ILLINOIS POLLUTION CONTROL BOARD January 22, 1981

VILLAGE OF HAMPSHIRE,)
Petitioner,)
v.) PCB 80-165
ENVIRONMENTAL PROTECTION AGENCY,)
Respondent.	,)

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

This matter comes before the Board on a petition for variance filed by the Village of Hampshire (Village) on September 10, 1980, as amended November 3, 1980. The Village seeks variance from the 1.0 mg/l maximum barium concentration limitation of Rule 304 of Chapter 6, Public Water Supply. The Illinois Environmental Protection Agency (Agency) originally objected to this petition, but withdrew its objection. The Agency recommended grant of variance with conditions in its original Recommendation filed December 1, 1980 (Rec.), and its amended Recommendation (Am. Rec.) filed December 17, 1980. Hearing was waived, and none has been held since no additional objections were filed with the Board.

The Village of Hampshire, which is located in Kane County, daily supplies about 240,000 gallons of water to its 570 connections from three wells drilled in shale, limestone, and sandstone aquifers and glacial drift. The primary water source, Well #5, is 818 feet deep and supplies water with a barium content of 2.0 to 2.2 mg/l. Back up or stand-by wells #3 and #4 are respectively 514 and 355 feet deep. The Village states that the barium content of Well #4 is 2.0 mg/l. The barium content of Well #3 is not given.

In the Village's view, its compliance options are a) to seek barium free water from shallow aquifers for use as either a primary water source or a source for blending, or b) to soften water from its existing sources and thereby remove the excess barium. The Village has not investigated availability of a suitable shallow aquifer water source, but notes that if one is found, its water would likely need treatment to reduce the usual high iron content of such water in Northern Illinois. The Village estimates the costs of a replacement well and iron treatment plant to be \$382,500.

In explanation of its identification of water softening as the appropriate treatment technique, the Village states that no 304 of Chapter 6: Public Water Supply for five years, subject to the following conditions:

- A. By June 1, 1981, the Petitioner shall submit to the Agency a report on the economic feasibility of developing Well #3 and/or Well #4 to serve as either primary wells or as blending wells so that finished water with a barium content of 1.0 mg/l or less may be delivered.
- B. Beginning on or about June 1, 1981, and at six month intervals thereafter, the Petitioner shall communicate with the Agency in order to ascertain whether barium removal techniques specifically applicable to small systems have been developed and identified.
- C. 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 barium standards.
- D. Petitioner shall take all reasonable measures with its existing equipment to minimize the level of barium in its water supply and shall not allow the barium concentration to exceed 2.2 mg/l.
- E. On or before March 30, 1981 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 1.0 mg/l maximum barium standard. The notice shall state the average content of barium 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 David L. Rieser, Technical Advisor, Illinois Environmental Protection Agency, 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 I	llinois Pollut	ion Control	Board in	PCB 80-165,
dated		understand		
Order, realizing that such acceptance renders all terms and con-				
ditions thereto binding and enforceable.				

Petitioner

Ву:	Authorized	Agent
$\mathtt{Titl}\epsilon$	9	
-		
Date		

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the state of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the day of the latest the day of the latest than the day of the latest the day of the latest th

Christan L. Moffett, Clerk
Illinois Pollution Control Board