

ILLINOIS POLLUTION CONTROL BOARD  
June 7, 1973

OLIN CORPORATION )  
 )  
 ) #73-82  
 v. )  
 )  
 ENVIRONMENTAL PROTECTION AGENCY )

GEORGE BULLWINKLE AND KENNETH R. MISCHNER OF PRICE, CUSHMAN, KECK,  
MAHIN & CATE, APPEARED ON BEHALF OF PETITIONER  
JAMES I. RUBIN, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF  
ENVIRONMENTAL PROTECTION AGENCY

OPINION AND ORDER OF THE BOARD (BY SAMUEL T. LAWTON, JR.):

On February 7, 1973, pursuant to petition for variance filed by  
Olin Corporation with respect to certain operations of its Joliet  
plant, the following Order was entered:

"1. Olin's Petition for Variance as respects its main  
plant sewer effluent is granted until June 1, 1973, insofar  
as the requirements of Sections 903 and 914 relating to  
operating permits, and Section 1002 relating to the project  
completion schedules are concerned, but only to the extent that  
they apply to the Rule 408 standards for arsenic, fluoride  
and lead, provided that:

- (a) Olin's main plant sewer effluent discharges to the  
Des Plaines River after December 31, 1973 not exceed  
0.5 mg/l arsenic, 20. mg/l fluoride and 0.2 mg/l  
lead.
- (b) Olin continues with and completes in timely fashion  
and in any event before December 31, 1973, its  
\$810,000 "Interim Control Program" presently underway.
- (c) Olin proceeds immediately to carry out and completes  
within 16 months from the date of this Order, Project  
B-7 calling for expenditures of \$400,000 to seal off  
the gypsum pond effluent, and completes that portion  
of Project B-1 calling for an expenditure of \$6,000  
to repair the HF emergency pond prior to December 31,  
1973.

2. Olin's petitions for variance in all other respects are  
mooted or denied in accordance with the above opinion.

3. The Environmental Protection Agency is hereby authorized to accept Olin's permit applications and completion schedules embodying the foregoing and is further authorized to issue such permits and approve such schedules in due course if such permits and schedules are otherwise in order.

4. On or before March 1, 1973, Olin shall have leave to petition the Board for an extension of this variance contingent upon sufficient proof of the continuing uncertainty of the detergent phosphate market and its economic effect on Olin's Joliet plant, the costs of compliance with the Board's regulations, and the effect on the concentrations of regulated constituents in the waters of the State of Olin's discharge beyond a reasonable mixing zone from the point of entry, in accordance with this Opinion."

On March 1, 1973, a petition for extension of variance was filed setting forth the entry of the foregoing Order and requesting an extension of the variance to June 1, 1974. The reasons ascribed were principally the uncertain future of the detergent phosphate market, and the inordinate cost of compliance in the event such market is decreased significantly or disappears. The Agency recommended that the variance be either denied or dismissed, asserting that the uncertainty of the phosphate market did not constitute a justifiable basis of hardship, entitling petitioner to the variance extension sought.

Hearing was held on the petition in Joliet on April 25, 1973. The evidence and testimony presented by petitioner may be summarized as follows:

William Nowakowski, Acting Controller of petitioner, (R. 7), testified that if capital expenditures were made that would bring the Joliet plant into compliance with all pollution regulations, the cash flow would remain negative for a period in excess of four years. This was premised on an assumption that price increases would offset cost increases, that bond interest and shareholder dividend expenditures would remain at their present levels and that approximately \$4,000,000 would be expended for the total pollution control program. The foregoing figure would include those expenditures which are presently programmed, as set forth in the above Order. Considered also was the profit that might otherwise be derived from the sale of Louisiana-produced soda ash that would be used in the Joliet phosphate production. In the event production declined, the cash recovery period would be correspondingly extended.

Tom S. Miya, (R. 41), Professor and Head of the Department of Pharmacology and Toxicology at Purdue University, testified that he was a member of the Woods Committee established by the Assistant Secretary of the Department of Health, Education and Welfare, with the objective

of studying the status of a phosphate detergent substitute known as N.T.A. The Committee established testing procedures for determination of the safety of N.T.A. Testing was proposed in two areas, carcinogenic potential and mutigenic potential. A minimum of 30 months was deemed necessary for completion of carcinogenic testing. While the report was filed in July of 1972, the witness was unable to state whether testing pursuant to the recommendation was initiated. At the present time, the safety status of N.T.A. has not been ascertained.

C. Edward Platt (R. 50) an employee of Proctor & Gamble, which is petitioner's primary phosphate purchaser in the detergent field, testified. This witness is involved in the marketing of laundry detergent and testified as to the status of various legislative and municipal enactments respecting phosphate bans and detergents, observing that the State of Indiana, Erie County, New York and Dade County, Florida, presently ban or limit the sale of phosphate laundry detergent. The states of New York and Connecticut also have comparable laws, either in effect or due to go into effect in the near future. On the other hand, the witness noted that the U. S. District Court for the Northern District of Illinois had declared the Chicago ban on phosphate unconstitutional. The substance of his testimony was to the effect that the future use of phosphate in detergents was unpredictable because of the uncertainty of restrictive legislation. Mr. Platt also commented on Proctor & Gamble's present testing and marketing program to diminish the use of phosphate in detergents, irrespective of prohibitive legislation, suggesting that this would ultimately lead to a decline in the purchase of phosphates. In any event, he believed that within "the next year or two", Proctor & Gamble would have a clearer prediction of what its needs would be for detergent phosphate. He predicted the phosphate demand for detergents by his Company would be substantially diminished.

Emil Stoltz (R. 71) Manager of Environmental Control of petitioner's Joliet plant, testified to the compliance program the Company had undertaken pursuant to paragraph 1 of our February 7, 1973 Order. He indicated that the anticipated cost of \$810,000 for the interim compliance program had increased to \$1,025,000. Construction permits have been applied for but not yet received as of the date of the hearing. The interim control program, however, is on schedule. Sampling of the Des Plaines River, both above and below the petitioner's discharge, indicated that a variance is no longer necessary for arsenic as the present effluent is below that provided in the Regulation.

The lead and fluoride parameters continue to exceed allowable limits although petitioner contends that the difficulty in testing lead content for the low measurements involved is such that, at the present time, it is not able to ascertain that it is, in fact, violating the Regulation. Fluoride in the effluent does exceed the allowable

limits although the dilution ratio once the effluent has passed the mixing zone is such that we are satisfied that no significant environmental harm will result. Accordingly, variance will be needed only for petitioner's main plant sewer effluent discharge to the Des Plaines River for fluoride and lead limited to 20 mg/l and 0.2 mg/l respectively, after December 31, 1973 as provided in our original Order.

Merhle Shoemaker (R. 92) Marketing Manager for phosphate products of petitioner, testified that Proctor & Gamble purchases of phosphate had declined approximately 30% for the period 1970-71-72 as contrasted with the base period of 1965 through 1969. A contract for phosphate supply has been entered into between petitioner and Proctor & Gamble for the year 1973, which, according to this witness, is unilateral in character in that it does not obligate Proctor & Gamble to purchase any amount from petitioner although conceivably valid as a matter of law if the buyer was limited to petitioner's source alone. The maximum estimated amount which would be required is again 30% below that of the base period. Alternative uses for phosphate, particularly as fertilizer, do not appear feasible in view of the cost of production.

Hugh Hogeman (R. 108) Assistant Director of Environmental Affairs for petitioner, testified to the nature of the relief sought by the present petition for variance extension, observing that variance only in the fluoride and lead parameters was sought, under Rule 408 to June, 1974. In addition, relief from the project completion schedule is sought to June of 1975 for compliance with the fluoride and lead limits. The interim compliance program will be achieved by December 31, 1973.

From the foregoing, it appears that Olin is pursuing the interim compliance program and gypsum pond improvements pursuant to its original representations. However, with respect to the ultimate future of the phosphate production and demand, we know little more than we did at the time of the original proceeding. Legislation limiting phosphate use has been adopted in some jurisdictions. Petitioner's principal customer, while continuing to use phosphate, is proceeding with formulations that will lessen its use and the Federal Government's studies of phosphate substitutes, for all that appears in the record, have not made any significant progress. The prognosis of petitioner's continued phosphate production and the demand for its product continues uncertain. However, as in all variance cases, we must act on what is in the record and balance the possibility of harm to the community if the variance is allowed against the hardship on the Company if the variance is denied. This, in turn, must be correlated to the precise environmental impact that results from any departure from the Regulations granted by this Board. We have previously held in consideration of all of the relevant factors, that the environmental impact from relaxation of the parameters sought by petitioner, namely, fluoride and lead, is relatively slight with respect to the main plant sewer effluent, as

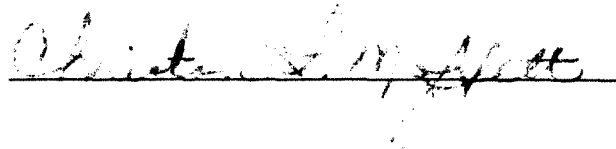
contrasted with the substantial expenditures petitioner would be compelled to make to bring its operation into full compliance in the immediate future, particularly in light of the continuing uncertainty of its phosphate production and demand.

However, we do not feel constrained to extend the variance for a full year. We will grant a six-month variance from the fluoride and lead restrictions and relief from the requirements of the project completion schedule in order to allow for completion of petitioner's compliance program and gypsum pond improvements, as already undertaken. We believe the Board should be advised as to the status of petitioner's operations and program at which time we can again review both the compliance program as undertaken and the future of petitioner's total operation.

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

IT IS THE ORDER of the Pollution Control Board that variance order heretofore granted in #72-253 on February 7, 1973, is extended as to petitioner's main plant sewer effluent until December 1, 1973, with respect to Rule 408, standards for fluoride and lead only, subject to all terms and conditions as set forth in said Order. Any petition for extension of variance shall be filed no later than September 1, 1973, subject to all terms and conditions provided in paragraph 4 of said Order. Sections 903 and 914 relating to operating permits and Section 1002 relating to project completion schedules are varied for a period to and including one year from this date in order to enable the Environmental Protection Agency to grant construction permits to enable completion of petitioner's compliance programs and gypsum pond improvements pursuant to our original Order.

I, Christan Moffett, Clerk of the Pollution Control Board, certify that the above Opinion and Order was adopted on the 1<sup>st</sup> day of June, 1973, by a vote of 4 to 0.

  
Christan Moffett