

IL IS POLLUTION CONTROL BOARD
January 29, 1976

VILLAGE OF WALTONVILLE)
)
 Petitioner,)
)
 v.) PCB 75-347
)
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

OPINION OF THE BOARD (by Mr. Dumelle):

This Opinion is in support of an Order granting the variance entered on November 26, 1975.

Petition for Variance was filed on September 4, 1975 from Rules 203(c), 402 and 404(f) of Chapter 3, Water Pollution Regulations, which pertain to the discharge of phosphorus from a proposed sewage treatment plant.

The Illinois Environmental Protection Agency filed its recommendation asking for a grant of the variance on October 7, 1975. No public hearing was held.

Waltonville is a village of 385 located in Jefferson County. The Village of Waltonville proposes to build a sewer system and a contact stabilization waste treatment plant. Contracts for construction of the sewage plant are expected to be awarded on February 15, 1976 with operation scheduled for December 1, 1976. The plant will discharge into an unnamed creek which discharges in turn to Buck Creek and to the Big Muddy River which flows into Rend Lake.

Rule 203(c) limits phosphorus to 0.05 mg/l in any reservoir or lake or any stream at the point where it enters any reservoir or lake.

The variance petition gives the following costs for variance alternates or combinations of alternates:

	<u>Total Present Worth</u>	<u>Annual Equivalent Cost</u>
Contact Stabilization Plant	\$ 246,160	\$23,236
Land Irrigation (following treatment)	395,572	37,340
Diversion to another watershed	421,297	39,768

Thus utilizing either land irrigation or watershed diversion would more than double the costs for the project.

The Petitioner states that Rend Lake is presently at 0.08 mg/l phosphorus content (60% over the standard of Rule 203(c)). Treatment of Waltonville's effluent to 1.0 mg/l phosphorus content would reduce daily discharge of phosphorus from 2.3 lbs. per day to 0.4 lbs per day. Treatment to the water quality standard of 0.05 mg/l (deemed unfeasible) would drop the discharge to 0.02 lbs. per day.

The Village asks that either no treatment for phosphorus be required or that an effluent limit of 1.0 mg/l be set.

The Agency recommendation points out that land disposal is complex for a small village to operate and that the soils are not suitable for this type of disposal. The contribution of Waltonville's phosphorus to Rend Lake is placed at about 0.5%.

Rend Lake is said to be eutrophic and phosphorus-limited but without algal blooms. The Agency states that more research is needed. Taste and odor problems possibly caused by algae are experienced at the Rend Lake Water District.

We have thus a situation in which a very small village cannot afford to remove phosphorus below 1.0 mg/l. On the other hand, Rend Lake is characterized by the Army Corps of Engineers in a December 1974 report as receiving a "dangerous" rate of phosphorus input. The Corps also states

Because the lake is phosphorus limited,
all phosphorus inputs should be minimized
to the greatest practicable extent to slow
the eutrophication of Rend Lake.

(Appendix 3 to Recommendation, p. 2)


Therefore, we grant the variance so that Waltonville may proceed to get its long awaited sewage plant and sewer system. But we shall require that provision be made for phosphorus removal

facilities (to 1.0 mg/l) should water research show this to be needed to save Rend Lake. The variance is granted until July 1, 1977.

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

Mr. Young and Dr. Satchell abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above was adopted on the 29th day of January, 1976 by a vote of 3-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board