ILLINOIS POLLUTION CONTROL BOARD

June 20, 1974

BORG-WARNER CORPORATION,)
Petitioner,)
v.) PCB 74-115
ENVIRONMENTAL PROTECTION AGENCY,)
Respondent.)

Frederick E. McLendon, Attorney for Petitioner John Palincsar, Attorney for the EPA

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

Borg-Warner Corporation requests variance from Rules 103(b)(2) and 205(f) of the Air Pollution Control Regulations while its environmental control system is undergoing modification. The modifications were allegedly made necessary by an error in judgment of the contractor who designed the control system.

Petitioner owns and operates a chemical manufacturing plant in LaSalle County for the production of acrylonitrile-butadiene-styrene (ABS) resin. The plant includes nine polybutadiene reactors and two polybutadiene flasher vessels. During the production cycle raw materials are polymerized in one of the reactors and then discharged to one of the flasher vessels. Unreacted raw materials, primarily butadiene, from the reactors and flashers are drawn by vacuum through condensers where butadiene vapors are condensed and recycled. Approximately 73 lbs./hour of organic vapors escape the system through the vacuum steam jets and are discharged to the atmosphere with exhaust steam. Rule 205(f) limits Petitioner's organic emissions to 8 lbs./hr.

Compliance with the standards was to have been accomplished by routing the vacuum steam jet through a water scrubber to condense the steam and then discharging the uncondensed hydrocarbons to a John Zink burner for incineration. Petitioner proceeded with installation of the John Zink incinerator but encountered difficulties with another portion of the control system.

In the proposed control system, water discharge from the scrubber goes into a hot well from which a portion of the water circulates through a cooler and back to the scrubber. An excess supply of water occurs at this point in the system and the excess water was to have been withdrawn through a liquid seal. The depth of the water seal was originally set at 3'. When Petitioner attempted to operate the system as designed, hydrocarbons were released into the manufacturing building. This created a hazardous condition which might have resulted in an explosive concentration within the building. Depth of the liquid seal was increased to 6' but this failed to solve the problem.

Petitioner has now completed design modifications to provide a positive liquid seal on the hot well and thereby prevent hydrocarbon discharges into the manufacturing building. The necessary equipment has been ordered. Petitioner expects the \$15,000 modification to be completed by October 31, 1974. The Agency believes that if the modifications are successful, control efficiency will reach 85% and allow Petitioner to meet the requirements of Rule 205(f).

The Agency recommends granting variance from Rule 205(f) because Petitioner made conscientious efforts to achieve compliance by the December 31, 1973 deadline, and the contractor's error in judgment constitutes "excusable" delay. An Agency representative inspecting the plant in April 1974 detected no odors beyond the plant boundary. No citizen complaints have been received by the Agency in opposition to the granting of this variance. Ground level concentrations encountered at Petitioner's facility are not toxic according to the Agency.

Petitioner has satisfactorily shown its need for variance from Rule 205(f). However, variance from Rule 103(b)(2) is not appropriate here. Variance from Rule 103(b)(2) would relieve Borg-Warner of the duty to obtain an operating permit. The permit system is a very important part of the pollution control program of Illinois and whenever possible variances should be fashioned so as to leave the permit requirement in effect. The record shows that Petitioner already has an operating permit but one of the conditions of the permit is the installation and testing of the John Zink incinerator by December 1973. We will modify the permit by extending the deadline for installation and testing of the John Zink incinerator to October 31, 1974. The Agency concurs in the extension of this compliance date. Variance from Rule 103(b)(2) is denied.

This opinion constitutes the findings of fact and conclusions of law of the Illinois Pollution Control Board.

ORDER

It is the Order of the Pollution Control Board that:

- A. Borg-Warner Corporation be granted variance from Rule 205(f) of the Illinois Air Pollution Control Regulations until October 31, 1974 for the operation of nine polybutadiene reactors and two polybutadiene flashers at its LaSalle County ABS manufacturing facility. That portion of Petitioner's operating permit (Application #04010058) requiring installation and testing of a John Zink incinerator by December 31, 1973 is hereby amended to require installation and testing of the John Zink incinerator by October 31, 1974. This variance is subject to the following conditions:
 - During the term of the variance Petitioner shall install all equipment necessary for control system modifications as outlined in this proceeding, to achieve compliance with Rule 205(f).
 - 2. Petitioner shall submit monthly progress reports to the Environmental Protection Agency. The progress reports shall commence on July 15, 1974 and shall provide details of Petitioner's progress towards completion of the control system modifications.
- B. Variance from Rule 103(b)(2) of the Air Pollution Control Regulations is denied.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this day of day of 1974 by a vote of to o.

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