

ILLINOIS POLLUTION CONTROL BOARD
October 11, 1973

CLARK OIL AND REFINING CORPORATION)
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 v.) PCB 73-238
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 ENVIRONMENTAL PROTECTION AGENCY)
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MR. W. GERALD THURSBY OF HACKBERT, ROOKS, PITTS, FULLAGER AND
POUST, appeared on behalf of Clark Oil and Refining Corporation
MR. LARRY R. EATON, ASSISTANT ATTORNEY GENERAL, appeared on behalf
of the Environmental Protection Agency

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

Clark filed a Petition for Variance from the Pollution Control Board's Rules and Regulations, Chapter 3 (Water Pollution Rules) on June 8, 1973. The Environmental Protection Agency (Agency) filed a recommendation to grant the variance on July 27, 1973. Hearing was held on July 31, 1973.

Clark operates a petroleum refinery located in Hartford, Illinois. The plant employes approximately 325 people in the production of gasoline, fuel oil and petroleum coke from crude oil. The plant processing capacity is currently expanding from 37,000 to 80,000 barrels per day of crude oil. Sampling results obtained by the United States Environmental Protection Agency (U.S. EPA) and the Agency, in addition to data from Clark's Monthly Operational Reports, indicates that Clark is currently discharging an effluent that is not consistantly within the limits of 20/25 mg/l BOD/ suspended solids standard and the phenol and cyanide levels which become effective December 31, 1973.

Following the adoption by the Board of the Water Pollution Rules, Clark began to develop a plan to meet the requirements. Clark filed a Compliance Schedule with the Agency on September 21, 1972. The Agency approved the schedule which showed that Clark would be in compliance on December 21, 1973. Subsequent to this, Clark met with U.S. EPA and learned that the program it had proposed for compliance with Illinois standards would not comply with the expected discharge limitations to be found in the National Pollutant Discharge Elimination System (NPDES) requirements.

The Agency agrees with Clark, in that to force Clark to comply with the Illinois standards by December 31, 1973, would result in an arbitrary and unreasonable hardship because Clark would have to redesign and reconstruct to meet any federal standard which was more stringent. The Agency states that Clark's effluent should not cause a detectable increase in the downstream concentrations of BOD, suspended solids, phenol and cyanide. More significantly, the Agency believes that the continued discharge of Clark's present effluent concentrations for the period of time requested should not adversely affect present aquatic life or significantly retard restoration of the Mississippi River.

Clark is seeking a variance from Water Pollution Rule 1002 to allow the Agency to approve a compliance schedule that will result in compliance by July 30, 1974 of Clark's effluent except for cyanide, for which Clark seeks a 3 year variance. A variance from Water Pollution Rule 404(b) is sought for BOD and suspended solids effluents which are normally either just under or over the limit of 25 mg/l. A variance from Water Pollution Rule 408 is sought for phenol effluents which are shown to exceed the 0.3 mg/l limit on occasion. Cyanide levels exceed 0.025 mg/l 10 percent of the time. The Agency has recommended that the variances be granted because of the short time involved, the minimal effect on the Mississippi River, and the fact that the delay was caused by factors outside of Clark's control.

This case is somewhat similar to others where the Board has denied variances from the cyanide requirements because of a failure to give any detail as to the method of complying with Water Pollution Rule 408 with respect to cyanide (PCB 73-14). The Board feels that this case is significantly different in that Clark violates the cyanide limit less than 10% of the time. Clark's professional engineer in charge of the pollution abatement program testified that it will take up to one year to carry out research to pin point the source of the cyanide and to develop possible upstream treatment techniques to reduce cyanide levels reaching the treatment plant. He also testified that his firm, William Brothers Waste Control, will be reviewing the research done in the field for the next year and will develop a program to correct the cyanide problem.

The Board finds that a delay of seven months in the completion of Clark's facility to control BOD, suspended solids, and phenols will not cause significant deterioration of the Mississippi River sufficient to overcome the hardship that would be forced upon Clark if the variance petition was denied. Therefore the Board will grant a variance to Clark to allow the Agency to approve Clark's compliance schedule and a variance from the effluent limitations on BOD, suspended solids, and phenols subject to certain conditions that follow. Remaining is the request for a variance as to cyanide.

The Board finds that Clark is in compliance more than 90% of the time. The Board also notes that Clark has presented testimony that there is apparently no current technology that will guarantee consistent compliance with the cyanide limit as respect to oil refinery wastes. The Board grants Clark a variance from the cyanide limits for one year in order to allow Clark to investigate the source of the cyanide, conduct research as to possible upstream removal, and to evaluate treatment systems subject to the limitations that follow.

The Board notes with displeasure that Clark's waste treatment lagoons are subject to flooding during high water periods on the Mississippi and therefore are rendered inoperative part of the year. While the record is absent as to possible flooding of the proposed new plant the Board feels that the Agency should examine permit applications as to the susceptibility of floods.

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

ORDER

It is the Order of the Pollution Control Board that:

1. The Board hereby grants Clark a variance from Rule 404(b) until July 30, 1974, subject to the conditions that Clark's effluent concentrations of BOD and suspended solids not exceed 50 mg/l.
2. The Board hereby grants Clark a variance from Rule 1002 of Chapter 3 provided that the compliance schedule indicates compliance by July 30, 1974 with respect to all parameters except cyanide. The compliance schedule with respect to cyanide shall only constitute a prima facie defence to any enforcement action until October 11, 1974.
3. The Board hereby grants Clark a variance from Rule 408, as it applies to phenols, until July 30, 1974, subject to the condition that Clark's effluent concentration of phenol not exceed 1.0 mg/l.
4. The Board hereby grants Clark a variance from Water Pollution Rule 408 as it applies to cyanide, until October 11, 1974 subject to the following conditions:
 - a. That Clark's effluent concentration of cyanide not exceed 0.30 mg/l at any time.

- b. That Clark submit to the Agency, within 30 days information regarding what experimentation has been undertaken and what method appears feasible.
- c. That Clark submit bi-monthly research progress reports to the Agency detailing the progress made in finding a solution to any cyanide removal problem it may have.
- d. That Clark conduct monthly water quality monitoring at the edge of the applicable mixing zone with respect to cyanide and report the results to the Agency.

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 11th day of October, 1973 by a vote of 4-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board