship as it would impose a moratorium on the very economic growth necessary to fund the proposed improvements to bring the Village's water system into compliance. In addition, the Board finds that grant of the requested variance will impose no significant injury on the public or on the environment for the limited time of the requested variance and will actually help to hasten ultimate compliance. The Board notes that since the variance only lifts the effects of being on restricted status, it only affects those

users who consume water drawn from any newly extended water lines. The variance does not alter the status of the population who draws from existing water lines except insofar as the variance helps to expedite the ultimate compliance date. Accordingly, the variance relief requested will be granted subject to conditions as proposed by the Agency.

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

IT IS SO ORDERED.

B. Forcade dissented and J. D. Dumelle concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 120 day of 1987, by a vote of 5-1.

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board