

ILLINOIS POLLUTION CONTROL BOARD
July 19, 1973

TEXACO, INC.)
(LAWRENCEVILLE REFINERY),)
)
Petitioner,)
)
v.) PCB 73-6
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

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

On January 8, 1973, a variance petition was filed by Texaco asking for relief from Rules 404(b) and 404(c) and Rule 408 of the Water Pollution Regulations. The Agency's recommendation, filed March 8, 1973, states that variances from Rules 921(d), 1002(a) and 1002(b) are implicit in the petition. Denial is recommended by the Agency unless proof is made by Texaco that no significant adverse effect will occur upon the Embarras River.

A public hearing was held in Lawrenceville on April 12, 1973.

The Lawrenceville refinery employs 600 persons and processes 92,000 barrels of crude oil (3,600,000 gallons) a day. It makes the whole gamut of petroleum products from LPG and gasoline to heavy fuel oil and asphalt.

The effluent from the detention pond amounts to 3300 gpm. According to Texaco, it does not meet the 20 mg/l BOD₅ standard of Rule 404(b), but averages 29 mg/l instead. Also, the effluent averages 0.062 mg/l cyanide instead of the 0.025 mg/l standard called for in Rule 408 after December 31, 1973.

Texaco proposes an improvement program costing \$2,235,000 which includes (a) improvements to No. 8 oil-water separator and changes in the detention, aeration and storage capacities, all to reduce BOD, (b) reducing the volume of effluent from 3300 gpm to 2400 gpm to achieve a dilution ratio greater than 5:1 and a looser effluent standard, and (c) correcting the cyanide problem with incineration as a future possibility.

The Agency, in its recommendation, points out the possibility of a suspended solids violation. However, since the petitioner has not amended his petition to request a variance for this parameter, we will not grant what is not asked. Counsel for the Agency, in opening remarks, has admitted that the BOD discharge from Texaco will not have an adverse effect upon the six miles of Embarras River between the refinery and the junction with the Wabash River (R. 7). Thus, it would be easy to grant the BOD variance except for (a) the unexplained delay in accomplishing a BOD improvement program sooner (the current effluent deadlines were adopted March 7, 1972) and (b) the prematureness of the request by Texaco's own schedule. Since the effluent reduction will be accomplished by August 15, 1974, there is no need for a variance from Rule 404(c)(ii) since that applies only after December 31, 1974. This variance request is dismissed as premature. Variance is granted from Rule 404(b) to discharge BOD at a 30 mg/l monthly average level for one year.

On June 28, 1973, the Board deleted Rule 921(d) and thus no variance is needed for this. We are left then with Rule 408 and 1002(a) and 1002(b) to consider. The Agency points out that a discharge of cyanide of 0.07 mg/l would raise the Embarras River to 0.018 mg/l (still below the Rule 203 water quality standard of 0.025 mg/l). But Texaco has not come forth with a program to achieve cyanide reduction. Dates are given in the petition, but the Board has no commitment as to the type of cyanide control program and that is a pig in a poke. And the Texaco witness, Mr. Lee E. Mueller, in answer to a question to forecast a date by which Texaco would have solved the cyanide problem stated:

- A. I cannot at this time forecast the date we will be in a position to submit an application for construction (R. 110).

His testimony then is in flat contradiction to the dates set forth in the petition of September 1, 1973 to apply for a construction program and all following interim dates to achieve cyanide reduction by December 1, 1974.

Thus, there is no program before the Board on which to act. Neither the method nor the dates are firm, and we must deny this part of the variance request. And since the 1002(a) and 1002(b) "implicit" variances are needed only with the Rule 408 variance, we need not grant them now. We do however, grant a Rule 1002 variance if necessary for purposes of the Rule 404(b) variance on BOD.

We point out for Texaco's guidance that even had the method of cyanide reduction been known and the proposed dates been firm, that no evidence was adduced as to the effects of the cyanide

upon the Embarras River. While the Agency's figure of 0.018 mg/l is below the 0.025 mg/l water quality standard, there is also a major technical question as to what amount of cyanide is really present.

The record shows that the Agency believes its automated cyanide test method, which seems not to be accepted anywhere else except for users of Technicon equipment, will detect at least twice as much cyanide as other methods (R. 134, 142). Thus, since Texaco asks for an effluent limit variance of 0.07 mg/l, in reality the discharge might be twice as much, or 0.14 mg/l, if the Agency's test method is correct. Applying a 4:1 dilution ratio to the 0.14 mg/l could then result in a cyanide level in the Embarras River of 0.035 mg/l, using an upstream background value of 0.009 mg/l as stated in Texaco's petition. The 0.035 mg/l is 40% over the water quality standard of 0.025 mg/l. Its adverse effects, if any, should be documented by Texaco.


Texaco should also, perhaps in cooperation with the Agency, determine which cyanide test method is more accurate.

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

ORDER

1. Variance is granted from Rule 404(b) until July 19, 1974 to the petitioner to discharge BOD up to 30 mg/l on a monthly average.
2. Variance is denied without prejudice as to Rule 408 for failure to state a firm program, both as to method and time.
3. Variance is denied as to Rule 404(c)(ii) because of prematurity.
4. Variance is granted from Rule 1002 in order that a Project Completion Schedule may be filed for the Rule 404(b) variance having to do with BOD.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 19th day of July, 1973 by a vote of 4-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board