## ILLINOIS POLLUTION CONTROL BOARD September 18, 1975

ILLINOIS NATURAL HISTORY SURVEY, Petitioner,	)		
v.	) ) )	PCB	75-322
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 22, 1975, seeking relief from Rule 203(h) of Chapter 3: Water Pollution Regulations. Petitioner seeks to apply rotenone on sections of Lake Shelbyville to obtain a "standing crop" survey. The Environmental Protection Agency (Agency) Recommendation to grant the variance was filed on September 4, 1975. No hearing was held.

Lake Shelbyville has a surface acreage of 11,100 acres and discharges to the Kaskashia River. The lake is not a public water supply source although Vandalia, thirty miles downstream, uses the Kaskaskia River for its water supply. Petitioner proposes to treat only two small (3-5 acre) bays (average depth of 5 feet) without tributary streams. waters of these bays are to be isolated from the resevoir by polyethelane sheeting. Petitioner states that the rotenone will be applied at a concentration of 1 part per million and will remain toxic for approximately six hours. Petitioner states that as soon as the dead fish are processed, the area will be detoxified with potassium permanganate. Petitioner also indicates that the plastic barrier may be allowed to remain in place for three or four days as a safety precaution. Petitioner proposes that the application be made by its assistant aquatic biologist, Dr. John Tranquilli.

Petitioner alleges that Rule 203(h) of Chapter 3 constitutes an arbitrary and unreasonable hardship on Petitioner's research activities as there is no feasible alternative sampling procedure to determine fish populations.

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

The Agency recommends that the use of plastic barriers to separate the treated areas from the rest of the resevoir and the application of potassium permanganate for up to three or four days will insure protection of the remaining areas of the lake. The Agency projects no downstream environmental harm from the application.

A letter granting Petitioner permission by the U.S. Army Corps of Engineers to make the treatment was received by the Board on September 2, 1975. It sets the following four conditions which have been accepted by the Petitioner.

- a. Approval of the activity by the Illinois Department of Conservation.
- b. The presence of an Illinois Department of Conservation Fisheries Division representative during performance of the research work.
- c. Approval of bay locations by the Illinois Department of Conservation Fisheries Division and Corps of Engineers Park Manager.
- d. Presence at all times during the work, of an official representative of the Natural History Survey to protect the site from unauthorized trespass by lake users.

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 Agency also states that Petitioner has the toxicant. 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 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 supply. 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

The Pollution Control Board hereby grants the Natural History Survey a variance from Rule 203(h) of Chapter 3, during the Fall of 1975, subject to the following contitions:

- 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 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 Petitioner comply with the conditions set forth in the U.S. Army Corps of Engineers' August 25, 1975, letter to Dr. Tranquilli, as described in the Board's Opinion.

Christan L. Moffett/Clerk
Illinois Pollution Control Board