



with the more stringent BOD requirement of Rule 404(b)(ii) (20 mg/l) effective December 31, 1974. Caterpillar alleged that it had retained a consulting firm for the purpose of recommending a plan to correct the effluent problem. Our Opinion in PCB 74-233 granted the variance until January 1, 1975 so that Caterpillar could receive and review its consultant's recommendation. In the instant petition, Caterpillar again alleges its inability to comply with the BOD standards of 404(b)(ii). Caterpillar also states that its consulting engineers submitted a report on November 7, 1974, recommending that an activated sludge plant be installed to facilitate BOD removal. The recommendation was based on three factors:

1. Treatability studies indicated that activated sludge will provide stable and efficient operation;
2. Activated sludge offers greater flexibility than other treatment alternatives available, including aerated lagoon, synthetic media trickling filter, biological fixed film rotating disc and submerged (upflow) biological filter;
3. Activated sludge is cost competitive with the other biological treatment methods studied.

As a result of this recommendation, Caterpillar now proposes the following time schedule for completion of the activated sludge system:

Commence final design -	May 1, 1975
Completion of final design	- December 31, 1975
Award of construction grant	- June 1, 1976
Completion of construction	- July 1, 1977

Caterpillar provides the following data regarding the average monthly levels of BOD in its effluent at its Joliet Plant.

<u>DATE</u>	<u>BOD (mg/l)</u>
June, 1974	116
July, 1974	56
August, 1974	91
September, 1974	86
October, 1974	69
November, 1974	69
December, 1974	62
January, 1975	127

These figures are considerably higher than the earlier averages presented in PCB 74-233 and recorded in our Opinion therein. This is understandable in view of the fact that the improper laboratory procedure which yielded low BOD

levels was not discovered until May, 1974. Agency grab samples indicated BOD concentrations at the following levels:

<u>DATE</u>	<u>BOD (mg/l)</u>
March 1, 1974	95
April 11, 1974	85
July 9, 1974	60
January 16, 1975	15

Caterpillar alleges that failure of the Board to grant its instant variance request will impose an arbitrary and unreasonable hardship since it cannot currently control the discharge of BOD to meet applicable standards; that enforcement of the standards will jeopardize operation of the plant; and that the discharge will not cause significant harm to the Des Plaines River.

Our Opinion in PCB 74-233 recognized Caterpillar's good faith in engaging a consultant prior to filing the petition therein. The Agency, in a recommendation to grant the instant petition, filed on March 12, 1975, expressed an opinion that Caterpillar has continued to act in good faith in developing an abatement program. We agree that the compliance plan proposed by Caterpillar continues to evidence such good faith.

The Agency recommendation points out that on September 30, 1974, approximately three weeks before the Board's decision in PCB 74-233, Caterpillar was issued an NPDES Permit for its Joliet facility (ILOOO 1732). The dates which Caterpillar sets out in this petition for the design, construction, and completion of the activated sludge system are the same dates which are contained in the schedule of compliance in the NPDES Permit, and the Agency feels these dates are a reasonable assessment of the actual time needed for the completion of the system. The NPDES Permit does not specify a numerical or effluent limitation for BOD for the period from the date of issuance of the permit until the proposed date of completion of the activated sludge plant on June 30, 1977, but Caterpillar is required to monitor its effluent daily for BOD. After June 30, 1977 until the expiration date of the permit, Caterpillar is required to meet a daily average BOD<sub>5</sub> limitation of 20 mg/l, and a daily maximum of 50 mg/l. We shall set a maximum of 130 mg/l of BOD on a monthly average basis.

The Agency feels that although the compliance schedule set out in Caterpillar's NPDES Permit serves as a deterrent from delay in completion of the activated sludge system, a variance issued by this Board should be limited to no more than one year in order to insure that Caterpillar maintains

"good housekeeping and continues to exercise all possible care to maintain its BOD discharge at the lowest possible level" (Agency Recommendation, p. 6). We agree that such a time frame is appropriate.

Caterpillar also seeks variance from the permit requirement of Rule 902 and the filing of a project completion schedule requirement of Rule 1002. As we pointed out in PCB 74-233, Rules 902 and 903 were replaced by Rules 952 and 953 effective October 11, 1974 but suspended until the earlier of January 31, 1975, or the date the U.S. Environmental Protection Agency fails to approve the Illinois NPDES Permit Program. These rules are now effective and Caterpillar needs the variance regardless of the fact that it has an NPDES Permit. Rule 1002 (b)(ii) requires that a discharger, "shall file a project completion schedule" including "a time schedule for the project's completion which must meet the applicable deadlines." We also grant a variance from this Rule. The Agency would subject such a variance to the condition that Caterpillar file a Project Completion Schedule indicating compliance dates, notwithstanding that such schedule fails to meet the required applicable deadlines. This would appear to be unnecessary since Caterpillar has already filed its compliance schedule in connection with its NPDES Permit.

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

ORDER

1. Variance from Rules 404(b)(ii), 952, 953, and 1002 is granted from January 1, 1975 until December 31, 1975 subject to the condition that Petitioner's BOD discharge not be increased in strength or quantity beyond present levels and in no month shall it exceed 130 mg/l on a monthly average basis.

2. The following checkpoint dates shall be met by the Petitioner:

Commence final design - May 1, 1975  
Complete final design - December 31, 1975  
Award construction grant - June 1, 1976  
Complete construction - July 1, 1977

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 24<sup>th</sup> day of April, 1975 by a vote of 4-0

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board