

ILLINOIS POLLUTION CONTROL BOARD
April 7, 1988

DEPARTMENT OF THE ARMY,)
JOLIET ARMY AMMUNITION PLANT,)
)
Petitioner,)
)
v.) PCB 87-161
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

JOHN A. ROCK, ESQ., APPEARED ON BEHALF OF PETITIONER;

PETER E. ORLINSKY, ESQ., APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board upon a Petition for Variance filed October 19, 1987 by the Department of the Army, Joliet Army Ammunition Plant ("J.A.A.P"). Amendments to the Petition for Variance were filed on November 30, 1987 and January 7, 1988. Petitioner seeks variance from 35 Ill. Adm. Code 237.103 which regulates open burning of explosive wastes, so as to allow it to conduct a one-time burn of accumulated wastes.

Petitioner originally waived hearing. However, on November 9, 1987 Iva Duggins, a citizen who resides near the Joliet Army Ammunition Plant, filed an objection. Hearing was accordingly set and held March 11, 1988 at the Will County Courthouse, Joliet, Illinois. Mrs. Duggins and several other citizens appeared at the hearing; Mrs. Duggins commented on the record (R. 26-27).

On March 9, 1988 the Illinois Environmental Protection Agency ("Agency") filed a recommendation ("Agency Rec.") that the requested relief be granted, subject to conditions.

Based on the record before it, the Board finds that Petitioner would suffer an arbitrary or unreasonable hardship, not justified by the minimal environmental impact, should the requested relief be denied. The Board will accordingly grant the requested variance subject to the conditions recommended by the Agency.

BACKGROUND

Petitioner owns a munitions manufacturing facility which is operated under contract by Uniroyal Chemical Company, Inc. It is located on a 24,000 acre site in Will County approximately 8 miles north of Wilmington, 3 miles south of Elwood, and 12 miles west of Manhattan.

The facility is presently being maintained in a standby status and has not engaged in any manufacturing of munitions since 1977 (R. at 20). Nevertheless, Petitioner has accumulated various explosive-contaminated debris at the facility. The contaminated material consists of such items as vessels, tanks, pipes, duct work, production equipment, metal and wood stairs, and other miscellaneous items (Agency Rec. at 2) which have been removed from various explosive production areas at Petitioner's facility. The material is estimated to be approximately 75% wood and 25% metal (R. at 12), and to contain "trace" amounts of explosives, mainly trinitrotoluene (TNT) (Agency Rec. at 2). A Petitioner's witness estimated that the waste could contain "pockets of anywhere from a couple of ounces to a pound of ... explosive material" (R. at 14).

The contaminated waste has been accumulated into a pile measuring approximately 175 feet long by 75 feet wide by 15 feet high. The pile is located on-site approximately three-quarters of a mile from the nearest J.A.A.P. property line and one mile from the nearest off-property business and/or residence (R. at 11). Petitioner desires to decontaminate the pile by burning it in situ. The burning would be conducted on a one-time basis and would take approximately two hours.

Petitioner asserts that destruction of the trace amount of explosives that are present requires flashing at high temperature; no other disposal method is presently available (Petition at 1). After the burning has been completed and the area has cooled, the metals would be salvaged (Id. at para. 3).

REGULATORY FRAMEWORK

Open burning of wastes which might create a hazard of explosion, fire, or other serious harm is prohibited pursuant to 35 Ill. Adm. Code 237.103 unless a variance has first been granted. Section 237.103 states in its entirety:

Section 237.103 Explosive Waste

Open burning of wastes creating a hazard of explosion, fire or other serious harm, unless authorized by other provisions in this Part, shall be permitted only upon application for and grant of a variance as provided by

the Environmental Protection Act (Act) (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) and by the Pollution Control Board's (Board) Procedural Rules (35 Ill. Adm. Code: Subtitle A, Chapter I).

HARDSHIP

Petitioner alleges that if it is not granted the variance which it is seeking, it will have no alternative means of disposing of the contaminated waste because, due to the contamination, the material may not be placed in a landfill or shipped off site. Petitioner also alleges that if the material is left in its present state, the material will be subject to spontaneous ignition and may become a refuge for rodents and insects. Finally, Petitioner alleges that it is impossible to safely salvage the wastes because small quantities of explosives may be absorbed into the wood or located on metals (Petition at para. 5), which would represent a hazard to the salvagers (R. at 13-14).

The Agency has undertaken an on-site inspection of the J.A.A.P. facility and "finds no errors in fact as alleged in the Petition for Variance" (Agency Rec. at 4). The Agency also agrees with Petitioner that the contaminated material is too bulky to be incinerated and may not be landfilled or transported off site due to contamination with explosives. The Agency further agrees that the continued presence of the material on site in its present condition could pose a possible health or safety hazard. Given the lack of alternative means of disposing of the wastes, the Agency is therefore of the opinion that open burning is the safest means of disposing of the material (R. at 29) and that denial of the requested variance would constitute an arbitrary or unreasonable hardship (Agency Rec. at 7).

ENVIRONMENTAL/HEALTH IMPACT

Petitioner has calculated the amount of expected emissions using Table 2.1.1 of the U.S. Environmental Protection Agency's "Compilation of Air Pollutant Emission Factors", AP-42 (Petition at para 4). Table 2.1.1 is titled "Emission Factors for Refuse Incinerators without Controls". The Agency believes that the proper emission factors are those contained in Table 2.4.1 of the same publication, said table titled "Emission Factors for Open Burning of Nonagricultural Material" (Agency Rec. at 4). For this and other reasons, Petitioner and the Agency differ in their estimates of expected emissions:

	<u>Total Emissions (tons)</u>	
	<u>Petitioner</u>	<u>Agency</u>
Particulates	4.32	4.8
Nitrogen Oxides	1.33	1.8
Sulfur Dioxide	.03	.3
Carbon Monoxide	n.c.	25.5
Hydrocarbons	n.c.	9.0

Petitioner asserts that the burning would be conducted only when favorable atmospheric conditions exist to minimize adverse effects on air quality (Petition at Para 3). These are to include wind velocities between 5 and 15 miles per hour under clear weather and no inversions (R. at 15). Petitioner also agrees to notifying surrounding communities and the Agency of the intended burn and to restrict access to the burn site (Id.). J.A.A.P. also has its own fire service, which would be on hand (Id.). Finally, Petitioner introduced into the record as Exhibit 2 the U.S. Army's safety guidelines for decontamination and disposal of facilities, equipment, and material; as an Army facility, Petitioner would be required to follow these guidelines (R. at 19).

The Agency notes that the burn site is located in a rural area and that no persons live in the immediate vicinity of the site (Agency Rec. at 6). An Agency inspector also spoke to Mrs. Iva Duggins, who has filed a written objection, and to two of Mrs. Duggins' neighbors who are also opposed to the grant of variance. The three objectors live approximately 4 miles southeast of the proposed burn site. The Agency concludes that neither Mrs. Duggins nor her neighbors live close enough to be adversely affected by the open burning (Id.).

In summary, the Agency concludes:

The Agency believes ... that granting of the variance sought by petitioner should not pose a health hazard because the open burning site is located in an isolated area, the open burning will only last about 2 hours, and Petitioner will conduct the open burning operation on a day when atmospheric conditions will readily dissipate the emissions. (Agency Rec. at 6).

PREVIOUS/FUTURE VARIANCES

Petitioner has sought and received several previous variances for open burning of contaminated wastes; the Agency cites PCB 78-257, PCB 82-105, PCB 82-106, and PCB 83-174 (Agency Rec. at 4). In addition to the wastes Petitioner desires to burn pursuant to the instant request, the Agency believes that there are other contaminated wastes at the J.A.A.P. facility which

could become the subject of future variance requests. On this basis the Agency notes:

The Agency believes that Petitioner should develop a comprehensive program to identify quantities and types of all contaminated wastes and to determine how the wastes are to be disposed. The Agency believes that such an approach is preferable to Petitioner's current practice of using the variance procedure on a regular basis as a means of performing "house cleaning". It would also enable the Agency to determine if there is sufficient quantity of waste material which could be incinerated so as to warrant the construction of an explosive waste incinerator. (In 1976, Petitioner entered into separate consent decrees with the U.S. Environmental Protection Agency and the State of Illinois which provided for the construction of an incineration system for contaminated and explosive wastes. Since the facility has ceased manufacturing, the consent decrees have not been enforced). Agency Rec. at 5.

The Agency recommends that the disposal program recommended above be made a condition of the instant variance. The Board finds merit in the Agency's recommendation, and will condition the variance accordingly. This notwithstanding, the Board notes Petitioner's contention that "under the present conditions, we shouldn't be expecting to see other requests for variance for opening burning" (R. at 21). Should this conclusion of no foreseeable need for further variances hold true upon additional investigation by Petitioner, the Board assumes that a written statement of this conclusion will suffice to meet the variance condition.

The Board also believes that the 90 days recommended by the Agency for submission of the disposal program report may be unnecessarily restrictive, given that the instant variance alleviates the immediate problem. For this reason the Board will require that the report be submitted within 180 days.

CONCLUSION

Based on the record before it, the Board finds that Petitioner would suffer an arbitrary or unreasonable hardship, not justified by the environmental impact, if denied the requested relief. The relief will therefore be granted, subject to conditions.

ORDER

Petitioner, the Department of the Army, is hereby granted variance from 35 Ill. Adm. Code 237.103, for the waste pile located at its Joliet Army Ammunition Plant and as described in the attached Opinion, subject to the following conditions:

1. Variance shall expire six months from the date of this Order.
2. The open burning shall be conducted on a day when the atmospheric conditions are expected to be conducive to good smoke dissipation.
3. The open burning shall not commence prior to 10:00 A.M. and shall be completed no later than 2:00 P.M.
4. Petitioner shall maintain an adequate staff of fire fighting personnel with appropriate equipment at the open burning site.
5. Petitioner shall provide 24 hour advance notification to the fire departments of Elwood, Manhattan, and Wilmington; and to the Agency's Maywood office (312/345-9780).
6. Petitioner shall close all access roads to the open burning site until all fires have been completely extinguished.
7. Petitioner shall provide adequate security personnel to prevent unauthorized persons from entering the open burning site.
8. Within 180 days of the grant of the variance herein, Petitioner shall prepare a written report detailing the types of quantities of all other contaminated wastes remaining at the J.A.A.P., the nature of the contamination and a comprehensive program for waste disposal. Said report shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Field Operations Section
Post Office Box 19276
Springfield, Illinois 62794-9276

and

Illinois Environmental Protection Agency
Division of Air Pollution Control
Field Operations Section
1701 South First Street
Maywood, Illinois 60153

8. Within 45 days of the date of this Order, Petitioner shall execute and forward to Peter E. Orlinsky, Enforcement Attorney, Illinois Environmental Protection Agency, 100 West Randolph Street, Suite 3-100, Chicago, Illinois 60601, a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period shall be held in abeyance during any period that this matter is being appealed. Failure to execute and forward the Certificate within 45 days renders this variance void and of no force and effect as a shield against enforcement of rules from which variance was granted. The form of said Certification shall be as follows:

CERTIFICATION

I (We), _____, hereby accept and agree to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 87-161, April 7, 1988.

Petitioner

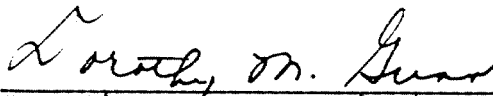
Authorized Agent

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 7th day of April, 1988, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board