ILLINOIS POLLUTION CONTROL BOARD January 22, 1981

| VILLAGE OF HAN | NNA CITY, |) |
|----------------|-------------------|--------------|
| | Petitioner, | .) |
| V • | |) PCB 80-206 |
| 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 November 10, 1980. The Village of Hanna City seeks variance from the 2.0 mg/l maximum fluoride concentration limit and the 15 pCi/l maximum gross alpha particle activity limit of Rule 304(B) and (C) of Chapter 6: Public Water Supply. The Illinois Environmental Protection Agency (Agency) recommended a grant of variance with conditions on December 9, 1980. Hearing was waived, and none has been held.

The Village of Hanna City (Village), which is located in Peoria County, daily supplies approximately 115,000 gallons of water to its 1400 residents (460 customers). The water is pumped from two deep (1850 feet) wells. The Agency has notified the Village at various times during 1976-1979 that the average fluoride content of its water is 2.5 mg/l; by letter of October 17, 1980 the Agency informed the Village that the gross alpha particle activity was 24.7 pCi/l.

The attachments (B1-4) to the Agency's Recommendation document the excess fluoride findings, but do not specifically provide recent results of radiological testing. This omission is troubling, in light of the Agency's admission in City of Minonk, PCB 80-136, October 2, 1980, p.1-2, that its radiological testing methodology had an "accuracy problem." The Board therefore declines to grant variance from Rule 304(C) on this evidence, as the Board has not been advised of the date of the test and whether the accuracy problem has been solved. Submission of more than a single test result for this parameter, particularly under these circumstances, would be advisable.

The Village states, without elaboration, that an engineering investigation completed in 1980 determined that there were no alternative surface water or shallow well sources of better quality to replace or sufficiently supplement the Village's deep well

supply. Consequently, the Village sees lime softening as the most feasible method for removing fluoride (as well as radioactive contaminants) from its water. The capital cost of the treatment plant is estimated to be \$441,600, and the annual operation, maintenance and finance costs (exclusive of special waste handling of the resulting sludge) to be \$63,120 a year. The additional monthly cost to its 460 water customers would therefore be \$11.43. The Village adds that this would be especially burdensome to its customers because water rates must also be raised by \$10.60 per month to finance other necessary improvements to its water treatment plants.

The Agency concurs with all of the facts and beliefs presented by the Village, including its assertion that consumption of its water presents no danger to the public health of its residents. The Agency therefore supports a grant of variance until the deadline date for exemptions under \$1416 of the Safe Drinking Water Act (SDWA), \$300(g)-5. This deadline was recently extended by Congress in PL96-502 from January 1, 1981 until January 1, 1984.

In its previous Opinions concerning variance requests from small public water supply systems, the Board has granted full five year variances (e.g. <u>City of Minonk</u>, PCB 80-136, October 2, 1980, and cases cited therein at p. 3). The extension of the SDWA exemption deadline does not change the Board's previously expressed reasoning or result. The Board finds that the Village had demonstrated existence of an arbitrary or unreasonable hardship, and grants variance for a five year period, subject to the conditions in the attached Order.

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

ORDER

- 1. Petitioner, the Village of Hanna City, is granted a variance from the 2.0 mg/l maximum fluoride concentration limit of Rule 304 of Chapter 6: Public Water Supply for five years, subject to the following conditions:
- A. 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 fluoride removal techniques specifically applicable to small systems have been developed and identified.
- B. 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 fluoride standards.

- C. 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 an average of 2.5 mg/l.
- D. On or before March 30, 1980 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 maximum fluoride standard. The notice shall state the average content of fluoride in samples taken since the last notice period during which samples were taken.
- 2. Variance from the 15 pCi/l radiological quality standard of Rule 304 is denied as being unproven based on the evidence before the Board.
- 3. 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 Illinois Pollution Control Board in PCB 80-206, 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. |
| Dr. Satchell concurred. |
| 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, 1981 by a vote of |

Christan L. Moffett, Clerk
Illinois Pollution Control Board