

ILLINOIS POLLUTION CONTROL BOARD
August 18, 1977

ILLINOIS DEPARTMENT OF CONSERVATION,)
)
Petitioner,)
)
v.) PCB 77-176
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

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

On June 30, 1977 the Illinois Department of Conservation (DOC) filed with the Board a petition for variance. The petition requests relief from the phosphorus limitations of Rules 203(c) and 402 of Chapter 3: Water Pollution Regulations for its Little Grassy Fish Hatchery in Williamson County, Illinois. Petitioner asks to be allowed to discharge effluent up to 1.0 mg/l of phosphorus.

The DOC is attempting to increase its capacity to stock Illinois waters to meet projected long-range needs. Pursuant to this program Petitioner seeks to expand the Little Grassy Fish Hatchery to establish an "intensive rearing system capable of supplementing the proposed statewide facility at Sand Ridge." The expanded facility will be designed to promote hatching and rearing of two species of fish, channel catfish and redear sunfish. Phosphorus levels in excess of current State standards would arise in Petitioner's effluent entering Little Grassy Creek as a result of the introduction of fish feed into the facility raceways during the rearing process.

The facility will have two independent sources of effluent. One source of overflow will be from the hatchery operations and the other will be treated wastewater, mainly from the cleaning operations. Petitioner predicts that the overflow will not exceed a concentration of 10 mg/l BOD, 12 mg/l suspended solids, and 1 mg/l phosphorus. At an expected dilution ratio of 1:1 no treatment would be required for the overflow should the variance be granted. A treatment plant (0.1 MGD) consisting of an equalization tank, a two stage lagoon, and intermittent sand filter

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will treat all wastewater from the cleaning operation. Petitioner predicts that this facility will not discharge in excess of one mg/l phosphorus. However, should it appear that this level will be exceeded, treatment modifications (a chemical addition) and/or the implementation of pollutant-abating hatchery operations will be utilized (Pet. 4.2).

Petitioner predicts that the effluent discharges from the expanded hatchery will not exceed 1 mg/l phosphorus. Petitioner states that it is expected on a yearly average, phosphorus output concentrations will more nearly approach 0.24 mg/l (Pet. 5.1). According to the Agency with a combined effluent of 3.2 MGD, Petitioner's proposed facility will discharge between 6.4 and 26.7 pounds of phosphorus per day. In the USEPA National Eutrophication Survey's booklet, "Report on Crab Orchard Lake," it is estimated that Crab Orchard Lake receives 79,355 Kg per year (478.3 lbs. per day). Thus, according to the Agency, Petitioner's proposed facility will contribute between 1.3 and 5.6% additional phosphorus.

The Board has before it now the regulatory proceeding of R76-1, a proposal by the Agency to change the phosphorus standard which is the subject of this variance request. If the Board enacts the proposed change, Rule 203 will be eliminated and Rule 407 will be expanded to allow discharges containing 1.0 mg/l of phosphorus in bodies of water such as Crab Orchard Lake. Currently under Rule 203(c) the standard is 0.05 mg/l of phosphorus.

The Agency agrees with Petitioner that to require Petitioner to attain the 0.05 mg/l level would constitute a hardship. The Agency states that while to reach 0.05 mg/l is technically possible, it is economically unreasonable. Petitioner states capital costs of \$2.2 million and an annual operating cost of \$430,000 would be required to come into compliance (Pet. 8.2). The Agency files show no NPDES permit or application for permit for the Little Grassy Hatchery. The Agency recommends granting the variance subject to conditions.

The Board has confronted similar problems with phosphorus in the past and has granted variances numerous times, Urbana and Champaign Sanitary District v. EPA, PCB 76-295, 24 PCB 707 (Feb. 3, 1977), and City of Arcola v. EPA, PCB 76-280, 24 PCB 559 (Jan. 6, 1977). The Board finds as in the earlier cases that to require Petitioner to meet the water quality standard of 0.05 mg/l would be an arbitrary and unreasonable hardship. The Board grants a variance subject to the Agency's proposed conditions.

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This opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

It is the order of the Pollution Control Board that a variance is granted to the Illinois Department of Conservation Little Grassy Fish Hatchery, from the phosphorus limitations of Rules 203(c) and 402 of Chapter 3: Water Pollution for a period of five years or until such time as the proposed regulatory change R76-1 is adopted, whichever occurs first, subject to the following conditions:

1. The effluent from Petitioner's wastewater plant and from the overflow shall not exceed 1 mg/l phosphorus at anytime.
2. Petitioner shall agree to comply with any modification of Rule 203(c) of Chapter 3: Water Pollution if and when adopted by the Illinois Pollution Control Board.
3. Petitioner, within 28 days after the date of this order, shall execute and forward to the Illinois Environmental Protection Agency, Manager, Variance Section, 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 such certification is to be as follows:

CERTIFICATION

The Illinois Department of Conservation has received and understands the Order of the Illinois Pollution Control Board in PCB 77-176 and hereby accepts said order and agrees to be bound to all of the terms and conditions thereof.

Signed by _____

Title _____

Date _____

IT IS SO ORDERED.

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I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 18th day of August, 1977 by a vote of 5-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board

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