

ILLINOIS POLLUTION CONTROL BOARD
October 24, 1974

CATERPILLAR TRACTOR COMPANY)
(Joliet Plant))
)
)
 v.) PCB 74-233
)
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 ENVIRONMENTAL PROTECTION AGENCY)
)

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

Petition for variance from the Water Pollution Regulations (Chapter 3) was filed on June 19, 1974. Variance was requested from Rules 203, 205, 401, 402, 404(a), 404(b)(ii), 902, 903, and 1002. On June 27, 1974 the Board entered an order for additional information asking the reasons for the delay in meeting the biochemical oxygen demand standard (BOD₅).

Caterpillar filed an amended petition on July 26. The Agency filed its recommendation on August 29. No public hearing was held.

The Caterpillar plant, on Route 6 in Joliet, manufactures earthmoving and construction machinery and equipment and employs approximately 6,000 persons. Industrial wastewater amounting to 770,000 gpd is generated by plant utilities, metal removal, and cleaning and coating operations. The plant processes about 16,400 tons of raw materials (castings, forgings, unformed steel, etc.) per month. Discharge is to the Des Plaines River.

Caterpillar alleges that the discharge was recently found to contain levels of BOD₅ from 30-100 mg/l compared to the Rule 404(a) standard of 30⁵mg/l. Using a 7-day, once-in-10-year, low flow of 1000 MGD the petitioner alleges a contribution of only 0.3% additional BOD₅ to the Des Plaines River over that normally present.

The petitioner states that a consulting firm, Clark, Dietz and Associates, was retained on April 25, 1974 and their final report is due November 1, 1974. The amended petition also states that Caterpillar's regular sampling "until very recently indicated compliance with existing standards". An independent comparative analysis was made and the higher strength discharges were then discovered. No dates are given for these events.

The Agency presents Caterpillar's own Operation Reports giving monthly averages of 24-hour composite samples:

MONTH AND YEAR	BOD ₅
October, 1973	34 mg/l
November, 1973	46 mg/l
December, 1973	27 mg/l
January, 1974	23 mg/l
February, 1974	25 mg/l
March, 1974	30 mg/l
April, 1974	35 mg/l
May, 1974	-----
June, 1974	116 mg/l

The Agency points out that the October and November, 1973 values are above the 30 mg/l level set by Rule 404(a). It also points out that Rule 404(b) tightens the BOD₅ effluent limit to 20 mg/l after December 31, 1974 and that Caterpillar should have filed a Project Completion Schedule prior to December 31, 1972 to tell how this tighter limit was to be met (Rule 1002(b)(iii)). In fact, states the Agency, the Project Completion Schedule filed on February 5, 1973 was silent on BOD₅ improvement.

The history of the Sanitary Water Board (a predecessor board to the Pollution Control Board) with this plant is given by the Agency. A permit was issued March 14, 1967 limiting BOD₅ to 40 mg/l but the petitioner is quoted as indicating its treatment works would meet 30 mg/l.

We do not feel that variance is necessary from Rule 203 because this rule deals with General Standards and the Des Plaines River is a "Secondary Contact" classification in the reach of the discharge. A variance from Rule 205 is unnecessary. Rule 401 is not applicable since it is in the nature of general philosophy and guidance. Rule 402 does not apply because no water quality standards violations are shown.

We are thus left with Rules 404(a), 404(b)(ii), 902, 903 and 1002. We grant the variance with respect to these Rules. Counsel for Caterpillar has pointed out that given the low apparent BOD values, a "tuning-up" or process improvement could have been contemplated by management without the necessity for new waste treatment plant construction and for a Project Completion Schedule which would mention BOD improvement.

Management perhaps saw the December, 1973 - April, 1974 BOD values as indicative that operational changes were possible. Later the true values of the BOD levels were discovered and are much higher than thought.

By this opinion we do not mean to excuse the failure of Caterpillar's laboratory to adequately measure BOD levels. Caterpillar maintains responsibility for the actions of its agent; in this case, the laboratory. Other dischargers are well advised to periodically have independent checks run on their analyses to make certain that correct values are being determined.

Caterpillar has shown good faith by engaging a consultant on April 25, 1974. A report is due November 1, 1974. However, Caterpillar might have discovered the incorrect levels of BOD much earlier had some laboratory quality control procedures been in effect.

Rules 902 and 903 were replaced by Rules 952 and 953 effective October 11, 1974. Both of the Operating Permit requirements have been suspended, from October 11, 1974 until the earlier of January 31, 1975 or the date the Administrator of the U.S. Environmental Protection Agency rejects the Illinois NPDES Permit Program submittal, for dischargers who have to obtain an NPDES permit.

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

ORDER

1. Variance from Rules 203, 401 and 402 is dismissed.
2. Variance from Rules 205, 404(a), 404(b)(ii), 902, 903 and 1002 is granted from June 19, 1974 to January 1, 1975.

IT IS SO ORDERED.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 24th day of October, 1974 by a vote of 5-0.



Christian L. Moffett, Clerk
Illinois Pollution Control Board