## ILLINOIS POLLUTION CONTROL BOARD April 8, 1976

ILLINOIS NATURAL HISTORY SURVEY,	)
Petitioner,	) )
v.	) PCB 76-44
ENVIRONMENTAL PROTECTION AGENCY,	)
Respondent.	)

OPINION AND ORDER OF THE BOARD (by Dr. Satchell):

The Illinois Natural History Survey (Petitioner) filed a variance petition on February 13, 1976 seeking relief from Rule 203(h) of Chapter 3: Water Pollution Regulations. Petitioner seeks to make an application of antimycin A to determine whether certain fishes in Lake Sangchris can be selectively removed without affecting some of the more desirable species in the population. Following this treatment Petitioner would make an application of rotenone to complete a "standing crop" survey of the fish populations in the lake. The Environmental Protection Agency (Agency) Recommendation was filed March 17, 1976. No hearing was held.

Lake Sangchris is a 2,100 acre body of water; only two small bays (3-5 acres in size) would receive the treatment. The Lake was formed as an artificial cooling lake for Commonwealth Edison Company's power generating station at the south end of the Lake. The waters of these bays are to be separated from the reservoir and contained by polyethylene sheeting. Petitioner states that antimycin A will be applied at a concentration of .05 parts per billion, and rotenone will be applied at 1 part per million. The chemicals will be initially applied during the Spring of 1976 and then, to compare seasonal effects, the study will be completed during mid-summer. Petitioner also indicates that the antimycin A will remain toxic for approximately 1 1/2 days and the rotenone for six hours. Petitioner states that following the application, the embayed area will be detoxified with potassium permanganate and the plastic barriers may remain in place for an additional three or four days as a safety precaution. The dead fish will be collected, sorted, classified and then disposed of at a licensed landfill. Petitioner states that the treatment is to be applied by its assistant aquatic biologist, Dr. John Tranquilli. Petitioner alleges that Rule 203(h) of Chapter 3 constitutes an arbitrary and unreasonable hardship as to Petitioner's fisheries research, as it prohibits the testing of fisheries management chemicals and because there is no alternative sampling procedure to determine the standing crop of fish.

The Agency Recommendation favors the granting of a variance. The Agency agrees with Petitioner that given Petitioner's research functions and the lack of an alternative fish census method, the denial of a variance would work an unreasonable hardship.

The Agency indicates that the lake is not used as a source of water supply for human or animal consumption. The Agency believes that the use of plastic barriers and the application of potassium permanganate for up to three or four days should adequately protect the remaining areas of the lake.

The Agency Recommendation notes that a similar variance from Rule 203(h) to apply antimycin A and rotenone to Lake Sangchris was granted to the Illinois Natural History Survey on September 18, 1975 in PCB 75-316. Petitioner has provided letters approving the treatment from Commonwealth Edison Company and from the Illinois Department of Conservation. The Agency notes that these two approvals constitute the required approval by all the holders of interest in the lake.

The Board finds that Petitioner would be subject to an unreasonable hardship by a variance denial, as no suitable alternative means exist to obtain the research information it requires. In addition the application procedure reflects sufficient safeguards for the protection of non-subject portions of the lake and its aquatic populations. Lastly, there appears to be no inherent hazard to a public water system at present. Therefore, a variance from Rule 203(h) is granted to the Natural History Survey.

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

## ORDER

The Pollution Control Board hereby grants the Illinois Natural History Survey a variance from Rule 203(h) of Chapter 3 during the Spring and Summer of 1976 subject to the following conditions:

1. That the toxicants be applied by Dr. John Tranquilli, Assistant Aquatic Biologist of the Illinois Natural History Survey, such application to be made with all proper safety precautions taken by applicator;

2. That the Petitioner use polyethylene sheeting to retain the water in the bays while the chemicals remain toxic;

3. That the embayed areas will be detoxified with potassium permanganate upon completion of the study;

4. That signs be posted surrounding the treated areas warning against primary and secondary contact use of the affected area during and after the application of the chemicals, and such signs shall remain posted until fingerling bluegills survive 48 hours exposure in livecars.

5. That within seven days after the date of the Board Order the Petitioner shall execute and forward to the Environmental Protection Agency, Manager, Variance Section, Water Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706 and to the Pollution Control Board a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. The form of the Certificate shall be as follows:

## $\underline{C} \underline{E} \underline{R} \underline{T} \underline{I} \underline{F} \underline{I} \underline{C} \underline{A} \underline{T} \underline{I} \underline{O} \underline{N}$

I (We), \_\_\_\_\_ having read

and fully understanding the Order of the Illinois Pollution Control Board in PCB 76-44 hereby accept said Order and agree to be bound by all of the terms and conditions thereof.

Signed	
Title	

Date

Mr. Dumelle concurs.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the  $8^{-1}$  day of  $9^{-1}$ , 1976 by a vote of  $5^{-1}$ .

ma Christan L. Moffett Werk Illinois Pollution Control Board

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