

ILLINOIS POLLUTION CONTROL BOARD
July 11, 1974

VILLAGE OF NEW BERLIN,)	
Petitioner,)	
)	
v.)	PCB 74-133
)	
ENVIRONMENTAL PROTECTION AGENCY,)	
Respondent.)	
)	
VILLAGE OF SHIPMAN,)	
Petitioner,)	
)	
v.)	PCB 74-187
)	
ENVIRONMENTAL PROTECTION AGENCY,)	
Respondent.)	

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

These two proceedings are variance requests to use copper sulfate for algae control in water supply reservoirs. We grant them subject to the conditions in the Order.

The Village of New Berlin filed its petition on April 10, 1974. The Board on April 30 entered an Order requesting information as to actual copper levels attained in the finished drinking water under 1973 dosing. On May 22 the Village of New Berlin replied to state that they had never measured copper levels and in fact had not used copper sulfate in 1973.

The Agency recommends a grant of the variance from Rule 203(f) of the Water Pollution Regulations to exceed the level of 0.02 mg/l for copper for the Village of New Berlin.

The Village of Shipman filed its variance petition on May 21, 1974. The Board on May 23 asked for information as to actual copper levels measured in the raw water intake under previous variance (PCB73-259). On June 17 the laboratory analysis for September 1973 was submitted.

The laboratory data are not clear. The Board order in PCB73-259 required that copper in the raw water intake not exceed 1.0 mg/l. This exact level is shown for this sampling location. However a 6 ounce sample for the lake before copper sulfate was added shows a blank (presumably zero) while a 2 ounce similar sample showed 0.90 mg/l of copper. This discrepancy is not explained. And if the natural level of copper is in fact 0.90 mg/l in the lake, then no need might exist to add more copper. The Agency should review these sampling data because they are not consistent and closely check new data from Shipman.

On June 17, 1974 the Agency filed its recommendation. It recognized the data discrepancies and attributed them to mislabelling or switching of bottles. The Agency gives other copper data which show levels from zero to only 0.18 mg/l for five samples and all are thus far below the 1.0 mg/l limit set by Board order.


As we have said in many similar opinions, the use of copper sulfate is presently now under Board review in the Public Water Supply proceeding. Secondly, the alternatives to its use seem not satisfactory. Lastly, the poisoning of the bottom sediments by copper has not been shown and may be a long term hazard. Thus we urge the Agency to study alternatives. We urge the two petitioners here to use as little copper sulfate as possible.

ORDER

1. Variance is granted to the Village of New Berlin and to the Village of Shipman to exceed the 0.02 mg/l copper level set forth in Rule 203(f) during 1974.
2. Treatments with copper sulfate shall be limited to one per month (May through September for New Berlin; June through September for Shipman). The quantity used shall not exceed 150 lbs. per treatment for New Berlin and 400 lbs. per treatment for Shipman. If it is shown to the Agency that the dosage for Shipman will not control algae, then 500 lbs. may be used.
3. Copper concentrations in the raw water intake to the treatment plant shall never exceed 1.0 mg/l. They shall be measured and reported to the Agency monthly.
4. The copper concentrations in the reservoir shall be measured before and after each treatment and the results submitted monthly to the Agency.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board do hereby certify that the Board adopted the above Opinion and Order this 11th day of July, 1974 by a vote of 5 to 0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board