

ILLINOIS POLLUTION CONTROL BOARD  
September 20, 1985

OLIN CORPORATION, )  
 )  
 Petitioner, )  
 )  
 vs. ) PCB 85-86  
 )  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

OPINION AND ORDER OF THE BOARD (by R. C. Flemal):

This matter comes before the Board by the Petition for Variance and First Amended Petition for Variance filed by Olin Corporation ("Olin") on June 21, 1985, and July 11, 1985, respectively. Olin is seeking variance for a period not to exceed three years from the open burning prohibition of 35 Ill. Adm. Code 237.102. The Illinois Environmental Protection Agency ("Agency") filed its recommendation on August 12, 1985, recommending that variance be granted conditionally. The Board received a written objection to the granting of this petition from Mr. Hal Armstrong, who lives approximately 1/2 mile from Olin's burn site. This objection necessitated a hearing, which was held September 11, 1985.

Olin develops and manufactures various propellants, pyrotechnic devices, small and medium caliber ammunition, and gas generator propulsion devices at a former U.S. Army Ordnance Plant located in the Crab Orchard National Wildlife Refuge west of Marion in Williamson County, Illinois. These materials are produced for the U.S. Department of Defense and for export to foreign governments. In addition to the manufacturing facility, Olin operates a test range and waste thermal treatment facility on 290 acres of land two miles northwest of Marion, also in Williamson County. It is at this site that the open burning proposed by Olin would take place.

Petitioner states that as part of its contracts with the Department of Defense, Olin is required to test the ammunition it manufactures by firing a certain number of rounds (generally one per test) into containers of fuel. These tests are intended to simulate the conditions that would occur when firing ammunition into enemy vehicle fuel tanks. The ammunition types that could require testing include 50 caliber MPC, and 20 MM, 25 MM, and 30 MM HEI and MPC. The fuels required to be tested are diesel fuel, gasoline, Jet A and Jet B, and containers holding 3 to 33 gallons are used during testing, the size of the container varying with the nature of each particular test. When a round of ammunition

is successfully fired into one of the containers of fuel, the fuel ignites and burns, causing violation of section 237.102. Petitioner states it extinguishes the ignited fuel after approximately 5 minutes, and contends that typically 1 to 5 gallons of fuel are burned per test. Olin anticipates that the Department of Defense would require no more than 300 of the aforementioned tests per year.

Previously, Petitioner has received variances from the Board which allowed it to openly burn explosive wastes and allowed operation of explosive waste incinerators [PCB 71-160 (1971); PCB 71-371 (1972); PCB 71-517 (1973); PCB 79-234 (1980); PCB 81-118 (1982); PCB 83-102 (1983); PCB 84-69 (1984)]. The two most recent variances allowed activity similar to that involved in this petition.

Olin and the Agency concur that the proposed testing will result in only insignificant environmental impact to the area surrounding the burn site. Olin submitted the following data (which the Agency considers to be correct) detailing the annual emissions resulting from the tests:

Annual Emissions

Based on the worst case, i.e. 33 gallons of fuel and the full amount of the explosive charge contained in each round of ammunition burned in each test, and assuming 300 tests performed in one year the annual emissions would be as follows:

<u>Pollutant</u>	<u>Tons/Year</u>
Particulates	0.0099
Sulfur dioxide	0.2805
Carbon monoxide	0.0265
Nitrogen oxides	0.1095

Olin alleges, however, that based on past experience, no more than 5 gallons of fuel would be burned per test. Therefore, assuming 5 gallons of fuel and the full amount of the explosive charge contained in each round of ammunition burned in each test and 300 tests performed in one year, the annual emissions would be as follows:

<u>Pollutant</u>	<u>Tons/Year</u>
Particulates	0.0015
Sulfur dioxides	0.0420
Carbon monoxide	0.0055
Nitrogen oxides	0.0165

Petitioner contends, and the Agency does not contest that there is no feasible method of conducting the required tests other than by open burning. Consequently, Olin submits no compliance plan in support of its petition for variance relief. Moreover, the Agency has stated that given the testing requirements, it is unable to say that compliance is even technologically possible (Recommendation, par. 16). Petitioner has attempted to achieve compliance in the past by utilizing filtration equipment and by researching the feasibility of a test facility to contain the explosions. Neither potential solution was found to be useful because each prevented the simulation of actual battle conditions, a prerequisite of the tests. Without variance relief the only option available to Olin would be to conduct the tests at an out-of-state location; Olin submits that the cost of doing so would be prohibitive and that failure to gain variance would place Petitioner at a competitive disadvantage on two contracts it anticipates gaining within the pendency of the variance. For these reasons Olin and the Agency agree that denial of variance relief to the Petitioner would constitute an unreasonable hardship.

The Board finds that denial of variance relief in this case would cause Olin to suffer an arbitrary or unreasonable hardship, and so grants Petitioner variance from section 237.102 for a period of three years. It is uncontroverted that emissions resulting from Olin's testing have an insignificant environmental impact on the surrounding area, and that it is technically and economically infeasible for Olin to conduct these tests without violating section 237.102.

The only contested issue between the parties to this case relates to the duration of the variance period; Olin requests three years and the Agency recommends two years. Olin's request for three years is predicated on its expectation of bidding on two additional contracts, one this year and the other in 1987, which would entail testing similar to that required under its present contract. The first contract would consist of 20MM MPC and would run from 1986 through 1987. Olin estimates 200 tests could be required under this contract. The 1987 contract would involve 200 25MM MPC tests, with testing running from July, 1987 through 1988\*. Since both these contracts call for 200 tests, the emissions attributable to each would be only two-thirds of the amount resulting from the immediate testing program, the latter

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\*The Board notes that Petitioner's request for variance "not to exceed three (3) years" (Amended Petition, p.1) is seemingly at odds with Petitioner's apparent intent to have variance to allow testing which "would begin the first of July 1987 and run for 18 months or therefore 1987 through 1988" (Amended Petition, p.5), in that a three year period would not include the entirety of 1988. Though this is an inconsistency, the Board will not assume the task of redrafting Olin's Amended Petition. If in fact Olin is still in need of variance relief when this variance expires on September 21, 1988, Petitioner will have to take the appropriate actions at that time to extend its variance relief.

an amount which the Agency finds to be insignificant. Thus should Olin receive the 1987 contract, its emissions during the contested third year would equal approximately two-thirds of Petitioner's emissions under its first-year contract. During the second half of 1987, when two sets of tests would be occurring if Olin successfully bids for both new contracts, the rate of emissions could be expected to be one-third higher than the present rate. Since denial of the requested third year of variance would threaten to put Olin at a competitive disadvantage, and since the potential testing to be done by Olin during the third year would not differ in character but would occur with lesser frequency, the Board finds its appropriate that the variance run for three years.

The concern expressed by the Agency that a two-year variance "would allow closer regulation of the testing activity" (Recommendation, par. 19) the Board finds unpersuasive. The conditions imposed with the granted variance provide for Agency oversight throughout Olin's testing activity. The Agency also opined that a two-year variance period would be sufficient to give Olin "adequate time to pursue a more permanent remedy" (Recommendation, par. 19), including a possible site-specific rule. The Board finds this to be an insufficient argument to reject the three-year term requested by Petitioner.

As noted above, the Board received an objection to Olin's petition from Mr. Hal Armstrong, whose home is approximately  $\frac{1}{2}$  mile from the burn site. Mr. Armstrong complained of smoke and noise emanating from the Olin property. The Agency received a similar complaint from Mr. Armstrong. Subsequent Agency investigation "did not show that the complaints were related to the ammunition testing" (Recommendation, par. 5). However, the Agency does make several recommendations regarding conditions to be imposed along with granting of the requested variance which are intended to safeguard neighbors from possible impact of the ammunitions testing program; the Board finds these conditions reasonable and therefore adopts them in full.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

#### ORDER

Olin Corporation is hereby granted variance beginning September 21, 1985 from 35 Ill. Adm. Code 237.102 for ammunitions testing conducted at Olin's Test Range and Waste Thermal Treatment facility in Williamson County, Illinois, subject to the following conditions:

1. This variance shall expire September 21, 1988.
2. This variance pertains exclusively to open burning relating to ammunitions testing pursuant to contract with the United States Government.

3. Should Olin receive private complaints concerning its open burning practices, or should the Agency contact Olin concerning complaints it has received regarding the open burning which is the subject of this variance, Olin shall immediately discontinue testing unless and until meteorological conditions are such that the open burning will not constitute a possible violation of section 9(a) of the Act.

4. Olin shall keep available such records of the testing as may enable it to develop an ammunition testing procedure which does not constitute open burning as defined in the Act.

5. Olin shall submit quarterly reports of the testing to the Agency, the first such report due thirty days from this date. Such reports shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

Such reports shall include, as a minimum, time and place of each burning, identification of the quantity of oil burned, meteorological conditions in the vicinity, and complaints received by Olin and action taken thereon.

6. Olin shall conduct the open burning activities only between the hours of 8:00 a.m. and 5:00 p.m.

7. Olin shall provide a phone number available to receive complaints on a 24-hour per day basis.

8. Olin shall assign one person the responsibility of responding to citizen complaints, thereby allowing the public access to some one person familiar with the test burning procedures.

9. Within forty-five days after this date the Petitioner shall execute and send to:

Mr. William D. Ingersoll  
Enforcement Attorney  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

a certification of acceptance of this variance by which it agrees to be bound by its terms and conditions.

This forty-five (45) day period shall be held in abeyance for any period during which this matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

The Olin Corporation, having read the Order of the Illinois Pollution Control Board, in PCB 85-86 dated September 20, 1985, understands and accepts the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Olin Corporation

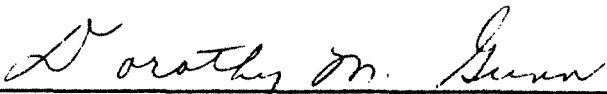
\_\_\_\_\_  
By: Authorized Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 20<sup>th</sup> day of September, 1985, by a vote of 7-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board