

ILLINOIS POLLUTION CONTROL BOARD  
June 3, 1976

CITY OF EFFINGHAM,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 76-129
	)	
ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

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

This matter comes before the Board as a Petition for Variance from Rule 203(h) of the Chapter 3: Water Pollution Regulations filed on May 3, 1976 by the City of Effingham. Petitioner originally filed the request PCB 75-428 in November, 1975 but it was dismissed on a motion by the Environmental Protection Agency (Agency) because of inadequate information. Additional information was sent to the Agency on January 30, 1976. A new petition was not filed with the Board until May 3, 1976. The Agency recommendation on this matter was filed April 28, 1976.

Petitioner requests a variance from Rule 203(h) to allow the application of an aquatic herbicide to Lake Sara, Effingham County, Illinois for the purpose of weed control. Effingham seeks to apply the herbicide 2,4-D to the lake once in early spring of 1976 and once in early spring of 1977. The application is to be 3,000 pounds of 2,4-D twenty percent granules to twenty-three acres of the lake surface. Petitioner estimates that the volume of the water to be treated will be  $35.5 \times 10^6$  gallons out of an estimated total volume of the lake of  $2,900 \times 10^6$  gallons. The estimate is that each application will result in a concentration of two parts per million (ppm) in the immediate area treated and .025 ppm when distributed throughout the whole lake.

Lake Sara is a supplemental water supply source for the City of Effingham. The water from the lake is discharged by natural drainage to pump stations on the Little Wabash River when the River, which is the primary source of supply for the City, proves inadequate. The lake also serves as a recreational facility for the area. The aquatic weed problem has become such that recreational use of the lake has at least in one instance become dangerous as well as unpleasant. Various mechanical means of removing the weeds have proven ineffective.

Petitioner will use the Isooctyl Ester formulation of the chemical which is substantially less toxic to aquatic biota than other forms of the chemical. The Isooctyl form of the chemical was not toxic to small bluegill at a concentration of forty parts per million and various game fish fry and fertilized eggs tolerated the chemical in laboratory conditions in concentrations up to 10 ppm. Previous tests of applications of 2,4-D to farm ponds indicated residuals ranging from no detectable levels after 29 days following a 5 ppm application to .13 ppm detected 24 hours after a 2 ppm application. To insure no detectable amounts of 2,4-D will reach the public water supply, no water will be withdrawn from Lake Sara for 30 days following application of the herbicide. Based on projected levels of toxicity in other animals the Petitioner stated that an ingestion of an 8 ounce glass of water treated at 2 ppm would result in less than 1:10,000 of a lethal dose to man.

The Agency has confirmed the data and plan with the Illinois Natural History Survey and with U.S. EPA and finds that there should be no resultant harm from the use of the herbicide in this manner.

The Agency recommended the variance to treat the lake with no more than 3,000 pounds of 2,4-D twenty percent granules to control weeds be granted subject to the conditions found in the Order.

The Board finds that denial of a variance in this case would be an unreasonable hardship. There is no suitable alternative method to control the weeds. Following the Agency conditions should be sufficient safeguard to the public water supply of the City of Effingham. Thus the Board does grant the variance subject to the aforementioned conditions.

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

#### ORDER

The Pollution Control Board hereby grants a variance from Rule 203(h) of the Chapter 3: Water Pollution Control Regulations to allow the City of Effingham to apply 3,000 pounds of twenty percent granules of the Isooctyl form of 2,4-D to Lake Sara in the spring of 1976 and the same application in the spring of 1977 for the purpose of weed control, subject to these conditions:

1. That the choice of the particular commercial brand of the herbicide be approved by the Illinois Natural History Survey.

2. That no water be withdrawn from Lake Sara for use as a raw water source for the City of Effingham Public Water Supply for at least 30 days following the application of the herbicide.
3. That Petitioner furnish the Agency with a sample of water for analysis taken from the point of discharge of Lake Sara 30 days after the initial application; and that no water be withdrawn from Lake Sara for use in the Effingham Public Water Supply without prior notification to and approval by the Agency.
4. That within seven days after the date of this Order 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 Certificate of Acceptance and Agreement. The form of said certificate shall be:

CERTIFICATION

I (We), \_\_\_\_\_ having read and fully understanding the Order of the Pollution Control Board in PCB 76-129 hereby accept said Order and agree to be bound by all of the terms and conditions thereof.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 3<sup>rd</sup> day of June, 1976 by a vote of 5-0.

  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board