ILLINOIS POLLUTION CONTROL BOARD

July 11, 1974

CITY OF EUREKA,)		
Petitioner,)		
)		
V •)	PCB	74-132
))	
ENVIRONMENTAL PROTECTION	AGENCY,)	•	
Respondent.))	

OPINION AND ORDER OF THE BOARD (by Dr. Odell)

On April 3, 1974, the City of Eureka filed a Petition with the Pollution Control Board (Board) requesting a variance from Rule 203(f) of the Water Pollution Regulations (Chapter Three). Rule 203(f) of Chapter Three states, in pertinent part, that the concentration of copper in any water of the State, may not exceed 0.02 mg/l. Petitioner wants to treat its 50,400,000 gallon water reservoir with copper sulfate in sufficient amounts to control the algae problem which routinely occurs during the warm summer months.

On April 18, the Board issued an interim Order requesting additional information within 45 days on the City's 1973 experience in treating with copper sulfate pursuant to the variance granted for that summer. See City of Eureka v. Environmental Protection Agency #73-206, 8 PCB 623 (July 26, 1973). The Board indicated in its interim Order that failure to timely file the requested information would make the Petition liable to dismissal for inadequacy.

The Environmental Protection Agency (EPA) filed its Recommendation on May 17, 1974. The EPA Recommendation included data from the one report received from the City of Eureka for a September 11, 1973, treatment of 800 pounds of copper sulfate into the public water supply. The report indicated the following concentrations in the reservoir:

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Immediately before application:

Immediately after application:

Twenty-four hours after application:

Raw water intake twenty-four hours after application:

0.25 mg/l copper.

0.48 mg/l copper.

0.07 mg/l copper.
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The above copper values for "immediately before application" and "immediately after application" of copper sulfate do not appear to be consistent, and they should be checked more carefully in future sampling and analysis.

The EPA also had copper measurements from its own routine bacteriological samples:

May 21, 1973:	0.03	mg/1	copper
July 24, 1973:	0.00	mg/1	copper
August 20, 1973:	0.00	mg/1	copper
September 24, 1973:	0.03	mg/l	copper
October 22, 1973:	0.01	mg/1	copper

Subject to certain conditions, the EPA recommended that the Variance be granted. EPA indicated that copper sulfate treatment has been routinely practiced by Petitioner for at least ten years with no apparent adverse effects on human or aquatic life. Chlorine application was not recommended to be a good substitute for copper sulfate because it created taste and odor problems.

On June 27, Petitioner waived until July 11, 1974, the 90 day decision requirement under Section 38 of the Act.

We grant the Variance. Although Petitioner has not supplied additional information as requested by the Board, the information contained in the EPA Recommendation supplies us with data sufficient for a decision. No adverse environmental consequences will result from the grant of this Variance. Furthermore, treatment of the water supply with copper sulfate will prove beneficial to the public interest.

ORDER

IT IS THE ORDER of the Pollution Control Board that:

- 1. Variance is granted from Rule 203(f) of the Water Pollution Regulations to permit exceeding the water quality standard for copper of 0.02 mg/l when dosing with copper sulfate for algae control in the water supply reservoir. The variance is subject to the following conditions:
 - a. Copper sulfate treatments are limited to one each for the months of June through and including September 1974.
 - b. The dosage shall not exceed 800 lbs. per treatment of copper sulfate.
 - c. The copper concentration at the raw water intake to the treatment plant shall never exceed 1.0 mg/l.
 - d. The copper concentrations in the reservoir are to be measured immediately prior to and after each treatment and the results submitted to the Agency on a monthly basis.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the Arabay of ______, 1974, by a vote of ______ to ____.