

4. The installation and operation of the lime treatment process for fluoride removal will result in the generation of 35 tons/day of CaF_2 sludge, the disposal of which will pose a further problem.

5. An affidavit signed by one of Olin's process engineers indicates that the fluorides in the plant effluent have been at times and can be in the future drastically reduced by means of in-plant controls. Presently the fluoride concentration in the effluent is between 10 mg/l and 20 mg/l for a monthly period and has been kept as low as 7.5 mg/l for a period of seven days. The engineer estimates with a 95% degree of certainty that the fluoride concentration can be reduced to between 4 mg/l and 8 mg/l through in-plant controls without the addition of a lime treatment facility.

6. In order to be in compliance with the 2.5 mg/l standard by December 31, 1974, purchase orders for the equipment would have had to be placed by April 1, 1974. Cost would be \$1.4 million.

The Illinois Environmental Protection Agency recommends that the variance be granted.

We agree that Petitioner should be relieved of the necessity to proceed with the installation of the lime treatment facility at this time. Olin has the ability to reduce the fluoride concentration in its effluent through in-plant controls. The generation of 35 tons/day of sludge should be avoided if possible.

A change in the fluoride standard is imminent (See R73-15) and it appears that Olin will be able to comply with the new standard without the large expenditures of funds which are discussed in this case.

Under all of the circumstances we believe it would be unreasonable to require Olin to meet the 2.5 mg/l fluoride standard. We will extend the variance for just a short time into the future and upon termination of this variance we will expect Olin to meet the new standard for fluoride which will be established in R73-15.

Of great significance in this proceeding is the fact that the water quality of the Des Plaines River, which receives the effluent of the Joliet Blockson Works has not exceeded the water quality standard of 1.4 mg/l fluoride. We would not wish to authorize any variance which would have the effect of violating the water quality standard for fluoride in the Des Plaines River.

Petitioner abandoned a request that it be granted a variance for its discharge of lead.

The fluoride variance will be granted to March 31, 1975.

This Opinion constitutes the findings of fact and conclusions of law of the Illinois Pollution Control Board.

ORDER

It is the Order of the Pollution Control Board that Petitioner, Olin Corporation, be granted a variance from Rule 408 with respect to the fluoride concentration in the effluent of the Joliet Blockson Works from December 1, 1973 until March 31, 1975. The following conditions shall be met:

1. The concentration of fluoride in the effluent of the Joliet Blockson Works shall not exceed 20 mg/l fluoride.
2. The effluent of the Joliet Blockson Works shall not cause or contribute to a violation of the water quality standard for fluoride in the Des Plaines River.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 27th day of February, 1975 by a vote of 4 to 0.

Christan L. Moffett