ILLINOIS POLLUTION CONTROL BOARD April 28, 1977

INTERNATIONAL	HARVESTER (COMPANY,)	
	Peti	tioner,))	
v.)) PCB	76-222
ENVIRONMENTAL	PROTECTION	AGENCY,))	
	Respo	ondent.	,	

JOHN FLETCHER, ESQ., APPEARED ON BEHALF OF PETITIONER; JAMES BUMGARNER, ESQ., APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by Mr. Goodman):

This matter is before the Board upon a Petition for Variance by International Harvester Company (Harvester) for the company's facility at Canton, Illinois (Canton). Hearing was held in this matter on March 16, 1977 at which time both parties indicated that they had agreed upon conditions for the proposed variance. One citizen testified at the hearing, and objections to the variance have been received by the Board.

The Canton Plant is engaged in the manufacture of farm equipment, parts for industrial and construction equipment and other miscellaneous parts. The manufacturing process includes shearing of steel, punching, forging, welding and machining processes. The Canton Plant normally employs between 1900 and 2200 employees, and its products are shipped to other International Harvester Company manufacturing facilities for use in their manufacture and assembly of other products. The subject of the Variance Petition herein is the Canton Plant's Forge Shop and the noise emissions therefrom. Harvester requests variance from Rules 202, 204, and 205 of Chapter 8, Illinois Pollution Control Board Rules and Regulations (Regulations). In addition, the Agency suggests that variance from Rule 206 of the Regulations is required; thus the Board will consider that Rule in its deliberations.

The sources of the noise at the Canton Plant include a wide variety of forge shop equipment, exhaust systems, and ventilation equipment. The maximum current levels of noise emissions from the Plant to surrounding properties are in the range of 51 to 87 dB, and the level of steady-state noise emissions from the Plant range from 3 to 17 dB (Amended Petition, p.3). Harvester alleges that property acquisitions have had the effect of extending the distance between the Plant and land receiving the noise emissions at a cost of In addition the Company has used special materials in \$180,000.00. replacing a portion of the forge shop roof and the West wall and part of the East wall of Building 103, which materially reduces the sound transmission, and has installed exhaust mufflers and other such equipment on its hammers. These projects have cost Harvester \$400,000.00 to date (Amended Petition, p.5). Several additional projects are in process in an attempt to further reduce noise emissions from the Canton Plant, including relocation of hammers, modification of exhaust vents, enclosure of equipment, etc. It is estimated that the completion of these projects will cost an additional \$100,000.00 (Amended Petition, p.6).

Harvester has studied several alternatives including relocation of the hammers, acquisition of additional adjoining land, enclosure of existing buildings, outside contracts, etc. Harvester alleges that it has yet to find a method which is both technologically and economically feasible to reduce the noise emissions to within existing regulations. It supports this conclusion with the results of noise consultation studies by Lyle F. Yerges of June 22, 1974, and August 17, 1974, and Bolt, Beranek and Newman in 1971, copies of which studies are presented as Exhibit 5 (Amended Petition, p.7). These studies indicate the only technically feasible method of reducing noise levels to within compliance is the complete enclosure of the buildings. It is estimated that the complete enclosure of the forging operation would cost approximately \$9,000,000.00 (Exhibit Harvester alleges that it would be arbitrary and unreasonable to require it to spend \$9,000,000.00 (approximately four times the book value of the forge shop) to meet the requirements of the regulations and requests variance from the existing noise emission standards Rules 202, 204, and 205(206) for a period of 5 years.

The Agency has developed a very complete Recommendation in this case including sound surveys, interviews with citizens, and estimated cost data. The Agency concludes that Harvester should be granted a variance for a period of time determined by the results in R 76-14 and R 76-19, proposed amendments to the Board's Noise Regulations with respect to forging noise. In addition the Agency suggests conditions be put on the proposed variance which would result in attenuation of the present noise level and the continuation of ongoing research in reducing forge plant noise.

In its Recommendation the Agency details the noise problems at Harvester's facility, the adverse effects therefrom, and the cost associated with both compliance and noncompliance with the regulations. The Agency agrees that compliance with the steady-state noise rules, i.e. Rules 202, 204, and 205, should await the results of R 76-14 and R 76-19 and that Harvester should additionally be granted variance from Rule 206, the impulse noise rule which is the subject of the amendments under consideration (Agency Recommendation, Exhibit 4). In addition, however, the Agency points out that Harvester can attenuate the noise level during the term of the proposed variance.

Two letters of objection were received by the Board concerning this proposed variance. The Agency received one of these letters (Agency Recommendation, Attachment 1) and two other letters requesting that the proposed variance be granted (Agency Recommendation, Attachments 3 and 4). In addition the Agency interviewed three of the signors of the letter of objection and eight residents concerning the noise emissions of the Harvester facility (Agency Recommendation, Attachment 2). One letter of objection argued that the objector's vacant lot, zoned commercial, might be depreciated in value if the variance is granted. The second letter, signed by twelve citizens, argued that a further increase in the noise of Harvester's operation would result wherein "it will no longer be possible to live in this area with any degree of comfort".

Attachment 2 to the Agency's Recommendation contains interviews with three of the citizens objecting to the variance petition and interviews with eight additional residents constituting a "sampling" on the West side of the Harvester plant. The three complainants interviewed complained for the most part about trucks coming from the North side of the plant in low gear in passing their homes. side residents stated that the noise did not bother them (3), that they are slightly bothered by the noise (3) or that they were annoyed by the noise (2). Disregarding the effect of the noise emissions on value of the empty lot, the main objection of the citizens interviewed appears to be the truck traffic on the streets adjacent to Harvester's facility and the apparent feeling by many that a variance will allow Harvester to increase the noise emissions from the facility. the only citizen in attendance at the hearing (who was also one of the objectors) stated "what I wanted to know is, do they expect to add additional noise on the Northeast of the building, anymore appliances or anything for more noise?" Mr. Fletcher responded on behalf of Harvester "and so that in the event any new equipment was added, the noise attenuating characteristics and anything that had to be done in order to keep the noise levels down would be done." (R.11-12).

Balancing the effect of Harvester's noise emissions on the

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surrounding area with the extreme cost associated with immediate compliance using the only known method, i.e., total enclosure, and considering that the noise problem is now the subject of regulatory hearings, the Board finds that it would place an arbitrary and unreasonable hardship upon Harvester to deny the proposed variance. However, the Board will impose conditions upon the variance in order to relieve the impact of Harvester's noise emissions on the surrounding area to the extent possible and to safeguard that area from any increase in those emissions.

This Opinion constitutes the findings of facts and conclusions of law of the Board in this matter.

ORDER

It is the Order of the Pollution Control Board that International Harvester Company be granted variance from Rules 202, 204, 205 and 206 of the Board's Noise Regulations until April 1, 1979 or until the final determination in regulatory proceedings R 76-14 and R 76-19, whichever event shall occur first, under the following conditions:

- 1. Harvester shall reduce the ventilation openings by partially closing the large overhead doors on the West side of the plant when possible to reduce the noise emissions.
- 2. Harvester shall maintain its participation in ongoing research in reducing the forge plant noise, specifically the 1974 Industrial Noise Control Research Project sponsored by the Forging Industry Educational and Research Foundation.
- 3. Harvester shall report to the Agency every six months, beginning from the date of this Order, on the results of its activity with respect to 1 and 2 above.
- 4. Harvester shall not increase the noise emission from the Canton facility during the term of this Variance.
- 5. Harvester shall execute and forward to the Environmental Protection Agency, Division of Noise Pollution, Enforcement Section, 2200 Churchill Road, Springfield, Illinois 62706 and the Pollution Control Board a Certification of Acceptance and

agreement to be bound to all terms and conditions of this Order. The form of said certification shall be as follows:

CERTIFICATION

I (We),	having read and fully
understanding the Order of the Ill PCB 76-222 hereby accept said Orde the terms and conditions thereof.	
	SIGNED
	TITLE
	DATE
	of the Illinois Pollution Control inion and Order were adopted on the by a vote of S-O
	Olika Januar
	Christan L. Moffett Clerk Illinois Pollution Control Board