

ILLINOIS POLLUTION CONTROL BOARD
April 18, 1974

CITY OF NASHVILLE)

v.)

PCB 74-35)

ENVIRONMENTAL PROTECTION AGENCY)

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

The City of Nashville (Nashville) filed a Petition for a Variance from Chapter 3, Part II of the Pollution Control Board's Rules and Regulations (Water Pollution Rules) on January 25, 1974. The Agency filed a Recommendation on March 25, 1974 recommending a grant of the variance subject to certain conditions. No hearing was held.

Petitioner operates a public water supply system serving the residents of the City of Nashville. A 40-acre reservoir which drains 1.39 square miles provides the surface waters used as raw water supply in Petitioner's system. The Agency states that the water supply reservoir currently meets the requirements of the Environmental Protection Act and the relevant Rules and Regulations of the Board.

Because of plant nutrients present in the surface water reservoir, algae growth presents a serious problem to the Petitioner during warm weather months. Algae presents taste and odor problems and tends to clog Petitioner's water treatment system.

In order to control algae growth, Petitioner seeks a variance from the limit of 0.02 mg/l of copper found in Rule 203(f) of the Water Pollution Rules. Petitioner seeks to do what it has done for 19 years, treat the water supply reservoir with copper sulfate. Nashville proposes to use 350 lbs. of copper sulfate per treatment in its 78,900,000 gallon reservoir. At the maximum dosage, the copper levels should not exceed 0.13 mg/l.

The Board notes that treatment of surface water supply reservoir with copper sulfate is an effective way of controlling algal growth (Algae Growth in Public Water Supply Reservoirs, and Alternatives to the Use of Copper Sulfate--A Discussion, Mr. G.E. Margrave, Division of Public Water Supply, Environmental Protection Agency). However, a concern of the Board, is the possible buildup of copper in the bottom sediments sufficient to poison benthos or affect bottom-feeding fish. A requirement to obtain a permit from the Agency for the activity proposed by Nashville is currently before the Board in the Proposed Amendments to the Public Water Supply Systems Rules and Regulations, R73-13.

The Board grants the City of Nashville the variance requested and notes essentially the same request was granted last year, City of Nashville v. EPA, PCB 73-227 (June 28, 1973).

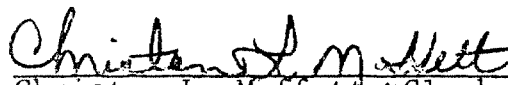
This Opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

The Board hereby grants the City of Nashville a variance from Rule 203(f) of the Water Pollution Rules subject to the following conditions:

1. That copper sulfate treatments be limited to 1 treatment per month during the months of May through and including October, 1974;
2. That copper sulfate dosages not exceed 350 lbs. per treatment;
3. That copper concentrations at the raw water intake to the treatment plant never exceed the 1.0 mg/l recommendation of the U.S. Public Health Service Drinking Standard; and
4. That the copper concentrations in the reservoir be measured immediately prior to and after each copper sulfate treatment, and the results of the measurements be submitted to the Agency on a monthly basis.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted on the 18th day of April, 1974 by a vote of 5-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board