## ILLINOIS POLLUTION CONTROL BOARD August 5, 1982

VILLAGE (	OF GLASFORD,		)	
		Petitioner,	)	
	v.		) PCB	82-42
ILLINOIS	ENVIRONMENTAL	PROTECTION AGENCY,	)	
		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 Glasford (Village) April 3, 1982 as amended May 6 and 28, 1982. The Village seeks variance from the 2.0 mg/l fluoride concentration limit of Rule 304(B)(4) of Chapter 6: Public Water Supplies (Chapter 6) and from the 15 pCi/l gross alpha particle activity limitation of Rule 304(B)(4) of Chapter 6. On July 2, 1982 the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance until January 1, 1984. Hearing was waived and none has been held.

The Village of Glasford, Peoria County, supplies the water needs of its approximately 1201 residents (1980 census) from two deep wells. These wells were the subject of a previous variance from the fluoride and radiological quality standards in PCB 79-238 (February 7, 1980). Agency analyses of samples taken between June, 1980 and June, 1982 of the Village's water show fluoride levels ranging from 2.55 mg/l to 3.76 mg/l. Analysis of composite (sic) samples was made in July, September, and December, 1981 and March, 1982 show gross alpha particle activity levels in pCi/l, respectively, of 31.9; 36.7 and 52.5; 28.3 and 23.2; and 55.8 (no ± figures provided). No reports were given of testing for radium-226, 228.

The City has identified two possible compliance options. The first would involve construction of a shallow well, but its location near the Illinois River would require the laying of a 2-mile transmission main and the quality of its water would require installation of an iron removal plant. Capital costs for this project would be \$310,000. (In PCB 79-238, construction of such a well was considered only for blending purposes, a concept which would seem to have been discarded.)

2

The other alternative would be installation of a lime softening plant, which would involve capital expenditures of \$250,000. The Village has stated that it "will proceed in this direction as financing becomes available."

The Village gives no projection as to when this might occur. It explains however that it has recently borrowed \$350,000 from the Farmer's Home Administration to finance sewage treatment plant rehabilitation and to construct an elevated water tower. As the average water/sewer bill per family is now \$14.00 per month, the Village believes that an immediate increase to finance the needed drinking water treatment plant would impose an arbitrary or unreasonable hardship. The Village finally reasserts its belief that no harm to the health of its water users has resulted from consumption of either radium or fluoride at the levels present in its water.

The Agency does not dispute the City's cost figures. It too reasserts its belief that the public health will not be endangered by grant of variance until January 1, 1984, the deadline date for exemptions pursuant to \$1416 of the federal Safe Drinking Water Act.

In light of the high cost of compliance, and the apparent lack of any immediate threat to health from consumption of water containing fluoride or radioactivity at the levels present in the Village's water (see Village of Kirkwood v. IEPA, PCB 81-111, December 3, 1981 and Village of Lemont v. IEPA, PCB 80-48, April 30, 1981) the Board finds that denial of variance would impose an arbitrary or unreasonable hardship. Variance is granted until January 1, 1984, subject to the conditions outlined in the attached Order. Given the apparent rise in gross alpha particle activity in the Village's water between December, 1981 and March, 1982, and the Board's continuing uncertainty about the accuracy of test analyses (see County of Du Page, PCB 82-24, May 27, 1982), it is even more than usually important that gross alpha testing continue and that radium testing commence, and the Board will so order.

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

## ORDER

- 1. Petitioner, the Village of Glasford, is granted a variance from the 2.0 mg/l fluoride limitation of Rule 304(B)(4) and the 15 pCi/l gross alpha particle activity limitation of Rule 304(C)(1)(b) of Chapter 6: Public Water Supply until January 1, 1984, subject to the following conditions:
  - a. Petitioner shall, in consultation with the Agency, continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Testing for radium 226 and 228 shall be commenced within 45 days of the date of this Order.

- As expeditiously as is practicable, but no later than November 1, 1982, Petitioner shall submit to the Agency, a program (with increments of progress) for bringing its system into compliance with radiological quality and fluoride standards.
- Petitioner shall take all reasonable measures with C. its existing equipment to minimize the level of fluoride and radioactivity in its water supply. The fluoride level shall not be allowed to exceed an average of 4.0 mg/l.
- Pursuant to Rule 313(D)(1) of Chapter 6, 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, Petitioner will send to each user of its public water supply a written notice to the effect that Petitioner has been granted by the Pollution Control Board a variance from the 2.0 mg/l fluoride standard and 15 pCi/l maximum gross alpha particle activity standard. The notice shall state the average content of gross alpha particle activity in samples taken since the last notice period during which samples were taken.
- Within forty-five days of the date of this Order, 2. 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 variance. 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 82-42, dated, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.
Petitioner
By: Authorized Agent
Title
Date

IT IS SO ORDERED.

## Board Chairman J. Dumelle concurred.

Control Board, hereby certify was adopted on the day by a vote of	of Musst 1982
	Church Smissett
	Christan L. Moffett, Clerk Illinois Pollution Control Board

I, Christan L. Moffett, Clerk of the Illinois Pollution