

ILLINOIS POLLUTION CONTROL BOARD  
August 22, 1991

THE ENSIGN BICKFORD COMPANY	)	
and THE TROJAN CORPORATION,	)	
	)	
Petitioners,	)	
	)	
v.	)	PCB 90-242
	)	(Variance)
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

ROY HARSCH, GARDNER CARTON & DOUGLAS APPEARED ON BEHALF OF THE PETITIONER, and JULIE ARMITAGE APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J.D. Dumelle):

This matter is before the Board on petitioner's ("EBC") variance request filed on December 21, 1990. Petitioner is seeking to modify the variance granted in PCB 88-156 and PCB 88-168 (consolidated) on August 10, 1989. There, the Board granted EBC and the Trojan Corporation (Trojan), both wholly owned subsidiaries of Ensign Bickford Industries (EBI), a variance from 35 Ill. Adm. Code 237.102, authorizing them to open burn explosive waste and explosive contaminated waste, as permitted by 35 Ill. Adm. Code 236.103, subject to certain conditions, for a period of five (5) years from the date of the Order. Petitioner requests that the amount of explosive contaminated materials allowed by the current variance order be increased, and that the EBC and Trojan materials and the explosive and pyrotechnic materials be combined. On March 11, 1991 the Agency recommended that the variance be granted subject to conditions. Hearing was held on July 10, 1991 in Anna, Illinois.

EBC and Trojan are explosives manufacturers with operations at a facility located outside of the town of Wolf Lake, Union County. Trojan is the owner of the facility and EBC rents space from Trojan. Both are wholly-owned subsidiaries of Ensign-Bickford Industries ("EBI"). The explosives manufacturing facility is located thirty minutes equi-distant between Carbondale, Illinois and Cape Girardeau, Missouri on approximately a 450-acre site. The facility is bordered by Shawnee National Forest on the North and East, Wolf Lake on the West and Illinois Route 3 and farmland on the South. The nearest residence is approximately one-half mile from the facility. Wolf Lake has a population of approximately 250 people. Both Union County and all of its neighboring counties are attainment areas for all criteria pollutants. The petitioners note that the nearest air monitoring station is located in Carbondale, approximately twenty miles away. There have been no violations of particulate standards at this station in the last three years.

EBC manufactures explosive devices with non-electric blasting caps in an assembly-line process at the plant. The process also includes packaging and storage activities. EBC generates small quantities of waste creating a potential risk of explosion in the course of manufacturing the Nonel Primadet Assemblies. This waste takes the form of off-specification product, packaging materials, and explosive contaminated laboratory waste. Explosive-contaminated solvents and waste water result from EBC's routine cleaning, repair and maintenance functions. The waste water contains explosive HMX aluminum particles.

Trojan manufactures cast boosters. These boosters are manufactured by melting and mixing TNT and PETN. This mixture is subsequently poured into cardboard molds, necessitating related packaging and storage activities. Explosive waste, including TNT, PENT, and pentolite, and explosive-contaminated waste are generated through the manufacture of these cast boosters. This waste takes the form of off-specification product, packaging materials, and explosive-contaminated laboratory waste. Currently, Trojan employs approximately 160 people at its Wolf Lake facility.

#### COMPLIANCE PLAN

In our August 10, 1989 decision we found:

...the petitioners' compliance plan is to investigate possible methods of disposal during the variance period. If a technically feasible and economically reasonable disposal method is identified, the petitioners will devise a time table to come into compliance. If an alternative to open burning is not found, the petitioners will pursue an adjusted standard or a site-specific rule change. The Agency noted in its recommendation that explosives incinerators are used by the explosives industry to render waste inert. However, the petitioners failed to consider the installation and operation of an explosives incinerator as an alternate compliance plan. The installation of an incinerator should be investigated during the variance period.

#### ENVIRONMENTAL IMPACT

As noted above, the nearest residence is approximately one-half mile from the facility. In addition Union County is attainment for all criteria pollutants. The nearest air monitoring station is located twenty miles northeast of Wolf Lake. This station has measured no exceedences of the standard for total

suspended particulates (TSP) for the past three years.

Petitioner states that open burning of explosive waste and explosive-contaminated waste will be conducted in such a time, place and manner as to minimize the emission of air contaminants. While open burning of the waste will have some unquantifiable environmental impact, it should not cause any violation of national ambient air quality standards.

#### COMPLIANCE WITH FEDERAL LAW

In accordance with the provision of Section 35 of the Illinois Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111-1/2, par. 1035 (1985)), the Board may grant variances only where they are consistent with the provisions of the Clean Air Act (42 U.S.C.A. par. 7401 *et seq.* (1983) and the 1990 Amendments to the Clean Air Act (P.A. 101-549)). The State of Illinois has not submitted 35 Ill. Adm. Code 237.103 to the U.S. Environmental Protection Agency as part of the State Implementation Plan to attain and maintain primary and secondary air quality standards under the Clean Air Act (42 U.S.C.A. par. 4701 *et seq.* (1983) and the 1990 Amendments to the Clean Air Act (P.A. 101-549)). Consequently, grant of the petition for variance will not require a SIP revision and is therefore consistent with federal law.

#### HARDSHIP

In consideration of a variance, the Board is required, pursuant to Section 35(a) of the Act, to determine whether the Petitioner has presented adequate proof that it would suffer an arbitrary or unreasonable hardship if required to comply with the Board's regulation at issue. Ill. Rev. Stat. 1989, ch. 111-1/2, par. 1035(a).

The basis for the requested relief is that the amount of explosive contaminated waste burned during second quarter 1990 exceeded the amount authorized by the variance issued on August 10, 1989. Petitioner alleges that the exceedence was unforeseen and was the direct result of a change in vendors used to supply TNT to EBC's operations. The original vendor, which ceased operations, used paper bags for packaging whereas the new vendors use heavy-gauge cardboard containers, the weight of which results in an increased total weight of materials burned. EBC has little if any ability to impact the packaging of the explosive materials.

Moreover, Petitioner alleges that the consolidation of EBC's and Trojan's materials is necessitated by the consolidation of manufacturing operations and that this has contributed to a larger amount of burning. In its previous variance, we have already held that EBC has incurred an arbitrary or unreasonable hardship. We find today that the circumstances which have transpired since then warrant the revisions EBC requests. At the same time, we caution

that the provisions of the 1989 variance still apply. That is, this revision will only span a three-year period. In the interim, the Board expects EBC to implement a different process other than open burning or file for permanent relief consistent with our previous Order.

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

ORDER

EBC is hereby granted a variance from 35 Ill. Adm. Code 237.102 and authorization to open burn explosive waste as permitted by 35 Ill. Adm. Code 237.103, subject to the following conditions:

1. Petitioner shall diligently pursue an alternative to open burning its explosive waste and explosive-contaminated waste.
2. Petitioner shall submit to the Agency, as quickly as reasonably possible, information pertaining to Condition one (1) as such becomes available.
3. At any time during the variance period, the Agency may identify new alternatives to open burning for petitioner to evaluate for technological feasibility and economic reasonableness. The evaluation shall be completed and a report made to the Agency as quickly as reasonably possible after notice by the Agency to petitioner of the new alternative.
4. Petitioner, upon ascertaining to a reasonable degree of certainty that there exists an alternative to open burning which is technologically and economically feasible, shall implement this alternative to dispose of its explosive waste and explosive-contaminated waste. Such implementation shall occur not later than the expiration date of the variance.
5. Petitioner, upon ascertaining to a reasonable degree of certainty that there exists no alternative to open burning which is technologically and economically feasible, shall proceed with:
  - a. a petition for an adjusted standard or;
  - b. a petition for a site-specific rule change.

Such petition shall be filed not later than August 10, 1993.

6. Petitioner shall take reasonable measures to minimize the contamination of materials during manufacturing operations.
7. Petitioner shall weigh and record all materials to be burned.

8. Petitioner shall maintain records with weekly totals, by specific type and weight of waste burned. A compilation of these records shall be submitted on a quarterly basis to the Agency. These records shall be available for Agency inspection at all times when petitioner is in operation.
9. Petitioner shall submit progress reports on a quarterly basis to the Agency. The reports shall detail the companies and individuals contacted regarding alternative methods of disposal with documentation, including copies of correspondence, and cost and any test results of alternative methods of disposal; a list of any trade associations contacted regarding possible alternative methods of disposal; a list of trade publications and reviews consulted regarding possible alternative methods of disposal.
10. Petitioner shall be limited to open burning once a day, Monday through Friday, for a maximum of four hours per burn. Burning will begin only between the hours of 10:00 a.m. and 2:00 p.m.
11. Open burning shall take place on calm clear days on which wind velocity is greater than 2 miles per hour but less than ten miles per hour.
12. Petitioner shall use cages to burn explosive-contaminated materials so that the dispersement of any ash is nominal at best. Petitioner shall maintain the cages so that the design, function and efficiency of the cages is not substantially altered from the cages as-built.
13. Petitioner shall promptly clean up and dispose of any ash after every burn in accordance with all RCRA requirements.
14. Petitioner shall use a concrete pad to prevent residual waste and waste constituents from contacting surface soils.
15. Petitioner shall comply with all RCRA requirements.
16. Petitioner shall have fire prevention plans and equipment ready and in place at the facility prior to the first burn.
17. Petitioner shall train its employees in the proper procedures to be followed regarding the open burning. Additionally, training manuals delineating the procedures shall be readily available to employees and Agency inspectors.
18. Petitioner shall fence off the entire burn area prior to the first burn.
19. Petitioners shall notify the surrounding community, prior to the first burn, that there will be periodic open burning. A copy of the notification shall be sent to the Agency.

20. The above mentioned notification shall include a telephone number for nearby residents to call in the event of any complaints.
21. Any complaints shall be forwarded to the Regional Office in Collinsville within 24 hours.
22. Petitioner shall not burn more than the following:
- |                                  |               |
|----------------------------------|---------------|
| Explosive-contaminated solvents  | 130 lbs/week  |
| Materials to start fires         | 75 lbs/week   |
| Explosive-contaminated materials | 3900 lbs/week |
| Pyrotechnic materials            | 35 lbs/week   |
| TNT waste                        | 10 lbs/week   |
| PETN waste                       | 10 lbs/week   |
| Pentolite waste                  | 810 lbs/week  |
| Composition B waste              | 21 lbs/week   |
| Other explosives                 | 114 lbs/week  |
23. This variance shall expire on August 10, 1994.

Within 45 days after the date of this Opinion and Order Petitioner shall execute and forward to:

Julie Armitage  
 Division of Legal Counsel  
 Illinois Environmental Protection Agency  
 2200 Churchill Road, P.O. Box 19276  
 Springfield, Illinois 62794-9276

a certificate of acceptance of this variance by which it agrees to be bound by the terms and conditions contained herein. The 45 day period shall be in abeyance for any period during which the matter is appealed. This variance will be void if the Petitioner fails to execute and forward the certificate within the 45 day period. The form of the certification shall be as follows:

CERTIFICATION

I, (We), \_\_\_\_\_, having read the Opinion and Order of the Illinois Pollution Control Board, in PCB 90-242, dated August 22, 1991, understand and accept the said Opinion and Order, realizing that such acceptance renders all terms and conditions

thereto binding and enforceable.

\_\_\_\_\_  
Petitioner

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

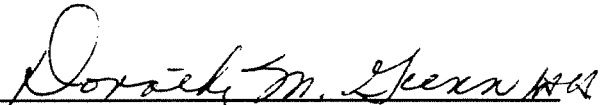
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Section 41 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111-1/2 par. 1041) provides for appeal of final orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

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 22<sup>nd</sup> day of August, 1991 by a vote of 7-0.

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