

ILLINOIS POLLUTION CONTROL BOARD
August 10, 1983

DEPARTMENT OF THE ARMY,)
)
 Petitioner,)
)
 v.) PCB 83-109
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by W.J. Nega):

This emergency provisional variance request comes before the Board upon an August 8, 1983 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 45-day provisional variance from Rule 502 of Chapter 2: Air Pollution be granted to the U.S. Department of the Army (Army) to allow the open burning of approximately 300,000 pounds of nitrocellulose ammunition propellant.

The Petitioner's Joliet Army Ammunition Plant in Joliet, Will County, Illinois currently has in storage approximately 300,000 pounds of reclaimed ammunition propellant which is made of the highly volatile, explosive material known as nitrocellulose. This propellant was removed from the ammunition during demilitarization operations in the 1970's and has been in storage since that time. (Rec. 2).

The Army generally disposes of stored propellant in one of two ways; it either can be sold to a private company or destroyed. A critical factor in determining whether a specific propellant can be sold is the propellant's stability. Thus, the Army conducts routine stabilizer analyses pursuant to a Propellant Stability Program. Only those propellants which have been certified as to stabilizer content can be offered for sale and those that cannot be certified must be destroyed. In the present case, the nitrocellulose-based propellant is inherently unstable and will self-ignite when the stabilizer ingredient becomes exhausted. (Rec. 2).

In the Army's Propellant Stability Program, ammunition stocks are labelled by assigning lot numbers to consecutive quantities manufactured together. These identification lot numbers, which are assigned at the time of manufacture, are used to identify related ammunition which is withdrawn from field units due to ammunition failure or unsafe conditions.

Unfortunately, the nitrocellulose-based propellant involved in this case lost its lot identity when incorporated into ammunition and when it was subsequently reclaimed during demilitarization. Since the lot that the 300,000 pounds of nitrocellulose propellant came from cannot be ascertained, it is impossible to establish a baseline for the propellant, its history cannot be known, and its degradation profile (i.e., how soon the stabilizer ingredients will degrade and result in an explosion) cannot be developed. (Rec. 2).

Both the Army and the Agency agree that, because no assurance of the stability of the nitrocellulose-based propellant can be given, the continued storage of the propellant creates an extremely hazardous and dangerous situation which requires the immediate disposal of this material. (Rec. 3). The Army has developed procedures for disposal action which it asserts will be followed to assure the safety of personnel, structures, and grounds. (See: Exhibit 1). The Army asserts that the residue from burnt propellant will be deposited in the sanitary landfill which is located on the plant grounds and operated in strict accordance with applicable regulations.

The Agency has concluded that prohibiting the Army from the one-time open burning of the nitrocellulose-based propellant under Rule 502 of Chapter 2: Air Pollution would not only be extremely dangerous and present a safety hazard to human life, but would also impose an arbitrary and unreasonable hardship upon the Army. Therefore, the Agency recommends that the Board grant the Army a provisional variance from Rule 502 of Chapter 2: Air Pollution for a period of 45 days, subject to certain conditions. The conditions suggested by the Agency provide only that variance is limited to the 300,000 pounds which was the subject of the request, and that the Army comply with Section 725.482 of the RCRA rules requiring only that certain distances be maintained from neighbor's property lines depending on the amount of explosive waste destroyed.

The Board finds these suggested conditions to be wholly inadequate to protect the environment even during emergency destruction of these unstable wastes. The provisional variance as recommended essentially gives the Army carte blanche to dispose of these wastes in any manner whatsoever, as long as the property line distances are observed. The suggested conditions do not even require the Army to follow its own procedures. They do not address issues such as daytime versus nighttime burning, assessment of atmospheric and meteorological conditions affecting smoke dissipation, or notification and reporting to the Agency of circumstances of burns or even when the variance burns have been completed. Such conditions were essential to the Board's grant of variance in Trojan Corp. v. IEPA, PCB 82-23, October 5, 1982, to allow destruction of gunpowder-contaminated buildings and wastes.

Section 35(b) of the Act severely limits the Board's discretion in dealing with a provisional variance request and recommendation which meet the requirements of Sections 37(b) and 35(b). Were the Board free to exercise full discretion in this matter, the Board would impose additional conditions to remedy the noted deficiencies. As a minimum, given the scanty data before the Board, such conditions would include conditions 11, 14, 15, 16, 17 and 20 of the Trojan order, and a condition requiring the Army to follow its standard procedures.

Under the circumstances, however, the Board can only direct the Clerk to serve the Army with a copy of that Order, and to strongly urge the Army to comply with the above-enumerated conditions, in addition to its own "Standards Operating Procedure For Burning Propellant Powder." As directed by Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

ORDER

The U.S. Department of the Army is hereby granted a provisional variance from the open burning provisions of Rule 502 of Chapter 2: Air Pollution for a period of 45 days from the date of this Order, subject to the following conditions:

1. Only the 300,000 pounds of nitrocellulose propellant which are the subject of the variance petition may be openly burned.

2. The Army shall conduct such open burning in full compliance with the Section 725.482 of the Board's RCRA Rules. (35 Ill. Adm. Code 725.482).

3. Within 10 days of the date of the Board's Order, the Department of the Army shall execute a Certificate of Acceptance and Agreement which shall be sent to: Illinois Environmental Protection Agency, Division of Air Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706. This certification shall have the following form:

CERTIFICATION

I, (We) _____,
having read the Order of the Illinois Pollution Control Board in
PCB 83-109 dated August 10, 1983, understand and accept said Order,
realizing that such acceptance renders all terms and conditions
thereto binding and enforceable.

Petitioner


By: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution
Control Board hereby certify that the above Opinion and Order
was adopted on the 10th day of August,
1983 by a vote of 3-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board