ILLINOIS POLLUTION CONTROL BOARD March 16, 1978

SAVANNA ARMY DEPOT ACTIVITY,)
Petitioner,))
v.) PCB 77-182
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,))
Respondent.	,)

OPINION AND ORDER OF THE BOARD (by Dr. Satchell):

On July 5, 1977 the Savanna Army Depot Activity filed a petition for variance from the Rules 202(b), 502(a) and 505 of the Board's Chapter 2: Air Pollution Control Regulations. After several subsequent pleadings the Environmental Protection Agency (Agency) filed its amended recommendation on February 8, 1978.

Petitioner is a U.S. Army installation and is primarily engaged in storing useable munitions and in the demilitarization of unserviceable munitions for the U.S. Department of Defense. Part of the demilitarization process involves the open burning of explosive waste. It is estimated by Petitioner that 96 tons of material will be burned in fiscal years 1978 and 1979. The Agency estimates that the combined amount of all specified contaminants to be emitted from open burning of 96 tons of material will total less than one ton. In 1975 Petitioner burned an average amount of material on approximately 100 days per year consisting of:

800 artillery projectiles at 25 lbs. TNT each 400 wooden containers at 20 lbs. each 2 rockets at 50 lbs. each 10 lbs. of hand grenades 10 cannister mines at 33 lbs. each 1,757 lbs. of No. 2 fuel oil.

The wooden containers are contaminated and must be destroyed so that it is not possible to sell, stockpile, or give them away. These wooden containers are consequently used to ignite the other explosive material. The fuel oil is poured over the wooden containers to serve as part of the igniting process. However, now Petitioner requests permission to burn only that material which constitutes a safety hazard, material that requires immediate destruction to protect personnel and property. Some material decomposes over time becoming a safety hazard. Petitioner has established a policy of refusing to accept material for storage in the future which may become a safety hazard. This should help minimize the open burning that will occur.

At the present time there is no incinerator system available to control the discharge of contaminates. Petitioner intends to install an environmentally approved incinerator designed to control emissions from the ammunition demolition ground facilities. The construction of Petitioner's incinerator has been deferred pending the evaluation of test results from a prototype incinerator. The control equipment Petitioner intends to install, should the prototype prove successful, consists of a fluidized bed reactor, a decontamination oven, a cyclone separator, a venturi scrubber and a column scrubber. Petitioner's construction is to be completed by July 1984. The only other immediate alternative to the continuation of open burning is the shipment of the explosive material to another Army installation in the United States at an estimated cost of \$50,000 per year.

The nearest residences to the open burning location are approximately 3 1/2 miles to the northwest in Bellevue, Iowa, population 1,182. Blanding, Illinois, population 150, is approximately 3.8 miles to the northeast. The nearest ambient air monitoring station is 9.0 miles to the northwest in Galena, Illinois. The Agency regards this as being too distant to provide relevant data.

The Agency states in its recommendation that the methodology of controlling emissions from the open burning of this material is still an uncertain one. The purpose of developing and operating the prototype is to augment the knowledge concerning the methods of control. The Agency agrees with Petitioner that there is no reasonable and prudent alternative but to open burn certain amounts of material. Transportation to other sites for disposal is unreasonable because of the possibilities of explosion during the handling and transportation process. The Agency states that in consideration of the small amount of contaminants to be produced, the very small segment of the population which may be affected by the contaminants and the uncertainties regarding air pollution control methodology as well as the safety hazard posed by disallowing open burning the Agency recommends the grant of the variance with certain conditions.

The Board finds that the Petitioner has shown sufficient hardship to warrant the grant of a variance subject to the Agency's conditions. The danger of storing or moving the explosives and the uncertainty of control methods balanced against the small amount of contaminants to be released in a sparsely populated area indicate that Petitioner would suffer an arbitrary and unreasonable hardship if denied a variance. The Board does agree with the Agency that a variance from Rule 505 of Chapter 2 is unnecessary.

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

ORDER

It is the order of the Pollution Control Board that the Savanna Army Depot Activity is granted a variance from Rules 202(b) and 502(a) of Chapter 2: Air Pollution Control Regulations in order to open burn explosive waste until July 1, 1979 subject to the following conditions:

- The only material which can be open burned is that which requires immediate destruction to protect personnel and property.
- 2. Petitioner shall report to the Agency any changes in location of the open burning or any increase in quantities of material to be open burned within 30 days of Petitioner's discovery of same. Any such reports shall be sent to DAPC - Field Operations Sections, 4302 North Main Street, Rockford, Illinois 61103.
- 3. No later than March 1, 1979, Petitioner shall submit to the Agency a status report which includes information regarding any new alternatives to open burning, any new air pollution control techniques for open burning and the progress of the prototype incinerator. The status report shall be sent to the address specified in Condition Number 2.
- 4. Within 45 days after the date of this Board Order herein Petitioner shall execute and forward to the DAPC Field Operations Sections, 4302 North Main Street, Rockford, Illinois 61103 a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. This 45 day period shall be held in abeyance for any period during which this matter is appealed. The form of said Certification shall be as follows:

CERTIFICATION

I (We),			g read and	
fully understanding the Ore				
Board in PCB 77-182 hereby			and agree	to be
bound by all terms and con-	ditions	thereof.		
		Title		
		Date		

Christan L. Moffett, Clerk
Illinois Pollution Control Board