

ILLINOIS POLLUTION CONTROL BOARD
July 31, 1975

OLIN CORPORATION,)
)
 Petitioner,)
)
 vs.) PCB 74-492
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

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

Olin Corporation requests variance from Rule 408(a) of the Water Pollution Control Regulations as that Rule pertains to suspended solids or, in the alternative, for a ruling that the subject effluent is a deoxygenating waste governed by the looser standard of Rule 404(a).

Petitioner owns and operates a manufacturing plant near Joliet, Illinois known as the Blockson Works which discharges waste water to the Des Plaines River. These waste discharges were the subject of PCB 72-253 and PCB 73-82. The prior proceedings resulted in a project completion schedule for installation of a clarifier system which was to bring compliance with Rule 408(a) by April 1, 1974.

Installation of the clarifier system was completed by April 1, 1974 according to Olin. The operation of this system was varied from April to November 1974 in an effort to achieve the level of performance required by Rule 408(a). Olin took samples of the clarifier discharge and states that 95% of all samples fell within a range of 6 mg/l suspended solids to 82 mg/l suspended solids. The overall average was said to be about 40 mg/l. Rule 408(a) establishes an allowable of 15 mg/l and Rule 404(a) establishes an allowable of 37 mg/l suspended solids. The BOD levels for the same period ranged from about 7 mg/l to 25 mg/l with an overall average of 12 mg/l.

During initial operations of the clarifier Olin discovered that the system is dependent upon an even flow rate if it is to achieve maximum efficiency. This discovery led to the ordering in early November 1974 of equipment to modify the underflow of

the clarifier. Installation of the modification equipment was expected by March 1, 1974. Olin anticipates that the modified clarifier will produce an effluent in compliance with the suspended solids limitations of Rule 404(a), but it will not be known until the equipment is operational whether the limitations of Rule 408(a) can be met.

Because of this uncertainty regarding quality of effluent from the modified clarifier, Olin is investigating the use of filtration equipment to polish filter the clarifier overflow. If the modified clarifier proves inadequate to meet the suspended solids requirements of Rule 408(a), Olin could install the polish filtering equipment by March 1, 1976, subject to any delays caused by vendors.

Olin submits that both the Agency and Olin had assumed until recently that the industrial discharge was governed by Rule 408(a). Based on recent Board decisions in EPA vs. Stepan Chemical Company, PCB 72-489 and PCB 73-184 and LaClede Steel Company vs. EPA, PCB 72-425 and PCB 72-505, Olin now believes that its discharge should more properly be classified as a deoxygenating waste under Rule 404(a).

Such a finding would be authorization to Olin to discharge an effluent containing 37 mg/l suspended solids instead of the 15 mg/l suspended solids allowed by Rule 408(a). Apparently the modified clarifier would be capable of producing such an effluent. If the Board should rule that the stricter standard of Rule 408(a) is the applicable Rule, then a variance until March 1, 1976 will be necessary.

On this issue, the Agency asserts that the Petition and Amended Petition provide no data to justify the application of Rule 404. The Board agrees. In Stepan the Board noted several BOD discharges in excess of 600 mg/l and at least 37 discharges in excess of 100 mg/l BOD. BOD concentrations in LaClede's effluent ranged from 8 mg/l to 1300 mg/l. Olin's BOD of 7 to 25 mg/l is not of the same dimension and should not be classified as deoxygenating waste.

Data submitted by the Agency, based on operating reports submitted by Olin to the Agency, does not confirm an average suspended solids of 40 mg/l from April to November 1974. As shown on page 5 of the Agency Recommendation, these data, originally obtained from Olin, are as follows:

| <u>Month</u> | <u>Suspended Solids (mg/l)</u> | <u>Flo (GPM)</u> |
|--------------|--------------------------------|------------------|
| May | 294 | 2116 |
| June | 228 | 2220 |
| July | 146 | 1857 |
| August | 159 | 1877 |
| September | 135 | 1722 |
| October | --NO DATA AVAILABLE-- | |
| November | 160 | 1292 |

Agency inspectors visited the Blockson Works on October 29, 1974 and conducted what the Agency described as an "extensive" sampling program. The sampling for suspended solids revealed the following:

| <u>Location</u> | <u>Suspended Solids (mg/l)</u> |
|---|--------------------------------|
| Influent to clarifier | 90 |
| Clarifier effluent | 1 |
| Storm sewer at point entering clarifier effluent stream | 290 |
| Total effluent discharge at river | 130 |

This information would indicate that the source of suspended solids contamination is from a storm sewer downstream of the clarifier. If that is the case, improvements to the clarifier may not be needed. The Agency states that results of the October 1974 sampling were consistent with findings made by the Agency investigators on July 25, 1974.

The Agency recommended denial of this variance unless Olin provided accurate suspended solids data and "a clear and complete explanation as to the source of suspended solids concentration in the final effluent and a compliance program for same, if needed".

Following receipt of the Agency Recommendation, Olin submitted supplemental information for the period March 9, 1975 through May 12, 1975. The data was obtained subsequent to modification of the clarifier underflow. It may be summarized as follows:

| | |
|---|-------|
| Total Samples Analyzed. | 169 |
| No. of Samples - 15 mg/l or lower | 45 |
| % of Samples - 15 mg/l or lower | 26.6 |
| No. of Samples - 30 mg/l or lower | 109 |
| % of Samples - 30 mg/l or lower | 64.6 |
| No. of Samples - 37 mg/l or lower | 121 |
| % of Samples - 37 mg/l or lower | 71.6 |
| Average - all samples - mg/l. | 37.0 |
| Range - mg/l. | 2-220 |

The Agency states that Olin's summary of data shows that Petitioner is currently unable to meet the standards of either Rule 408 or Rule 404. However, the Agency believes that on-site sampling conducted by Agency personnel revealed the existence of a more involved suspended solids problem than Petitioner is willing to address. In addition to the October 1974 sampling data shown on Page 3 of this Opinion, the Agency submits results from samples taken on April 1, 1975 which show that effluent from the clarifier contained 6.0 mg/l total suspended solids while the TSP-CL outfall contained 580 mg/l total suspended solids. The TSP-CL outfall sample location is above the point of confluence of this discharge with the clarifier effluent.

The Agency again recommends denial of variance until Olin submits "a clear and complete explanation as to the source of suspended solids concentration in the final effluent". In addition, the Agency believes Olin should be required to submit a compliance program showing full compliance with the requirements of the Water Pollution Control Regulations.

We read Olin's request as specifically applicable to effluent from the clarifier. Olin has submitted data substantiating its claim of excessive suspended solids concentrations in the clarifier effluent and a compliance program to bring the suspended solids concentration in that discharge into compliance with the Rule 408(a) standard.

Agency data, on the other hand, indicates that the two parties have drawn samples from different points and that Olin does have a problem in the total picture beyond that of the clarifier effluent. The Agency sampling program clearly shows the existence of at least one problem discharge. The Board agrees that Olin should come into total compliance with the Regulation, but will not deny the limited variance requested here. Olin has not requested a variance covering all streams which contain suspended solids. The EPA may prosecute Olin for its other discharges if in violation of the Regulations.

Variance will be granted subject to specified conditions. Olin has expressed a desire to propose installation of alternative

equipment and/or processes to the Agency in the event such an alternative can be found and would be operative by March 1, 1976. This is a reasonable request and indicates that Petitioner is reviewing other compliance methods in addition to the filtration equipment.

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

ORDER

It is the Order of the Pollution Control Board that Olin Corporation is granted variance from the suspended solid standard of Rule 403(a) of the Illinois Water Pollution Control Regulations until March 1, 1976. Variance covers only the effluent from Olin's Blockson Works clarifier system. Variance is subject to the following conditions:

1. Petitioner shall apply for and obtain all necessary permits for installation of equipment.
2. Petitioner shall submit a compliance plan and incremental time table to the Agency by September 1, 1975 showing what method is to be employed to achieve compliance with Rule 403(a). Should an alternative method become available to Petitioner which could be operative by March 1, 1976, Petitioner may submit details of such method to the Environmental Protection Agency. Upon approval by the Agency, Petitioner may alter the compliance plan and increments of the time table to reflect new requirements necessitated by the alternate method.
3. Petitioner shall submit monthly progress reports to the Environmental Protection Agency. Said progress reports shall commence on October 1, 1975 and shall provide details of Petitioner's progress towards compliance.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted the 31st day of July, 1975 by a vote of 5-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board