ILLINOIS POLLUTION CONTROL BOARD December 3, 1981

VILL AGE (OF KIRKWOOD,	Petitioner,)))
	٧.) PCB 81-111
ILLINOIS	ENVIRONMENTAL	PROTECTION AGENCY,)
		Respondent.)

RONALD D. STOMBAUGH APPEARED ON BEHALF OF PETITIONER; AND JOHN DEREK WILLIAMS APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on the petition for variance filed by the Village of Kirkwood (Village) July 9, 1981 as amended July 15, 1981. The Village seeks variance from the 2.0 mg/l fluoride standard of Rule 304(B)(4) of Chapter 6: Public Water Supplies. On July 17, 1981 the Illinois Environmental Protection Agency (Agency) filed its Recommendation that variance be granted until January 1, 1984 the current deadline date for exemption under \$1416 of the Safe Drinking Water Act (SDWA). Pursuant to a timely objection to the variance request filed by Mr. and Mrs. Phil Goedert on July 23, 1981, hearing was held in this matter on September 30, 1981.

At hearing, the Village presented testimony of its consulting engineer, Stephen Linkemann of Kenneth E. Schrader and Associates, Ltd., Village President Bruce Albert, Village Clerk Mary Hayes, and Village Attorney Ronald D. Stombaugh. The Agency presented the testimony of its employee Environmental Protection Specialist Richard Gerard, and of Sharon Pierce, dental health administrative assistant to the head of the dental health division of the Illinois Department of Public Health (IDPH). Each witness supplemented the information in the written record before the Board, and many responded to questions posed by Mr. and Mrs. Goedert.

The Village of Kirkwood, located in western Warren County, has a population of approximately 1000, billing approximately 350 water users on a bi-monthly basis. This public water supply, established in 1894, currently supplies water from two deep wells, drilled in 1948 and 1958. The Village's raw water contains fluoride in excess of the 2.0 mg/l standard, as does the water

from many deep wells in Knox, Peoria, Fulton, Warren, and Henderson counties, according to the (Illinois) State Water Survey. According to Agency records, the fluoride content has been measured as ranging between 2.4 mg/l and 3.4 mg/l, and averaging 2.9 mg/l (R. 46).

The Goederts, in their objection, as well as other witnesses, particularly Mr. Gerard, explained that the Village has problems with its water supply and delivery system of hardness, corrosiveness, low water pressure, staining and smell, problems which installation of fluoride removal systems would not correct (R. 10-12, 18, 41-50).

The Village seeks variance to allow issuance of permits to construct a new water tower and new water mains, which would solve the water pressure problems. This project is expected to be completed with the aid of \$350,000 from Farmers Home Administration funds. The Village believes that, if it is required to install fluoride removal equipment, it would "put the new water tower project in jeopardy", as the Village cannot afford to undertake both projects at the same time (Pet. 2, R. 33).

Engineer Linkemann believes that compliance could be most cheaply attained by use of the activated alumina or bone char adsorption process. Capital costs of equipment installation would be about \$174,000, with annual operating expenses of about \$26,000. This would increase the average \$10 per month water bill of each user by \$11 per month (Pet, Ex. A-C, R. 22). There is no other alternate ground or surface water supply available that would not exceed the fluoride limit or be of proven quality that is economically or "politically" feasible (Pet. 3, R. 16).

While Mrs. Goedert was concerned about the Village's other water problems, she was also concerned about the effects upon her young children (ages 1 and 4) of consuming water with fluoride at the 2.4 to 3.4 mg/l level. Ms. Pierce of the IDPH, who has worked in the dental field for 9 years and has been participating in a National Institute of Dental Research study concerning the fluoride problem in west central Illinois, addressed this issue. It is her opinion that there is no discernible physiological effect on teeth by consumption of fluoride at these levels, although teeth become discolored and more brittle at the 8 to 14 mg/l fluoride level. However, children younger than 12 years of age who drink water at the 3 to 4 mg/l level may suffer the cosmetic tooth mottling effect of "fluorosis". When this occurs, the child's teeth absorb fluoride as they are being formed, which may have the effect of either whitening or browning the teeth. The effects of mottling can be lessened by dental bleaching of the teeth, and of course can be avoided by use of an alternative supply of water [R. 53-59, see also Central Illinois Utility Co. v. IEPA, PCB 77-349 (April 13, 1978) T.

Based on the evidence presented, which demonstrates that no danger to public health exists, and that immediate compliance would impose an unreasonable economic hardship to this small community, the Board finds that variance should be granted. The Agency acknowledges that this petition falls in line with recent cases in which the Board has granted 5 year variances to small municipalities (1000 users or less) pursuant to the variance provision of \$1415 of the SDWA, which has no deadline, rather than \$1416 with its exemption deadline of January 1, 1984. For the reasons stated in these previous opinions, the Board grants variance for a five year period, subject to the conditions outlined in the attached order [see, e.g. Trivoli Public Water District, PCB 80-208, (March 5, 1981) and cases cited therein].

There remains yet another matter for the Board to resolve, pursuant to the terms of its September 24, 1981 Order. On August 31, 1981 the Village requested that the Board assume the costs of the stenographic transcript of the hearing since "paying all the costs for the hearing would present somewhat of a financial hardship". It was the Village's testimony that the holding of a hearing will cost it \$500 in engineering fees, \$400 in attorneys fees, and \$200 in court reporting fees, in addition to the \$248 expended in preparing the variance petition itself (R. 14, 37). The Village argues that "it would not be to the best interest of the People of the Village of Kirkwood and those that use the water system, to have them pay the costs of this hearing based upon what we've determined in one complaint". Alternatively, at hearing the Village requested the Board to pay for all hearing costs (R. 65). The Board will consider only the cost of the transcript [68 pages], pursuant to Procedural Rule 412(b).

Variance from the Board's rules is not "automatic", or available as a matter of absolute right under the Act. The legislature has specifically provided an absolute right to a hearing to the writer of "one complaint". Section 37 of the Act specifies that "if any...person files a written objection to the grant of [a] variance within 21 days, then a hearing shall be held". While some might feel that this is not the most efficient manner of adjudicating a variance request, it does insure an open forum where one or more citizens' legitimate health and other environmental concerns will be heard.*

The Board most certainly appreciates Village President Albert's statement concerning the Village's financially "narrow margin" of operations (R. 34). However, this general allegation is unsupported by any evidence showing the Village's precise financial situation. The petition is therefore denied for failure to prove "good cause".

^{*}The Board must note that many objections are filed by citizens who have received little or no prior explanation from their local officials concerning the action being taken before the Board on their behalf.

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

CRDER

- 1. Petitioner, the Village of Kirkwood, is granted a variance from the 2.0 mg/l maximum fluoride concentration limit of Rule 304(B)(4) of Chapter 6: Public Water Supply for five years, subject to the following conditions:
 - a. Beginning on or about June 1, 1982, and at six month intervals thereafter, the Petitioner shall communicate with the Agency in order to ascertain whether flouride removal techniques specifically applicable to small systems have been developed and identified.
 - b. As expeditiously after identification of a feasible compliance method as is practicable, but no later than January 1, 1984, Petitioner shall submit to the Agency a program (with increments of progress) for bringing its system into compliance with fluoride standards.
 - c. Petitioner shall take all reasonable measures with its existing equipment to minimize the level of fluoride in its water supply and shall not allow the fluoride concentration to exceed an average of 4.0 mg/l.
 - d. Pursuant to Rule 313(D)(1) of Chapter 6, on or before January 30, 1982 and every three months thereafter, Petitioner will send to each user of its public water supply a written notice to the effect that petitioner has been granted a variance from the 2.0 mg/l maximum fluoride standard by the Pollution Control Board. The notice shall state the average content of fluoride in samples taken since the last notice period during which samples were taken.
- 2. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, PWS Enforcement Programs, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this varince. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

CERTIFICATE

I, (We), _______, having read the Order of the Illinois Pollution Control Board in PCB 81-111, dated ______, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner				
ву:	Authorized	Agent		
ritl	e			
Date				

3. The Village's August 31, 1981 motion that the Board assume costs is denied.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the day of day of the day of the

> Christan L. Moffe(f) Clerk Illinois Pollution Control Board