ILLINOIS POLLUTION CONTROL BOARD October 25, 1973

GALLATIN-WHITE	WATER DI	STRICT,	INC.		
	V .)	PCB	72-448
ENVIRONMENTAL	PROTECTIO	N AGENCY))		

JOSEPH R. HALE, SHAWNEETOWN, ILLINOIS, appeared for the Gallatin-White Water District
THOMAS J. IMMEL, Assistant Attorney General, appeared for the Environmental Protection Agency

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

A petition for variance was filed on November 16, 1972 by Gallatin-White Water District. On December 18, 1972, the Agency filed a recommendation to deny the variance request. A hearing was held on January 11, 1973. The Board ordered on June 21, 1973, that Petitioner submit the hearing transcript within 21 days or have its variance petition denied. The transcript was received on July 2, 1973, approximately six months after the hearing date. The 90-day period was waived indefinitely by the petitioner.

Petitioner is a rural water district located in Ridgeway Township, Gallatin County, Illinois. Petitioner seeks relief from an Agency denial of a permit to construct and operate a 125 GPM water treatment plant and distribution system to serve approximately 250 rural water users. Water from an 82 foot shallow well is to be treated by iron removal, zeolite softening, fluoridation and chlorination Softening is proposed because the raw ground water contains 340 mg/l total hardness. Petitioner desires to use water from a second well to dilute the zeolite brine waste from 11,000 mg/1 to 3500 mg/1 of total dissolved solids (TDS). The Agency objected to this dilution as a violation of Chapter 3, Section 401(a) of the Board's Rules and Regulations (Water Pollution Rules) which states that dilution is not an acceptable method of treating wastes. The Agency also stated that the diluted brine discharge violated Section 408 of the Water Pollution Rules in that Petitioner's discharge would raise the TDS level above the allowed increase of 750 mg/l over the naturally occurring level of 374 mg/1 TDS.

Petitioner's shallow well is overlain with sand. The diluted brine waste was first proposed to be discharged 100 feet from the well. This was later increased to 500 feet. An Agency engineer testified that the cone of influence would extend from a minimum of 750 feet to a maximum of 1700 feet from the well shaft (R. 74, 1/11/73). Thus, Petitioner would pollute its own well by discharging the brine waste into a dry water course within the cone of influence (R. 81, 1/11/73). Such a discharge would tend to recycle dissolved solids and would raise the TDS level above the 500 mg/l TDS allowable limit for public water supply found in Water Pollution Rule 204(b).

Petitioner states that it does not care what type of treatment system it uses; it only desires to have a supply of soft water at a cost per user that will allow the Federal Farm Home Administration (FHA) to issue the \$250,000 grant and \$296,800 loan (R. 113, 1/11/73). Mr. Charles Schuman, State Director of the FHA, stated that the FHA has no preference as to the type of water treatment employed (R. 16, 1/11/73). He testified that if the cost exceeded \$1200 per individual user, the FHA takes a very careful look at the water system's ability to repay the loan (R. 13, 1/11/73). Petitioner's cost has already slightly exceeded the \$1200 limit (R. 16, 1/11/73).

Mr. Glen Clarida, Petitioner's Engineer, testified that he recommended zeolite softening primarily on the basis of cost (R. 19, 1/11/73). He ruled out lime softening because, according to the cost estimates he received it was \$33,000 more than the zeolite softening system (R. 24, 1/11/73). This difference is based upon a cost for the lime softening equipment of \$45,000 (R. 33, 1/11/73).

Mr. Ira Markwood, Manager of Public Water Supply Section, EPA, testified they had obtained recent cost figures of \$27,207 and \$24,265 for packaged lime softening systems to produce the same quality water as the proposed zeolite softeners (R. 96, 98, 1/11/73). He further testified that the two systems would cost approximately the same with lime softening possibly little less expensive (R. 100, 1/11/73).

The Board finds that Petitioner has not met the burden of proving an unreasonable hardship to warrant the granting of what would amount to an open ended variance to violate Water Pollution Rules 401(a) and 408. Dilution is not a proper method of treating a waste when there are other alternatives present. The Record shows that the brine waste could be pumped beyond the cone of influence, so as to avoid contaminating Petitioner's own well and that of the downstream irrigation wells. Agency testimony raises a serious doubt as to \$33,000 cost for the lime softening system. Petitioner's estimate is based upon an initial cost of \$45,000; while the Agency's figures are \$24,000 and \$27,000 for apparently the same equipment. The cost savings should be more than enough to construct a lagoon and the building modifications (R. 59, 1/11/73).

While the Board normally doesn't determine what type of system to employ, it is presently asked to approve a system which would result in violations of the Water Pollution Rules when there apparently exists another system that for the same cost, does not result in such violations. The Board must deny such a request.

The Board in denying this variance is not disputing the people's need for a safe, sanitary water supply; it is only asking that the Petitioner re-examine its cost estimates in light of the testimony presented by the Agency. The record indicates that FHA funds have been restricted (R. 15, 1/11/73). It should be noted that Petitioner has caused a substantial delay by not furnishing a copy of the hearing record until after the start of the current fiscal year. Only after a Board order, did Petitioner submit the record transcript.

The above Opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

It is the Order of the Illinois Pollution Control Board that petition for variance is hereby denied without prejudice.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the day of October, 1973 by a vote of

Christan L. Moffett, Clerk Illinois Pollution Control Board