

ILLINOIS POLLUTION CONTROL BOARD

August 23, 1973

BORG-WARNER CORPORATION,)
)
 Petitioner,)
)
 vs.) PCB 73-220
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

Frederick E. McLendon, Attorney for Borg-Warner
Fredric J. Entin, Assistant Attorney General for the EPA

OPINION AND ORDER OF THE BOARD (by Mr. Henss)

Borg-Warner operates a large plant at 700 South 25th Avenue, Bellwood, Cook County, Illinois which manufactures metal stampings and friction plates used in automatic transmissions of automobiles. Part of the manufacturing effort involves the processing and waste disposal of over two million lbs. per year of asbestos impregnated paper. Petitioner claims to be in compliance with applicable Standards except for Rules 621(d) and 634 (asbestos and fibre waste), Chapter 2, Part VI, Illinois Air Pollution Control Regulations. This opinion deals with Borg-Warner's Petition for Variance from Rules 621(d) and 634 which require use of sealed containers to bury asbestos waste at a landfill.

Petitioner's manufacturing plant produces face plates and flex bands for automatic transmissions, both of which require the use of asbestos paper. The asbestos paper contains from five to thirty percent asbestos by weight with the average being about seventeen percent. A latex material is used to bind the constituents of the paper. The asbestos paper is processed from large rolls through a press that cuts the paper into the desired shape. An estimated 30% of the paper goes into product with the remaining 70% being considered scrap. From thirty to forty cubic yards of paper waste are produced daily. This costs Petitioner about \$156 per day for disposal. Petitioner estimated that approximately 356,000 lbs. of asbestos are disposed of annually (i.e. 2,990,609 lbs. of paper processed X 70% scrap factor X 17% asbestos content).

Formerly, the asbestos scrap paper was dumped, spread, compacted and then covered. Several disposal methods have been considered by Petitioner. One year ago, the asbestos paper supplier told Borg-Warner that about 40% of the scrap could be recycled. Petitioner investigated recycling and again contacted the supplier only to discover that new restrictions had been imposed which would limit the recycling effort to only 12% of the total volume of paper being used (R. 16). Also, it was learned that recycling would be limited to paper containing a maximum of 10% asbestos fibre. This method was rejected because engineers determined that the binders would build up on the paper causing a "deteriorating effect", the supplier would not guarantee the quality of the recycled paper, and the cost of recycling and handling would not be offset by a gain in revenue (R. 17).

The possibility of using an incinerator (cost \$250,000) to burn the waste was also considered. Although incineration would reduce the waste volume to about 10% of that presently being disposed of, the basic problem of disposing of the asbestos fibres would not be solved since the fibres would be essentially unaffected by the incineration process. Availability of natural gas for the incinerator was also questioned.

The current method of disposal is to wet and compact the asbestos paper waste prior to delivery to a landfill. The scrap is conveyed pneumatically to a combination dust collector-baghouse system and thence to a compactor unit. An automatic water spray system located at the compactor sprays water over the scrap in an attempt to wet the material sufficiently to reduce asbestos emissions. Petitioner admitted that the physical properties of the scrap paper impedes thorough saturation by the water spray system. Once full, the compactor container is closed, placed on a truck belonging to a contractual waste disposal service and hauled to the Sexton Landfill in Hinsdale. Sexton describes the landfill operation as follows:

"In an effort to minimize the potential hazard in disposing of your asbestos waste, we will institute a new procedure for the burial of this material. The compactor-box will be dumped at the toe of the slope and the material dozed into the toe of the slope. We will not carry the material up the face as our normal procedure does. Our handling of the material will be kept to a minimum and other materials for disposal will be spread over yours promptly. We also would like the material in the load moistened in the event any fine material was to get into the box. The combination of these procedures should be a truly safe and practical disposal operation."

If Borg-Warner were to use the closed container for burial at the landfill as is required by the Regulation, the Company would use about 150 fifty-five gallon drums per day. Cost of drums would total almost \$3,000 per week (R. 12). In addition, a substantial change in Petitioner's waste handling system would have to take place since the present system could not use the small drums. Petitioner states that a full-time operator would be required after the change whereas the system is essentially automatic now. Compliance would also mean a tripling in rate at the landfill and an increase in the number of trips made to the landfill.

Borg-Warner testified that it is not in "technical compliance" with the asbestos regulations but contends that it is "complying with the spirit of the law" (R. 42). Petitioner obtained the services of National Loss Control Service Corporation to estimate the fibre emissions at the landfill. The calculation (Petitioner's Exhibit #1) is that for 30 minutes in each work shift the breathing zone at the edge of the dump contains 4.2 fibres per cubic centimeter. For the remaining 7.5 hours of the shift this area contains 0.2 fibres per cc. The 8 hour average is 0.45 fibres per cc. From this data, National Loss Control Service concluded that under the worst possible conditions at the landfill site, fibre emissions from the dumping of Petitioner's asbestos waste paper were only 8% of the present OSHA threshold limit value (i.e. only 5 fibres/cc longer than 5 microns). The study qualified the use of the word "fibre" stating that no attempt had been made to discriminate between asbestos and other fibres since the standard was for fibres only.

Borg-Warner did not refer to our Rule 651 which limits discharge of asbestos fibre to 2 fibres per cc of air.

Petitioner testified that, if granted the variance, the company would "undoubtedly", apply the following year for an additional variance (R. 38), while continuing to investigate possible ways of "controlling the potential emissions of the asbestos waste" (R. 26).

The Agency recommended denial of this variance on the ground that Borg-Warner had failed to show unreasonable or arbitrary hardship and had failed to propose any method by which compliance would be achieved during the variance time period. The Agency also expressed a belief that Borg-Warner had not attempted to recycle the amount of waste paper its supplier said it would take. The Agency commented that there was no assurance that the methods proposed to be used at the landfill would in fact be utilized, since the landfill operator was not a party to the instant proceeding and would not be bound by any Board Order.

An Agency investigator followed one of the disposal trucks to the landfill site on June 11, 1973 in order to observe the disposal method. There were visible emissions when the waste paper was dumped from the truck and again when the material was compacted, but the investigator was not close enough to determine if the visible material contained asbestos fibres.

At the plant site, the Agency investigator observed that the wetting cycle was apparently insufficient to properly moisten the waste paper, a deficiency which was pointed out to Borg-Warner officials. The Company now plans to increase the flow of water onto the asbestos paper. The investigator testified that this probably would solve the wetting deficiency (R. 49). The Company should also investigate the use of chemicals to aid in the wetting process.

Borg-Warner has not presented a strong case for a variance. Petitioner tells us that the variance "will not materially affect the general public nor will it materially affect any portion of the local community" and provides test results which purportedly show compliance with OSHA Regulations. However, these tests did not prove that Petitioner is in compliance with our Regulations or can be in the future. Petitioner admits that it has been unable to identify methods that are technically feasible and economically reasonable. Therefore, Borg-Warner would probably come before us year after year to ask for extensions of the variance until a satisfactory method is discovered.

We are told that denial of this variance will cost Borg-Warner "several hundred dollars daily" for suitable containers in addition to the cost for equipment modification and possible landfill rate increase. Petitioner advises that in excess of \$50,000 has already been spent on emission control equipment designed to "substantially eliminate exposure of Petitioner's employees and the general public to asbestos containing materials". These claims are not persuasive.

We find that Petitioner has not carried the burden of proof for the grant of a full one year variance. There is little or no information regarding a proposed method for achieving compliance. Petitioner merely claims, without documentation, that one method available for achieving compliance will cost more than the benefits derived. The inherent dangers of ingesting asbestos fibres have been thoroughly described in the Board Opinion issued upon adoption of the asbestos regulations. These dangers call for nothing short of the best possible control system available to insure minimal exposure to asbestos.

We shall grant Petitioner a variance for 4 months only. We allow this time for Petitioner to investigate and adopt a method,

by which compliance with the Regulations will be achieved in the shortest possible time period. We ask the Agency to cooperate fully with Borg-Warner officials in their search for an acceptable disposal method during this 4 month period. Subsequent proceedings should include the landfill operator, and any extension of the variance should be based upon satisfactory progress toward compliance with the Regulation.

ORDER

It is the Order of the Pollution Control Board that Borg-Warner is granted a variance until December 31, 1973 from Rules 621(d) and 634 Chapter 2, Part VI Air Pollution Control Regulations in order to formulate and adopt a method whereby compliance with Rules 621(d) and 634 can be achieved.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 23rd day of August, 1973 by a vote of 3 to 0.


