

ILLINOIS POLLUTION CONTROL BOARD
December 13, 1973

OLIN CORPORATION,)
a Virginia Corporation,)
)
Petitioner,) PCB 73-395
)
vs.)
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

Mr. Patrick O. Boyle, Attorney on behalf of Petitioner.
Mr. Dale R. Turner, Assistant Attorney General and
Mr. Paul Schmierbach, Attorney, appeared on behalf
of the Environmental Protection Agency.

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

On September 17, 1973, Petitioner, Olin Corporation, filed its Petition seeking a one-year variance from Rule 203(e) of this Board's Air Pollution Regulations (effective January 1, 1974).

At its facility in Williamson County, Illinois, Petitioner manufactures, inter alia, items which require propellant or pyrotechnic technology. Petitioner has disposed of the explosive wastes therefrom by open burning pursuant to the terms of a Variance originally granted by the Illinois Air Pollution Control Board (VR 67-60) and subsequently extended by the Illinois Pollution Control Board (PCB 72-517, PCB 72-357, PCB 71-371, PCB 71-60).

Petitioner has constructed a new and novel pollution control device for the disposal of its explosive and pyrotechnic wastes (hereinafter termed "experimental combustion device"). This experimental permit granted by the Agency on March 3, 1972 (OB 02 72 041, FIPS #199 055).

On February 9, 1973, Petitioner submitted an application to operate its new device (application # C-3-02-039, I.D. #199 055 AAR). The Agency denied said application on March 12, 1973. Petitioner, by the instant action seeks variance to operate the experimental combustion device for a term of one year.

The pollution control equipment on the subject device consists of a wet venturi scrubber and cyclone, costing a total of \$14,000. The Agency calculates that the described pollution control equipment has a particulate removal efficiency of 99.7%.

Petitioner estimates that the maximum amount of explosive scrap to be disposed of in any one week during 1974 will be as follows:

<u>Category</u>	<u>Maximum Amount per Week</u>
Ammonium Nitrate Propellant	300 lbs.
Double Base Propellant	40 lbs.
Single Base Propellant	20 lbs.
Pyrotechnic Flare Mix (high Magnesium content)	10,000 lbs.
Fuel Oil	Sufficient to immerse pyrotechnic mix as required for safety reasons
RDX	100 lbs.
Contaminated Packaging and Transfer Materials	100 lbs.

The Agency calculates emissions from the device to be 1.24 pounds per hour particulates and 1.61 pounds per hour carbon monoxide.

The subject device is situated in a remote area on a strip mine spoil land owned by Petitioner. Particulate concentrations in Petitioner's site area are 64 micrograms per cubic meter (maximum 24-hour average) and 32 micrograms per cubic meter (annual geometric mean). Both of these concentrations are well below primary and secondary national air quality standards. The 1975 particulate primary air quality standard is 75 $\mu\text{g}/\text{m}^3$ annual geometric mean and 260 $\mu\text{g}/\text{m}^3$ for a 24-hour average.

Petitioner states that it knows of no safe means to dispose of the explosive waste here involved other than by open burning or operation of the subject experimental device. The Agency concludes (Recommendation, p.3) that considerably more pollution would be emitted should Petitioner continue to open burn than if Petitioner employed its experimental combustion device.

Petitioner has no compliance program since it alleges that the subject device represents an advance in the state of the art which is not presently recognized in the Illinois Emission Standards and Limitations for stationary sources. Petitioner's views have been presented to the Standards Section of the Division of Air Pollution Control at meetings held in Springfield, Illinois, on April 26, 1973 and September 6, 1973. Further, Petitioner intends to petition this Board for regulations covering the subject device.

The cost of constructing the subject device was approximately \$90,000 and it is estimated that the cost of operation, vis-à-vis the cost of open burning, would entail a ten-fold increase in labor alone (R.22). The Agency recommends that this variance be granted and emphasizes that Petitioner has had a good record of compliance with previous Board Orders.

We are disposed to grant the variance requested, subject to conditions. Petitioner's device appears to have advanced the state of the art and we will allow it an opportunity to prove its effectiveness. In any event, both the Agency and Petitioner currently agree that utilization of the subject device will greatly diminish the amount of air pollution being presently experienced from open burning of explosive wastes.

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

ORDER

IT IS THE ORDER of the Pollution Control Board that Petitioner, Olin Corporation, be granted a Variance from Rule 203(e) of the Air Pollution Regulations to operate the subject experimental combustion device for the disposal of its pyrotechnic wastes for a period of one year from the date of this Order, subject to the following conditions:

1. That the firing rate into Petitioner's experimental combustion device shall not exceed 500 pounds per hour of pyrotechnic wastes.
2. That Petitioner shall obtain from the Agency an Operating Permit for the experimental combustion device.

3. That Petitioner shall not open burn any pyrotechnic wastes. In the event of a breakdown of the experimental combustion device, Petitioner shall store all pyrotechnic wastes until repairs are completed; however, if the time period necessary for repairs creates unreasonable safety hazards, then Petitioner may open burn such stored wastes after actual notice and approval by the Agency for each instance of open burning.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted this 13th day of December, 1973 by a vote of 5 to 0.

Christan L. Moffett