

ILLINOIS POLLUTION CONTROL BOARD  
May 1, 1981

VILLAGE OF WAUCONDA, )  
)  
                          Petitioner, )  
)  
                          v. )                          PCB 81-17  
)  
ILLINOIS ENVIRONMENTAL PROTECTION )  
AGENCY, )  
)  
                          Respondent. )

OPINION AND ORDER OF THE BOARD (by J.D. Dumelle):

On February 4, 1981 the Village of Wauconda (Wauconda) filed a petition for variance from the phosphorus limitation of Rule 407(c) of Chapter 3: Water Pollution and from subparagraph 5 of the Board's Order in PCB 77-191 (February 2, 1978). On March 27, 1981, the Illinois Environmental Protection Agency (Agency) filed a recommendation to grant a variance from Rule 404 of Chapter 3, but to deny the Rule 407(c) request. Hearing was waived and none was held.

Wauconda owns and operates a sewage treatment plant which provides secondary treatment and has a design population equivalent of 8,000. Discharge is to Bangs Lake Creek which flows approximately two miles to Slocum Lake which is tributary to the Fox River.

On August 4, 1977 Wauconda was granted a variance (PCB 77-125) from Rules 203(c) and 402 of Chapter 3 until January 1, 1981 or until the Board modified the phosphorus standards. That standard was modified on April 26, 1979. On February 2, 1978 the Board granted Wauconda variance (PCB 77-191) from Rule 404(f) of Chapter 3 until February 2, 1981 subject to several conditions. These included an order that Wauconda complete construction of an outfall sewer around Bangs Lake Creek and Slocum Lake by February 2, 1981 (subparagraph 5).

Wauconda is currently in the construction grants program for upgrading its wastewater treatment facilities. Its Facilities Plan is awaiting final Agency approval. Wauconda alleges that completion date of construction will be December 31, 1984. This nearly four-year delay has been caused by the necessity of amending the Facilities Plan three times in response to federal and state regulatory changes. The Agency agrees that the delays have not been caused by Wauconda.

In determining whether variance from the phosphorus limitation of Rule 407(c) should be granted, the Board must

first consider the environmental impact. That impact is upon Slocum Lake which was the subject of a 1975 study conducted by the United States Environmental Protection Agency. That study indicated that the lake is highly eutrophic, ranking 27th of 31 lakes studied. Further, Wauconda's wastewater treatment plant was found to contribute nearly 53% of the total phosphorus loading. The study recommended that "all phosphorus inputs should be minimized." A 1977 Department of Conservation letter noted "intense algal blooms...[and] numerous summer and winter fish kills." Later, it stated that "the lake is nothing but an oxidation pit for the effluent it receives."

According to discharge monitoring reports (DMR's) submitted by Wauconda, average phosphorus levels have ranged from 6.5 to 15 mg/l since August of 1977 in contrast to Rule 407(c)'s requirement of 1.0 mg/l and Wauconda's NPDES permit's 3.0 mg/l condition. These levels are inexcusably high and certainly contribute in large measure to the eutrophication of Slocum Lake. The Board fails to understand how the Agency could have permitted these levels to continue for 2½ years without bringing an enforcement action against Wauconda.

The Board does, however, understand why the Agency opposes the granting of variance with respect to phosphorus. Not only has a substantial adverse environmental impact been demonstrated, but Wauconda fails to allege any hardship in meeting the 1.0 mg/l standard. Cost of compliance (short of completion of the \$4.57 million plant improvements) is noticeably missing from the pleadings. In this regard the Board takes notice of its Opinion in R76-1 (32PCB598; Feb. 15, 1979) in which the Board finds that for systems of greater than 5,000 population equivalents, a 1.0 mg/l limitation is economically reasonable. This is especially true where, as here, substantial environmental harm has been shown.

Thus, the Board finds that Wauconda has not proven an arbitrary or unreasonable hardship with regard to the phosphorus limitation of Rule 407(c), and that variance should be denied. This means that Wauconda must necessarily improve its phosphorus treatment prior to the construction of permanent improvements to its plant. The present jerrybuilt system which functions intermittently and freezes in the winter is wholly unacceptable. Equipment for dosing the effluent with phosphorus-removing chemicals can probably be selected that can be re-installed into the new plant.

The variance request from subparagraph 5 of the Order in PCB 77-191 does not suffer from the same shortcomings. Although the petition is somewhat short on allegations of environmental harm, enough information is given to allow the Board to take notice of its findings in PCB 77-191 since the situation has remained relatively unchanged since that time. Therefore, for the same reasons as expressed in PCB 77-191, the Board finds that Wauconda is unable to meet a 10 mg/l standard for biochemical oxygen demand (BOD<sub>5</sub>) or a 12 mg/l standard for suspended solids (SS) prior to upgrading and

expansion of its facilities. MDR's show average ranges of 19 to 38 mg/l BOD<sub>5</sub> and 21 to 37 mg/l SS. Further, the Board finds that Wauconda has been diligent in its efforts to achieve compliance. Therefore, the Board finds that denial of the requested variance would constitute an arbitrary and unreasonable hardship. Further, and again for the same reasons as the earlier variance, the Board will impose the same conditions as in PCB 77-191 with the exception that the final completion date shall be no later than December 31, 1984. A variance from Rule 404 is also necessary for complete relief and will be granted for the same reasons.

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

#### ORDER

The Village of Wauconda is hereby denied variance from Rule 407(c) of Chapter 3 and granted variance until December 31, 1984 from Rule 404 of Chapter 3 and subparagraph 5 of the Order in PCB 77-191, subject to the following conditions:

1. That Wauconda shall immediately begin to upgrade and expand its existing sewage treatment plant;
2. That during the interim until construction is completed, Wauconda shall limit its effluent discharge to 30/30 mg/l BOD<sub>5</sub> and suspended solids, respectively;
3. That upon completion of its upgraded sewage treatment plant, Wauconda's effluent shall not exceed 10/12 mg/l BOD<sub>5</sub> and SS, respectively;
4. That Wauconda install and utilize nitrification equipment, acceptable to the Agency, at its new plant;
5. That Wauconda begin and complete construction of an outfall sewer around Bangs Lake Creek and Slocum Lake, with discharge to an unnamed tributary to the Fox River, as soon as funds become available, but in no event later than three years from the date of this Order;
6. That Wauconda report semi-annually to the Agency on its financial ability to install the outfall sewer identified in paragraph (5) above; and that
7. Within 45 days of the adoption of this Order, the Village of Wauconda shall execute and forward to the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 a Certification of Acceptance and Agreement to be

bound to all terms and conditions of this Order.  
The 45 day period shall be held in abeyance during  
any period this matter is being appealed. The form  
of said certification shall be as follows:

CERTIFICATION


I (We), \_\_\_\_\_ having read and  
fully understanding the Order of the Illinois Pollution Control  
Board in PCB 81-17 hereby accept said Order and agree to be  
bound by all of the terms and conditions thereof.

SIGNED \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

I, Christan L. Moffett, Clerk of the Illinois Pollution Control  
Board, hereby certify that the above Opinion and Order was adopted  
on the 1<sup>st</sup> day of May, 1981 by a vote of 4-0.

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