

ILLINOIS POLLUTION CONTROL BOARD  
June 23, 1971

OLIN CORPORATION, )  
MARION PLANT )  
 ) #PCB71-60  
 )  
v. )  
 )  
ENVIRONMENTAL PROTECTION AGENCY )

OPINION OF THE BOARD (BY MR. LAWTON):

DELBERT D. HASCHMEYER, Attorney for ENVIRONMENTAL PROTECTION AGENCY  
PATRICK O. BOYLE and J. F. SCHLAFLY, Attorneys for OLIN CORPORATION

The Olin Corporation has petitioned this Board for a one-year extension of the variance granted by our predecessor, the Air Pollution Control Board, to permit open burning of explosive waste. The waste is generated by a plant in Marion, Illinois, which manufactures rockets, flares, aircraft starter cartridges and gas generators and ignitors for missiles. These wastes consist of various types of propellant, of pyrotechnic candle mix and of fuel oil in which the scrap explosives are immersed as a safety precaution. The pyrotechnic waste, which has a high magnesium content constitutes approximately 6,000 pounds of the nearly 7,000 pounds of scrap explosives generated weekly. The waste is burned on a remote strip mining site .75 miles from the nearest residence.

An Order allowing the variance subject to the terms and conditions hereinafter set forth was entered by the Board on June 16, 1971. This Opinion is in support of that Order.

Petitioner contends that to deny the variance would constitute an unreasonable hardship principally because open burning is the only safe method to dispose of this particular kind of explosive refuse and because such open burning, conducted at extremely high temperatures, creates "relatively clean" emissions which cause "no harm to the public to the best of Petitioner's knowledge." (Variance petition).

The Environmental Protection Agency recommended denying the variance because of what it dubbed the "little more than token effort" of Olin in progressing toward a non-polluting method for disposal of these wastes. The Agency contended that Olin could have made substantial progress at its Marion plant because the Company had already done much to reduce pollution from explosive waste disposal at its plant in East Alton, Illinois (See PCB#71-7). And the Agency believed the East Alton situation comparable to the Marion problem.

While we agree that failure to show adequate progress toward pollution control is grounds for refusing to extend a variance, we find that Petitioner has shown good faith effort to resolve the explosive waste disposal problem at the Marion facility. Olin has engaged in the research and development of a prototype incinerator as well as other methods for disposal of pyrotechnic scrap (R.88-96, 101, 103, 138-139, 145).

Olin has demonstrated its Marion situation to differ substantially from its East Alton waste disposal problem.

In response to the Agency contention that Petitioner should have made a detailed analysis of the nature and quantity of contaminants emitted during open burning, Olin proved that pyrotechnic, unlike the explosive waste burned in East Alton, cannot be confined in order to obtain stack tests and reliable emission data. To the contention that it could set a specific date for bringing its Marion facility into compliance with the Environmental Protection Act, Olin responded that the nature of the waste burned in East Alton enabled it to specify a method of control and a target date for compliance. The scrap burned at the Marion site is primarily pyrotechnic which, because it is of irregular shapes and burns at temperatures too high for incinerators as presently developed, requires experimental methods of control which differ from the methods tried in East Alton. (R. 87,88).

The Agency asserted but did not prove that Olin had modified procedures in East Alton to reduce the amount of explosive scrap, whereas the volume of wastes was actually increasing at the Marion plant. Olin proved that it had undertaken efforts to reduce wastes as a percentage of production at Marion. (R.81,82).

We find that Petitioner has shown that to prohibit the open burning of these explosive wastes would constitute an unreasonable hardship because of the unavailability of alternative safe means of disposal and because of the showing of little harm to the environment and no public injury from permitting such burning.

We find the record inadequate on several points. Petitioner has failed to demonstrate sufficiently the safeguards which might be taken to protect the public from air pollution during the open burning. Olin offered little evidence on whether volatile pyrotechnic waste can be mixed with "non-volatile" scrap in order to produce a waste which can be burned in a control chamber such as that planned for use in the East Alton plant. Petitioner's statement as to why this could not be done is rather feeble. (R.106-110). And Olin neglected to develop Dr. Hesketh's testimony that with full Company cooperation he could produce an incinerator which might resolve the Marion dilemma by January, 1972 (R.147).

This Board will expect full discussion of these issues in the reports required by our Order.

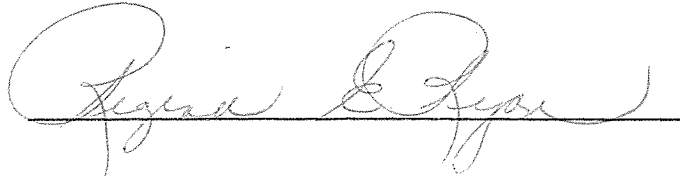
IT IS THE ORDER of this Board that the variance heretofore granted to the Marion plant of Olin Corporation shall be extended to February 24, 1972 to permit the open burning of explosive waste of the kind and in the amounts specified in the Variance Petition, subject to the following conditions:

1. Olin Corporation shall submit a monthly report to the Pollution Control Board and the Environmental Protection Agency specifying:
  - (a) the precautions taken to reduce the volume of explosive scrap burned, and to minimize the danger of air pollution from the burning of such scrap;
  - (b) the progress that has been made toward measuring the nature and degree of contaminants emitted from such burning and developing non-polluting techniques for disposal of these explosive wastes.
  - (c) the efforts made to develop methods for mixing volatile and "non-volatile" materials so as to permit burning in a control chamber.
2. Olin Corporation shall direct all necessary financial and informational cooperation toward the development of an incinerator with a pollution control device by January, 1972.
3. If the Environmental Protection Agency advises the Board that the open burning of explosive waste by Olin Corporation is producing an undue burden on neighboring areas, the Board shall make a determination as to whether the variance shall be terminated. Said determination shall be made only after a hearing on the matter is scheduled by the Board and held before a qualified hearing officer. Olin Corporation will be notified of the hearing date and shall be allowed to participate in said hearing.
4. The variation extension hereby granted shall terminate upon the establishment of alternative means of disposal of explosive waste, relative to all or any part of the Olin Corporation operation, resulting from the availability of new technology and processes which would enable

compliance with the relevant statutory provisions and regulations. Said determination shall be made only after a hearing on the matter is scheduled by the Board and held before a qualified hearing officer. Olin Corporation will be notified of the hearing date and shall be allowed to participate in said hearing.

5. During the period of this variance, Petitioner shall not increase the volume of wastes burned beyond that amount specified in its Variance Petition.
6. Failure to comply with any part of the above order shall be grounds for terminating the variance.

I, Regina E. Ryan, Clerk of the Illinois Pollution Control Board, certify that the above Opinion was adopted by the Board this 23rd day of June, 1971.

  
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