

ILLINOIS POLLUTION CONTROL BOARD  
April 26, 1979

A.E. STALEY MANUFACTURING COMPANY, )  
  ) )  
  Petitioner, ) )  
  ) )  
  v.                                    ) )                                    PCB 78-308  
  ) )  
ENVIRONMENTAL PROTECTION AGENCY, ) )  
  ) )  
  Respondent.                                    ) )

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

Petitioner has requested a variance from the BOD and phosphorus limitations of Rules 404(f) and 203(c) of Chapter 3: Water Pollution which are contained in NPDES Permit No. IL0002381. The Agency has recommended that the variance be granted subject to conditions. No hearing was held.

Petitioner processes corn and soybeans at a manufacturing facility in Decatur. Petitioner operates a combined cooling water and storm water collection system at the Decatur facility which discharges into Lake Decatur. Petitioner's NPDES Permit prohibits any increase in BOD and phosphorus concentrations in the effluent over the concentrations in the cooling water which is drawn from Lake Decatur. Data in Exhibit A attached to the Petition show that effluent concentrations of BOD have consistently exceeded intake concentrations by a range of 0.4 mg/l to 5.0 mg/l. During periods of wet weather when the storm water component has been substantial, the difference between intake and effluent concentrations has generally been greater. Increased phosphorus concentrations in the range of 0.1 mg/l to 0.2 mg/l are also associated with contributions from storm water.

Petitioner feels it would be fruitless to separate the streams of cooling water and storm water since the same contaminants would still reach Lake Decatur. Cooling towers could be installed to remove the cooling water component, but these would cost approximately \$1,000,000 and blow-down would have to be treated or discharged to the Decatur Sanitary District. Petitioner feels that cooling towers would not improve the storm water effluent and may have an adverse effect on Lake Decatur by reducing the volume of flow in the vicinity of the discharge.

Petitioner cannot meet the standards of Rule 404(f) for BOD (4.0 mg/l) and 203(c) for phosphorus (0.05 mg/l) since both of these values are exceeded occasionally in the intake water, and Petitioner has no treatment system in place to remove these contaminants. Petitioner has requested alternative

effluent limitations of 10 mg/l BOD and 1.0 mg/l phosphorus since these are the values proposed by the Agency in the pending regulatory proceedings designated as R77-12 and R76-1 respectively.

Data in Exhibit BB attached to the Amended Petition show that BOD levels in the intake, which is located one half mile downstream from Petitioner's discharge, have never exceeded 5.5 mg/l on a weekly average. Total phosphate levels in the intake have been as high as 2.8 mg/l (approximately 0.9 mg/l phosphorus), but Petitioner feels that these values can be attributed to local agricultural runoff. Exhibit DD lists dissolved oxygen values in Lake Decatur in 1972. The data here show values from 6.3 mg/l to 12.4 mg/l. Petitioner feels that the water quality of Lake Decatur is generally good and that it has not suffered from the effects of Petitioner's discharge. Petitioner has proposed to undertake an additional program to demonstrate that granting this variance will not contribute to a violation of water quality standards in Lake Decatur. This program would follow the procedures in Technical Policy Statement WPC-1 which the Agency has been using for granting Pfeiffer and lagoon exemptions under Rules 404(f)(ii) and 404(c)(iii) of Chapter 3: Water Pollution. If these procedures prove inadequate, Petitioner proposes undertaking additional monitoring and evaluating available alternatives including additional treatment, instream aeration, artificially induced dispersion or elimination of the discharge. This entire program is drawn from the justification posed by the Agency in support of the proposed rule change in R77-12.

The Agency has recommended that a variance be granted for two years subject to certain conditions. The Agency feels that effluent concentrations of BOD and phosphorus should be limited to those levels proposed in R77-12 and R76-1. These are 10 mg/l as a monthly average and 1.0 mg/l as a maximum respectively. The Agency is asking that Petitioner be required to comply with the conditions of R76-1 and R77-12 when the Board takes final action in these proceedings. The Agency feels that the procedures in Technical Policy Statement WPC-1 are inappropriate in this case since Petitioner's discharge does not enter a free-flowing stream. Instead the Agency is proposing that Petitioner proceed immediately to an evaluation of alternatives which would result in elimination of the discharge. If the Board finds that all available alternatives are technically infeasible or economically unreasonable, the Agency recommends that Petitioner be required to conduct an approved biological and chemical monitoring program to determine the impact of the combined cooling water and storm water discharge on the receiving waters.

Petitioner has accepted the Agency's Recommendation with the understanding that the variance would run from the

date of issuance of Petitioner's present NPDES permit (November 21, 1978).

The Board concludes that denial of a variance in this instance would constitute arbitrary or unreasonable hardship upon Petitioner. Petitioner is faced with no immediate practicable alternative to its present noncompliance. Petitioner's cooling water discharge would have to be eliminated to comply with the present NPDES permit. Petitioner would be forced to suffer significant economic hardship through disruption of its manufacturing operations with no significant environmental improvement. The Board agrees with the Agency's recommended interim effluent limitations since they are presently achievable. There is no reason to base effluent limitations in this instance on treatability since no treatment will be required during the term of the variance. The Board agrees that no useful purpose would be served by a demonstration pursuant to Technical Policy Statement WPC-1. It would be inappropriate to require Petitioner to undertake an evaluation of alternatives to its present discharge at this time. Requiring such an evaluation would constitute prejudgment of R77-12 and would require continuing Board jurisdiction over a matter whose outcome will be greatly affected by R77-12. This is not the appropriate time to require Petitioner to embark on an involved evaluation and monitoring program which may be unnecessary. A two year term for the variance should give the Board enough time to make its decision in R77-12 and Petitioner enough time to evaluate whatever action it will be required to take.

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

ORDER

- 1) Petitioner is hereby granted a variance from the requirements of Rule 203(c) of Chapter 3: Water Pollution until November 21, 1980 or until the Board takes final action in R76-1, whichever occurs first, subject to the condition that the concentration of phosphorus in Petitioner's effluent be limited to 1.0 mg/l as a maximum.
- 2) Petitioner is hereby granted a variance from the requirements of Rule 404(f) of Chapter 3: Water Pollution as it pertains to BOD until November 21, 1980 or until the Board takes final action in R77-12, Docket C, whichever occurs first subject to the condition that the concentration of BOD in Petitioner's effluent be limited to 10 mg/l as a monthly average.
- 3) The Agency is hereby authorized to modify NPDES Permit No. IL0002381 in a matter consistent with the terms of this Order.

- 4) Within 45 days of the date of this Order Petitioner shall execute a Certification of Acceptance and Agreement to be bound by the terms and conditions of this variance. The Certification shall be forwarded to the Illinois Environmental Protection Agency, Division of Water Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706. This 45 day period shall be held in abeyance during any period this matter is appealed. The form of the Certification shall read as follows:

CERTIFICATION

I (We), \_\_\_\_\_, having read and fully understanding the Order in PCB 78-308, hereby accept that Order and agree to be bound by all of its terms and conditions.

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 26<sup>th</sup> day of April, 1979 by a vote of 4-0.

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