## ILLINOIS POLLUTION CONTROL BOARD September 18, 1975

ILLINOIS NATURAL HISTORY SURVEY,	)	
Petitioner,	.)	
	)	
v.	)	PCB 75-316
	)	
ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

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

The Illinois Natural History Survey (Petitioner) filed a variance petition on August 14, 1975, seeking relief from Rule 203(h) of Chapter 3: Water Pollution Regulations. Petitioner seeks to make an application of a fish toxicant, antimycin A on Lake Sangchris as part of a field study to determine whether certain fishes can be removed without affecting more desimable fish populations. Following this treatment Petitioner would make an application of rotenone to complete a "standing crop" survey of fish populations in the lake. The Environmental Protection Agency (Agency) Recommendation was filed on September 4, 1975. No hearing was held.

Lake Sangchris is a 2,100 acre body of water. Petitioner proposes to treat only three small (3-5 acre) bays without tributary streams. The waters of these bays are to be separated from the reservoir and contained, by polyethelane Petitioner states that antimycin A will be applied sheeting. at a concentration of .05 parts per billion, and rotenone will be applied at 1 part per million. 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 in Lake Patterson Fishing Club v. Environmental Protection Agency, PCB 74-341 the Board conditioned the grant of a similar variance on the application of the chemicals by an Illinois Department of Conservation Fishery Biologist, and that Petitioner proposes that the application be made by its own assistant aquatic biologist, Dr. Tranquilli. The Agency states that as Dr. Tranquilli has eight years of experience in toxicant application, and the proposed treatment has been approved by the Department of Conservation's District Fishery Biologist, it would be appropriate for the Board to allow Dr. Tranquilli to apply the toxicant. The Agency also states that Petitioner has provided letters approving the treatment from Commonwealth Edison Company and the Illinois Department of Conservation. The Agency believes 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 is present. Therefore, a variance from Rule 203(h) is granted to the Natural History Survey.

The Board notes in conclusion, that an amendment to Rule 203(h) (R75-7) has been authorized for final public comment. This amendment provides, among other things, an exemption from Rule 203(h) for the Illinois Natural History Survey in the application of fish toxicants under its research programs. Toxicant applications in waters constituting a public water supply will require a permit from the Agency. For other waters the exemption would be automatic.

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

## ORDER

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The Pollution Control Board hereby grants the Illinois Natural History Survey a variance from Rule 203(h) of Chapter 3 during the Fall of 1975 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 Fetitioner use polyethelane 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.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the /g day of September, 1975 by a vote of 3-0

Christan L. Mot

Illinois Pollution Control Board