## ILLINOIS POLLUTION CONTROL BOARD December 2 , 1976

VILLAGE OF ALMA,	)	
Petitioner,	)	
V •	)	PCB 76-227
ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

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

This matter comes before the Board on the variance petition of the Village of Alma filed on September 7, 1976, seeking relief from Rules 203(c) and 402 of Chapter 3: Water Pollution Rules and Regulations as applied to phosphorus. An Agency Recommendation was filed with the Board on November 9, 1976; no hearing was held in this matter.

The Village of Alma is located in Marion County and has a population of 369 people. The Village has no sewage collection system or centralized treatment plant with all homes in the Village presently served by septic tanks and seepage fields. With the assistance of a 75% State/Federal grant, the Village proposes to install a sewage collection system and treatment facility consisting of a waste stabilization lagoon, submerged sand filters and chlorination prior to discharge. This effluent will discharge to Warren Branch, tributary to the East Fork of the Kaskaskia River which flows into the Carlyle Reservoir. phosphorus concentration in the East Fork presently exceeds 0.05 mg/l as it enters the Carlyle Reservoir; therefore, the Village's effluent is water quality limited. Since the Village's proposed treatment facility is not expected to meet the Rule 203(c) standard of 0.05 mg/L phosphorus, the Agency cannot award a construction grant or issue a construction permit unless the Village first obtains a variance from the Board.

The Village contends that the best existing phosphorus control technology is not adequate to meet the water quality standard on a continuous basis. The Agency agrees with this contention (Rec. 3). Although the Village did consider land application, this alternative was considered undesirable for economic reasons.

The National Eutrophication Survey Report on Carlyle Reservoir states that the Lake is eutrophic and also phosphorus limited. The Village alleges, however, that the reduction in phosphorus loading which would occur if the Village implemented a phosphorus removal process would be insignificant compared to the excessive cost to the community. The maximum amount of phosphorus that will be discharged from the proposed facility will be 3.0 lbs. per day, which represents only .157% of the daily phosphorus loading to Carlyle Reservoir.

On January 5, 1976, the Agency filed a Petition for Regulatory Change (R76-1) with the Board which would amend the Regulations by requiring only point sources which have 1500 or more population equivalent to treat wastewater to a level not to exceed 1 mg/l prior to discharge. As justification for this proposal the Agency submits that eutrophication studies by both the United States Environmental Protection Agency and the Illinois State Water Survey show that the contribution of point source dischargers to the total phosphorus problem of lakes and reservoirs is small compared to the non-point contribution. The Agency submits that non-point sources, such as run-off waters from farm lands fertilized with phosphate base fertilizers, account for the overwhelming majority of the phosphorus loading of most lakes and reservoirs.

The denial of this variance would prevent the Village from utilizing State/Federal grant funds to assist in the construction of a much needed sewage collection system and treatment plant. Balancing this hardship with the extremely small contribution the Village's discharge will make to the Carlyle Reservoir phosphorus problem convinces the Board that the Village is entitled to relief. The Board will require, however, that the Village design and construct the sewage treatment plant to allow for the possible future installation of appropriate phosphorus removal facilities.

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

## ORDER

The Village of Alma is granted variance for the operation of its proposed sewage treatment plant from Rules 203(c) and 402 of Chapter 3: Water Pollution Regulations as regards phosphorus until November 1, 1981, subject to the following conditions:

1. The variance will terminate upon adoption by the Board of any modification of the existing phosphorus water quality standards and effluent limitations and the Village shall comply with such revised regulations when adopted by the Board.

- 2. The sewage treatment plant shall be designed and constructed to allow for the possible future installation of appropriate phosphorus removal facilities.
- 3. Within 35 days of the date of this Order, the Village of Alma shall submit to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, an executed Certification of Acceptance and agreement to be bound to all terms and conditions of the variance. The form of said certification shall be as follows:

## CERTIFICATION

understand and accept sai	having read on Control Board in PCB 76-227, d Order, realizing that such erms and conditions thereto
	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 \_a day of \_\_\_\_\_\_\_\_, 1976 by a vote of 4-0 .

Christan L. Moffett Clerk
Illinois Pollution Control Board