

ILLINOIS POLLUTION CONTROL BOARD
August 2, 1984

DEPARTMENT OF THE ARMY)
JOLIET ARMY AMMUNITION PLANT,)
)
Petitioner,)
v.) PCB 83-174
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

MR. JOHN A. ROCK, ATTORNEY-AT-LAW, APPEARED FOR PETITIONER;

MR. PETER E. ORLINSKI, ATTORNEY-AT-LAW, APPEARED FOR RESPONDENT.

OPINION AND ORDER OF THE BOARD (by B. Forcade):

This matter comes to the Board upon a November 21, 1983 Petition for Variance, and a January 12, 1984 Amended Petition, filed by Department of the Army, Joliet Army Ammunition Plant ("Army"). On January 9, 1984, the Board received a letter from Ms. Gisela Topolski, which it construed as an objection. On February 24, 1984, the Illinois Environmental Protection Agency ("Agency") filed a recommendation that variance be granted with conditions. Hearing was held June 28, 1984.

Army has petitioned for a one-year variance from old Rule 505 of Chapter 2: Air Pollution, presently codified at 35 Ill. Adm. Code 237.103. That regulation prohibits the open burning of explosive wastes. Army seeks the variance to allow burning of 25 buildings contaminated with an explosive called "tetryl." The variance would apply to Army's facility which is approximately 18 miles south of Joliet, 5 miles north of Wilmington and 2 miles south of Elwood, in a rural area of Will County.

The Army facility is owned by the United States Government and is operated by the contractor, Uniroyal. The facility, when operating, manufactures explosives and loads and assembles munitions. The facility is presently on standby status (R. 1-10). During World War II, and the conflicts in Korea and Viet Nam, the Army facility manufactured tetryl. Twelve production lines were used to manufacture the explosive; now, Army has been instructed to decommission six of those production lines, approximately 25 buildings, by the Rock Island Headquarters (R. 10-12).

These 25 wood and steel buildings were built around 1940 and have become contaminated with from a few ounces to a pound of

tetryl per building (R. 12, 16). Any effort at conventional demolition would risk the possibility of a worker hammering on a pocket of explosives, causing an explosion that may result in serious bodily harm or death (R. 15-16). Standard destruction protocols call for the buildings to be burned. If the variance is not granted the buildings will remain as a safety hazard and the land upon which they sit could not be used for future production needs (R. 20-21).

The 25 buildings proposed for demolition are all in one area. The area is about one and one-quarter miles from the nearest installation property line, one and one-half miles from the nearest off-post residence or business, and two and one-half miles from Elwood, the nearest community (R. 14). The area surrounding the facility is rural (Rec. ¶13).

Army proposes to first remove all asbestos (siding, shingles, insulation) and lead (flooring, pipes) from the buildings. Then one or two buildings will be burned at one time. Wood will be added to the buildings to ensure a temperature high enough for complete destruction of the tetryl (R. 16). Each burn of one or two buildings would be conducted in daylight, when atmospheric conditions are conducive to smoke dissipation, and with numerous safety and notification procedures. Army and the Agency have agreed on these conditions (R. 25).

By using calculations from United States Environmental Protection Agency manual AP-42, Table 2.4.2, the parties found the following estimated emissions under the agreed conditions (Pet. ¶4; Rec. ¶¶ 8-9; R. 19):

	<u>Total Annual Emissions</u>	<u>Maximum Hourly Emissions</u>
Particulates	5,358 pounds	39.3 pounds/hour
Carbon Monoxide	44,128 pounds	323.8 pounds/hour
Organics	7,565 pounds	57.1 pounds/hour

The three nearest air monitoring stations are 10 to 18 miles away and showed no violations in 1982 for particulates, carbon monoxide or ozone. In 1983 the Braidwood monitoring station (10 miles south) showed one excursion for ozone (Rec. ¶14). The Agency believes adverse environmental impact from the burning would be minimal because of the isolated area, a one-year variance allows emissions to be spread out, and the restrictions on burning only during favorable atmospheric conditions (Rec. ¶ 15). One witness for Army testified that based on prior experience burning tetryl contaminated buildings he would not expect explosions or other problems (R. 19, 24).

The Board finds that denial of variance would constitute an arbitrary or unreasonable hardship in that continued existence of the 25 buildings may lead to spontaneous explosion (Rec. ¶15), and conventional demolition may cause serious injury or death to the

workers. This hardship outweighs the minimal adverse environmental impact expected from the controlled open burning. Therefore, the Board will grant the requested one-year variance with the agreed conditions.

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

ORDER

The Department of the Army, Joliet Army Ammunition Plant ("Army") is hereby granted a variance from 35 Ill. Adm. Code 237.103, subject to the following conditions:

1. This Variance shall expire August 2, 1985.
2. Prior to open burning of any building, Army shall:
 - a) remove all asbestos siding, shingles, and pipe insulation for disposal in accordance with all federal and state regulations;
 - b) remove and decontaminate all lead flooring and pipes;
 - c) construct a fire break around the building;
 - d) provide 24 hour advance notification to the fire departments of Elwood, Manhattan, and Wilmington and to the Agency's Maywood office at 312/345-9780;
 - e) maintain an adequate staff of fire fighting personnel with appropriate equipment at the burning site.
3. Army shall conduct open burning operations only during daylight hours.
4. Army shall conduct open burning operations only when atmospheric conditions are conducive to good smoke dissipation.
5. Army shall not conduct open burning operations during episodes declared pursuant to 35 Ill. Adm. Code Part 244.
6. Army shall close all access roads to the open burning site until all fires have been completely extinguished.
7. Army shall provide adequate security personnel to prevent unauthorized persons from entering the open burning site.

8. Army shall not burn more than 2 buildings within a 24 hour period.
9. On or before the 5th day of each month, Army shall file written reports with the Agency detailing:
 - (a) date, time, and location of each building burned;
 - (b) identification of the building burned;
 - (c) meteorological conditions at the time of the burning including wind speed, wind direction, temperature, barometric pressure, relative humidity, type of cloud cover, and visibility.

Said reports shall be sent to the Agency at the following addresses:

Environmental Protection Agency
Division of Air Pollution Control
Control Programs Coordinator
2200 Churchill Road
Springfield, Illinois 62706

Environmental Protection Agency
Division of Air Pollution Control
Region 1, Field Operations Section
1701 South First Avenue - Suite 600
Maywood, Illinois 60153

10. Within 45 days of the Board's Final Order herein, Army shall execute a Certification of Acceptance and Agreement to be bound by all terms and conditions of the variance. Said Certification shall be submitted to the Agency at the addresses specified in paragraph 9. The 45 day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATION

Department of the Army, Joliet Army Ammunition Plant, hereby accepts and agrees to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 83-174, dated August 2, 1984.

_____ (Petitioner)

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 Opinion and Order was adopted on the 22nd day of August, 1984 by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board