

ILLINOIS POLLUTION CONTROL BOARD
June 6, 1975

INTERNATIONAL HARVESTER COMPANY,)
Petitioner,)
)
v.) PCB 74-277
)
ENVIRONMENTAL PROTECTION AGENCY,)
Respondent.)

Mr. Alan I. Becker and Mr. Jeffrey L. Brown, on behalf of
Petitioner;
Mr. Peter E. Orlinsky and Mr. Thomas R. Casper, on behalf of
Respondent.

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

This petition for variance was filed by International Harvester Company (Harvester), the operator of an integrated steel mill in Chicago, Cook County, Illinois, on July 22, 1974. The petition requests an extension of a one-year variance previously granted on July 27, 1973 by the Board (PCB 73-176 and PCB 72-321). In the petition, Harvester alleges that they have complied with the Board's Order of July 27, 1973, wherein they were ordered to complete specific actions on their two coke oven batteries located at the plant. Upon motion for hearing by the Illinois Environmental Protection Agency (Agency), filed on August 16, 1974, the matter was set for hearing by the Board. On September 25, 1974, Harvester filed a supplement to its variance petition, in which they indicated proposed plans for a total control system on coke oven battery No. 4.

THE VARIANCE

The original variance granted by the Board in International Harvester v. EPA, PCB 73-176 and PCB 72-321 (1973), from which this extension is requested by Harvester, consisted of a variance for the operation of the following facilities in a manner which would otherwise violate the indicated regulations:

(a) The stacks on No. 3 battery, from Rule 202(b) (Opacity) of the Air Pollution Regulations (Chapter 2) of the Pollution Control Board (hereinafter PCB Rules, Chapter 2).

(b) The lids on No. 3 battery, from Rule 203(d) (6) (B) (i) (aa) of the PCB Rules, Chapter 2.

(c) Charging on batteries No. 3 and No. 4 from Rule 203(d)(6)(B)(i)(bb) of the PCB Rules, Chapter 2.

(d) Pushing and quenching on batteries No. 3 and No. 4 from Rule 203(d)(6)(B)(i)(bb) of the PCB Rules, Chapter 2.

(e) Coke oven doors on batteries No. 3 and No. 4 from Rule 203(d)(6)(B)(iv)(aa) of the PCB Rules, Chapter 2.

(f) Charging, pushing, and quenching operations on batteries No. 3 and No. 4 from Rule 104 of the PCB Rules, Chapter 2, to the extent that timely compliance with Part 2 of Chapter 2 will not be achieved.

In their amended motion to extend variance, Harvester deleted the request for extension of variance from 203(d)(6)(B)(i)(aa) which expired December 31, 1973, and further seeks an extension of its variance from Regulation Section 203(d)(6)(B)(i)(bb), charging emissions, up to and including May 31, 1975.

PHYSICAL DESCRIPTION OF BUSINESS ACTIVITY

Harvester's coke plant consists of two batteries of Wilputte by-product coke ovens. Battery No. 3 contains 67 ovens installed in 1952 and 1956 with a capacity of 15.6 tons of coal per oven. Battery No. 4 contains 45 ovens installed in 1968, with a capacity of 27.8 tons of coal per oven. Both batteries are charged from larry-cars through top side lids. The lids on No. 3 battery are removed and replaced manually by Petitioner's employees. The lids on No. 4 battery are removed and replaced by magnetic lid-lifters.

The coking process inherently produces large amounts of gases and smoke, 95% of which are allegedly captured by the by-product system and used for various purposes. The gases which are not captured in the by-product plant create the coke oven emission problem. These emissions result from minute imperfections in the seal of the coke-oven door. Additional emissions occur during the pushing operation and some leakage is emitted from the stacks of the No. 3 battery.

AGENCY RECOMMENDATION

On November 20, 1974, the Agency filed a recommendation in the matter wherein they state that Harvester had been dilatory in the implementation of its control program and had failed to allege that a denial of the variance would impose an arbitrary or unreasonable hardship. A hearing on the matter was held on January 8, 1975, after which Harvester submitted an amended variance motion to conform to the proof presented at the hearing. Briefs on the matter were subsequently submitted by both parties.

As to the Agency's contention that Harvester has failed to allege that it would suffer arbitrary or unreasonable hardship if its request for variance was denied, we find that arbitrary and unreasonable hardship was established in the original proceeding, PCB 73-176 and PCB 72-321, the record of which proceeding was incorporated within the record of this proceeding by stipulation between the parties.

The operation of the coke plant is vital to the entire steel mill operation, not only because the coke produced is used to make steel, (1973 Tr. 27), but because the coke gas that is also produced is a basic fuel for steel mill processes. (1973 Tr. 28). In the light of the current short supply of fuels, it is apparent that without the coke gas, Harvester could not continue in the production of steel without facing an arbitrary and unreasonable hardship.

The Agency charges that Harvester has been dilatory in achieving compliance in that they agreed to have completed their controls for charging emissions from No. 4 battery by July 26, 1974. Referring to Harvester's January 27, 1975 amended variance motion in this proceeding, the Agency alleges that Harvester now states that its program to control charging emissions from No. 4 battery will not be completed until May 31, 1975. It is clear from the documents cited by the Agency that the control program for charging emissions contemplated by Harvester to be completed May 31, 1975, goes well beyond that which Harvester submitted as its plan for control of charging emissions to be completed by July 26, 1974. In fact, the 1974 proposed program was substantially completed within a few months of the target date. In mitigation of that delay, Harvester presented testimony at the hearing supporting its claim that the delays were caused by unforeseen problems in the new system and delays caused by vendors of the equipment for the new system. (R30, R91) The Agency's contention that problems with the control system "should have been obvious to Petitioner at the outset of the project" is not supported by the evidence, and the problems appear to be relatively minor shakedown problems which Harvester proposes to correct by the May 31, 1975 target date.

The Agency alleges that Harvester has failed to comply with certain of the conditions of its original variance, PCB 73-176. Harvester, on the other hand, alleges that it has "substantially complied" with all conditions of the original variance and that any deviations were "wholly immaterial". The Agency points to Harvester's non-compliance with four of the conditions of the original variance, PCB 73-176.

The first condition of the original variance (PCB 73-176) cited, B-9, required Petitioner to put Agency-approved work rules into effect by September 26, 1973. The record

shows that these proposed work rules were submitted and rejected a number of times before final Agency approval and that final acceptance by the Agency did not occur until July 31, 1974. (R112) Testimony at the hearing tended to indicate that the work rules were a continuing problem caused by the experimental aspect of the control program, and that further revisions of these rules would likely be necessary in the future as the program continues to its completion. (R111) The Board accepts this explanation as mitigation to the fact that the work rules were not finally accepted by the date proposed.

Conditions B-10 and B-11 required Petitioner to work out study procedures within 35 days. The record shows that the Agency acquiesced to Harvester's request to extend the 35-day deadlines, in order to facilitate study procedures concerned with corollary procedures. (R156) This change in the compliance with the conditions proposed does not seem arbitrary, and as the Agency acquiesced to the changes, they cannot now be heard to complain of the delay. The last condition with which the Agency contends Harvester failed to comply is condition B-12, concerning progress reports. The Board finds that submission by Harvester of the first report five days late does not constitute a material breach of that condition. (R116)

The final objection by the Agency to the issuance of a variance in this case concerns the control procedures proposed by Harvester with regard to pushing and quenching emissions from No. 3 battery until the battery is shut down in mid-1977. A procedure proposed by Harvester is a "Granite City Steel type" water fogging or spray system. (R73) The Agency takes strong exception to Harvester's contention that such a system is a viable control technique. As the Agency admits, conflicting testimony was presented at the hearings concerning the operation of Granite City Steel's fogging system and, upon inspection of the record, the Board tends to agree. (R76, R180) The testimony of both the Agency's and Harvester's witnesses indicated that neither witness had any real knowledge of that particular system or how well it functioned. The Agency submitted an exhibit entitled Summary Report on Control of Coke Oven Emissions by Battelle Laboratories (Exhibit A) a knowledgeable independent research association, referring in their brief to Battelle's estimation of fogging systems and that they are given a "negative evaluation". Upon inspection of Battelle's report the Board finds that the term "negative evaluation" must be taken in context:

"Battelle's evaluation of these actual systems, therefore, must be negative in comparison with hoods and enclosures. However, such systems

help in visible degree, and future evolutions of this approach may prove quite satisfactory."
(Respondent's Exhibit A at p. 64)

The Board feels that Battelle's evaluation of the fogging system is the only reasonable evidence of the system's ability to function that was produced at the hearing. Based upon the Battelle report, the fogging system is a viable control technique, particularly in view of the fact that No. 3 battery is scheduled for shut down in mid-1977. Considering that the alternative proposed by Battelle to the fogging system is a hood or enclosure similar to that proposed by Harvester for their No. 4 battery at a projected cost of \$5 million, the Board holds that a fogging system would be a reasonable alternative for the two years left in the life of No. 3 battery.

The Environmental Protection Act provides in Section 36(b) for variances to be extended from year to year if satisfactory progress has been shown and the Board in past cases has followed that rule in both a positive and negative fashion, Olin Corporation v. EPA, PCB 72-517 (1973), Missouri Portland Cement Co. v. EPA, PCB 75-5 (1971), and Purdy Co. v. EPA, PCB 75-2 (1971). In Olin, Mr. Lawton stated:

"We believe that Olin has demonstrated progress toward the achievement of its objective and while it has not adhered to the original time schedule contemplated, it has offered satisfactory reasons in justification for the delay."

The Board finds, in this case, that Harvester has carried its burden of proof in showing satisfactory progress in their attempts to control emissions from their coke oven batteries. They have proposed a system acceptable to the Agency for No. 4 battery and have proposed to shut down No. 3 battery by 1977, while applying a reasonable control system on the operation of the battery. Harvester has spent, to date, approximately \$1 million toward control of the batteries and is proposing to spend an additional \$5 million on the control facilities for No. 4 battery.
(R72)

It is the decision of the Board that Harvester be granted the variance requested.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

ORDER

1. Harvester is granted a variance to and including July 26, 1975 for the operation of the following facilities from the indicated Air Pollution Rules:

- a. The stacks on No. 3 battery from Rule 202(b); and
- b. Pushing and quenching batteries No. 3 and No. 4 from Rule 203(d)(6)(B)(i)(bb); and
- c. Coke oven doors on batteries No. 3 and No. 4 from Rule 203(d)(6)(B)(iv)(aa); and
- d. Charging, pushing, and quenching operations on batteries No. 3 and No. 4 from Rule 104 to the extent that timely compliance with Part 2 of Chapter 2 will not be achieved.

2. Harvester is granted a variance from Rule 203(d)(6)(B)(i)(bb) for charging batteries No. 3 and No. 4 to and including May 31, 1975.

3. The variance granted herein shall be subject to all the terms and conditions of the July 26, 1973 Order in PCB 72-321 and PCB 73-176 (consolidated) as may be presently applicable.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 6th day of June, 1975 by a vote of 50.


Christan L. Moffett, Clerk
Illinois Pollution Control Board