## BEFORE THE POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS March 3, 1971

| ENVIRONMENTAL PROTECTION                  | AGENC  | Y )     |       |
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| V.  |        | į       | #71-7 |
| OLIN CORPORATION,<br>East Alton, Illinois |        | )<br>)  |       |
| OPINION OF THE BOARD (BY                  | MR. LA | AWTON): |       |

On October 28, 1970, this Board entered an Opinion and Order in Case #70-11, granting to Olin Corporation, East Alton, Illinois, an extension of its existing variance, originally granted on May 18, 1967 by the Air Pollution Control Board, to continue disposal of its explosive trade waste by open burning.

The Order extended the variance to February 22, 1971, subject to specified conditions which obliged Olin to make monthly reports on the nature and extent of its open burning activities and on the progress being made relative to improved technology and facilities enabling disposal of explosive wastes in compliance with statutory provisions and the relevant regulations. Provision was made that if the Environmental Protection Agency advised the Board that the open burning operation of explosive wastes by Olin was producing an undue burden on adjacent areas, the Board could, after Hearing, terminate the variation. No such report has been received from the Environmental Protection Agency. The monthly reports provided for in the Order of October 28, 1970 to be made by Olin have been received. On January 18, 1971, Olin filed a new Petition with this Board seeking an extension of the existing variance until December 31, 1971 "or until such shorter time as Petitioner has brought itself into compliance with all of the regulations". The content of the new petition will be considered below.

Pursuant to statute, the Environmental Protection Agency filed its recommendation in which it recommended that the petition be granted subject to certain terms and conditions which are embodied in this Order. The Board determined that no hearing would be necessary on this new petition.

On February 22, 1971, the day that the extended variance previously granted by the Board in Case \$70-11 expired, the Board entered an Order extending the variance to December 31, 1971, subject to the terms and conditions hereinafter set forth. This Opinion is in support of that Order.

The character of Petitioner's explosive waste and the means employed for its disposal have been amply set forth in our Order and Opinion #70-11. There we concluded that no suitable alternative to open burning presently exists and that petitioner had satisfied the statutory requisites for the granting of a variance. No burden on adjacent areas from petitioner's operation is indicated. The conditions justifying the original variance still maintain although Petitioner has made substantial progress in achieving compliance.

The present petition states that analysis of emissions show that the quantities of nitrogen oxides involved are negligible, total emissions from all burning being less than a pound per day as NO<sub>2</sub>. Likewise, no significant amounts of sulphur emanate from the scrap explosives or ammunition burned. Sulphur oxides as SO<sub>2</sub> total several pounds per day resulting from burning of low-sulphur fuel oil in the vertical destruction chamber. According to the petitioner, this corresponds roughly to emissions from a large residence heated by fuel oil (Pet. 5). A table of emissions determined from Illinois Institute of Technology tests is included in the petition.

Tests made by IIT indicate that disposal of primer mix, propellant powder and shot gun shells in the vertical destruction chamber will meet Board incinerator regulations. Petitioner proposes the use of a modified standard incinerator to dispose of contaminated paper, wood, trash, scrap lacquers and solvents as well as shot shell cases. A scrubber will be installed if necessary to meet State regulations.

Low temperature demolition of center fire and rim fire, metallic ammunition, primers and scrap primed metallic ammunition will be burned in a rotary kiln. This equipment will be installed on a pilot basis and be of adequate size and capacity to handle production quantities. Emissions from this unit will conform to State requirements when used on a production basis.

Substantial progress toward compliance has been made by petitioner since the entry of our October 28, 1970 order. Among other things, Olin is using water and antifreeze rather than oil to desensitize smokeless powder, eliminating the black smoke resulting from previous burnings when oil was used. Technical advances have been made in lead shot and powder removal, low temperature ignition experimentation to eliminate lead fumes, improved monitoring equipment and powder and emission analysis. Additional incineration equipment to achieve compliance is being purchased.

Petitioner seeks the extension of variance granted in Case #70-11 until December 31, 1971, or until such shorter time as petitioner brings itself into compliance with all applicable regulations.

The Environmental Protection Agency recommends that the variance be extended, subject to the vertical destruction chamber being used for the demolition of stated categories of explosive waste until a permit is obtained from the Agency but in no event for more than ninety days from the granting of the variance extension. The Environmental Protection Agency also recommends that the modified standard incinerator and rotary kiln shall be used for the demolition of the stated categories of explosive waste until December 31, 1971, subject to termination upon a showing of absence of satisfactory progress to achieve compliance.

In granting the original variance, we stated that future extensions would be allowed only upon a showing that petitioner was aggressively pursuing a program to bring itself into compliance. We are pleased with the progress being made in this direction. This proceeding demonstrates the desired result of a variance allowance, where, through cooperation between the industry, the agency and the board, rapid and definitive progress can be made in eliminating air pollution without the imposition of hardship on either the community or the applicant.

Petitioner anticipates being in full compliance with the applicable regulations by December 31, 1971. However, insistence on immediate compliance would impose hardship on petitioner and resulting dangers disproportionate with any benefit accruing to the public. The extension of the variance is clearly indicated.

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

IT IS THE ORDER of the Pollution Control Board that the variance heretofore granted in Case #70-11, expiring February 22, 1971, be extended to December 31, 1971, subject to all terms and conditions of said variance as granted, except as modified by this Order and in addition thereto, the following conditions:

1. The vertical destruction chamber shall be used for the disposal of primer mix and propellant powders for no more than ninety days from the date hereof, or until such time as a permit shall have been issued by the Environmental Protection Agency, whichever first occurs.

- 2. Use of the modified standard incinerator and rotary kiln for disposal of categories of explosive waste as stated in the petition, shall be permitted until December 31, 1971; provided, however, that the variance shall terminate, on or after July 31, 1971 if the Environmental Protection Agency shall demonstrate to the Board after notice and hearing, that the petitioner has not made satisfactory progress in bringing these facilities into compliance with the relevant regulations.
- 3. Petitioner shall continue to submit reports required by Items 1 and 2 of the Board's Order of October 28, 1970, except that the reports shall be transmitted to the Environmental Protection Agency only every sixty days.
- 4. Antifreeze shall be used as a desensitizer in the burning of smokeless powder. No oil shall be used for this purpose.

| I,  | Regina | E. | Ryan,  | certify          | that | the | Board | adopted | the | above | opinion |
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I Concur

I Dissent