## ILLINOIS POLLUTION CONTROL BOARD August 23, 1979

VILLAGE OF WEST DUNDEE,	)	
Petitioner,	)	
v.	)	PCB 78-1
ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):

Petitioner has requested a five year variance from Rule 304 of Chapter 6: Public Water Supply to allow the barium content in its water supply to exceed the Board standard of 1 mg/l. West Dundee, a village in Kane County which provides drinking water to approximately 3,300 residents, contends that arbitrary and unreasonable hardship would result if the variance was denied. One hundred percent of the needed water is provided by Well #1, a sandstone well with an excessive barium content (6 mg/l to 10 mg/l). Well #2, a drift well that contains no barium, can provide one half of the daily water requirement, but presently is used only in emergencies. Petitioner states that no new sources of water are available, that water softening is economically unfeasible, and that no adverse health effects will result from the high barium levels. The Agency recommends a variance until January 1, 1981 allowing a maximum concentration of 8 mg/l of water.

The Board has addressed the barium standard in <u>City of Crystal Lake v. EPA</u>, PCB 77-332 (March 29, 1979) and <u>Village of Cary v. EPA</u>, PCB 77-339 (May 24, 1979). In each case the Board followed U.S. EPA guidelines and granted a variance from the barium standard with 4 mg/l set as the maximum allowable concentration. The Board, from the information given, does not see any reason for drastically departing from the 4 mg/l limitation.

The Board also stated in <u>Crystal Lake</u> and <u>Cary</u> that variances must be conditioned upon ultimate compliance unless arbitrary or unreasonable hardship can be shown. In this case, compliance seems to be technically feasible and there has not been an adequate demonstration of economic hardship. Petitioner estimates the cost of installing water softening facilities at \$1 million with an operational and maintenance cost in excess

of 60¢ per 1,000 gallons. No mention is made of the availability of capital funding. The Agency states that the bond issues could be raised without a referendum pursuant to Ch. 24, Section 8-4-1, Illinois Revised Statutes and that the expense would not be "overly burdensome".

Although it is quite possible that water softening may not be economically feasible or medically desirable, the Petitioner has failed to assess other alternatives for compliance. West Dundee does not discuss the technical or economic feasibility of blending water from Wells #1 and #2, nor, consequently, is the feasibility of water softening after blending addressed. Absent in the Petitioner's variance and the Agency's recommendation is an identification of the barium compounds present in the water. The health effects of the particular barium compounds present in the water have not been assessed. Finally, Petitioner dismisses the Fox River as an unsuitable source of drinking water without presenting any data on the economic and technical feasibility of eliminating contaminants in that water. Petitioner has not submitted an ultimate compliance program or satisfactorily proven hardship; therefore, the Board must deny the variance.

It should be pointed out that the pleadings in this case date from January and February, 1978. Since that time a barium study has been completed in Illinois which studied West Dundee. Its findings could be entered into any future variance petitions.

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

## ORDER

It is the Order of the Illinois Pollution Control Board that Petitioner's request for a variance from the barium standard for drinking water in Rule 304 of Chapter 6: Public Water Supply be denied.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 23 day of \_\_\_\_\_\_\_, 1979 by a vote of \_\_\_\_\_\_\_,

Christan L. Moffe**tt /**Clerk Illinois Pollution Control Boar