

ILLINOIS POLLUTION CONTROL BOARD  
May 1, 1980

VILLAGE OF WATAGA, )  
 )  
Petitioner, )  
 )  
v. ) PCB 80-30  
 )  
ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
Respondent. )

OPINION AND ORDER OF THE BOARD (by Dr. Satchell):

This matter comes before the Board upon a variance petition filed February 13, 1980 by the Village of Wataga. The petition requests a variance from 2.0 mg/l maximum fluoride content limitation of Rule 304 of Chapter 6: Public Water Supplies. On March 21, 1980 the Environmental Protection Agency (Agency) recommended that the variance be granted through January 1, 1981. The hearing was waived and no public comment has been received.

The Village of Wataga is situated in Knox County about seven miles northwest of Galesburg. Its public water supply serves about 390 people with water from an 840 foot deep well. Its finished water shows an average fluoride level of 2.2 mg/l, in excess of the standard of 2.0 mg/l. Wataga has submitted an application for a Farmers Home Administration grant to construct a new well and a 150,000 gallon elevated storage tank. According to the Illinois State Water Survey and from Agency records, the Agency states that the ground water in the area is likely to contain fluoride at or above this level (Rec. 1). The Agency believes that the cost of extending a service main from Galesburg is unreasonable (Rec. 1).

The Agency agrees that fluoride at the levels shown in Wataga's water presents no threat to health (Rec. 2). Aside from dental mottling there are no known harmful effects from drinking water at levels up to 8 mg/l fluoride. The Agency believes that at the level of fluoride in Wataga's water there should be no noticeable fluorosis in the community, or if it is present, it should be at barely noticeable levels (Rec. 3).

The recommended treatment process is adsorption on activated alumina. This would cost an estimated \$275,000 or \$700 per user. To operate and pay for the installation would require additional revenue of \$65,000 annually or \$14.00 per month per user (Pet. 1). The Agency agrees that fluoride removal equipment is difficult to operate and control and does not believe that the level of fluoride

present in the Wataga supply warrants its installation (Rec. 2). The Board has previously found that activated alumina adsorption has been used in only a few full scale treatment plants in California and Arizona. The Administrator of the United States Environmental Protection Agency (USEPA) has not found that this is a generally available treatment technology. Turnberry Utilities, Inc. v. EPA, PCB 79-257, March 20, 1980. The Board finds that requiring immediate reduction of the fluoride level would pose an arbitrary and unreasonable hardship.

The fluoride standard is based on that promulgated by USEPA under the federal Safe Drinking Water Act. Illinois has been delegated primacy for enforcement. One of the conditions is that Illinois maintain a program at least as stringent as that of the federal government. The Agency recommends that the variance be granted through January 1, 1981, the deadline for exemptions under the Safe Drinking Water Act. However, there is no deadline for variances (42 U.S.C. §300(g); 40 CFR Part 142). The Board finds that there is no treatment technique which is generally available, taking costs into consideration, which will reduce to the standard the fluoride content of the raw water sources reasonably available to Wataga. The variance will be granted through March 31, 1985.

Wataga will be required to submit a progress report to the Agency approximately eight months before the expiration date of this variance. It will also be required to periodically advise its users of the existence of this variance, current level of fluoride in its water and that there is a possibility of fluorosis, including dental mottling.

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

#### ORDER

Petitioner, the Village of Wataga is granted a variance from the 2.0 mg/l maximum fluoride concentration standard of Rule 304 of Chapter 6: Public Water Supplies, subject to the following conditions:

1. This variance will expire March 31, 1985.
2. 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 4.0 mg/l.

3. On or before June 30, 1980 and every six 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 maximum fluoride standard. The notice shall state the average content of fluoride in samples taken since the last notice or during the last notice period during which samples were taken. The notice shall state that consumption of water containing excessive amounts of fluoride can result in fluorosis and that dental mottling can occur at levels in excess of 4.0 mg/l.
4. On or about August 1, 1984 Petitioner shall submit to the Environmental Protection Agency a progress report which shall identify sources of water which are reasonably available and treatment techniques for fluoride reduction which are generally available. The progress report shall include cost estimates of at least one plan to bring Petitioner's water supply into compliance with whatever fluoride standard exists at that time.
5. Petitioner and the Environmental Protection Agency shall devise a mutually agreeable schedule for sampling of Petitioner's public water supply.
6. Within forty-five day of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Variance Section, 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:

CERTIFICATION

I, (We), \_\_\_\_\_, having read and fully understanding the Order in PCB 80-30, hereby accept that Order and agree to be bound by all of its terms and conditions.

SIGNED \_\_\_\_\_  
TITLE \_\_\_\_\_  
DATE \_\_\_\_\_

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 1st day of May, 1980 by a vote of 5-0.

Christan L. Moffett  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board