ILLINOIS POLLUTION CONTROL BOARD February 28, 1974

ALLEN INDUSTRIES, INC.

v.

PCB 73-505

ENVIRONMENTAL PROTECTION AGENCY

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

The petition for variance filed by Allen Industries, Inc. (Allen) December 3, 1973 and amended December 19, 1973, asks for a variance from Rules 203(a), 203(b), and 205(f) of Chapter 2, Air Pollution of the Rules and Regulations of the Pollution Control Board, for its manufacturing facility located in Herrin in Williamson County. The recommendation of the Illinois Environmental Protection Agency (Agency), received February 25, 1974, recommends that the petition be granted until May 1, 1974 subject to several conditions.

Allen's facility in Herrin manufactures resinated cotton products, such as insulator pads, molded dashliners, and other resinated roll goods used in the automotive industry. Raw materials used in the manufacturing processes include cotton, phenolic resins, plastoids, and solvents.

The facility has been in existence for 16 years but within the last year a new operation, the manufacture of molded dashliners was installed at the facility at a cost of \$2,000,000; the operation using propane as the primary energy source. Previously, propane supplied by Northern Propane Gas had been used at the facility for heating; plus natural gas supplied by Central Illinois Public Service Company for other processes. There are also eleven afterburners at the facility, eight using natural gas at a rate of 7,500 cubic feet per hour, and three associated with the new dashliner process using 19,100 cubic feet per hour of propane. The afterburners were installed and the boilers converted from coal to gas as part of Allen's ACERP.

To provide the propane necessary for its new dashliner process, Allen contracted on July 18, 1973 with Petro-Tex to purchase 500,000 gallons of propane. The contract was cancelled subsequently as a result of the new Federal Mandatory Fuel Allocation Program. Thus Allen, assuming the other fuel suppliers do not interrupt their deliveries, has a shortage of approximately 485,000 gallons of propane and says it would not be able to continue its manufacturing operation. This in turn would put 400 employees, having 585 dependents, out of work.

Allen's solution to this problem would be to shut off the eleven afterburners and divert this fuel, propane and natural gas, to the process operations. Their petition for variance from Rules 203(a), 203(b), and 205(f) would allow them to operate the facility without the afterburners until such time as additional propane becomes available, and not be in violations of these regulations.

The emissions from the facility, without the afterburners operating, consist of cotton particulates, hydrocarbons, and phenol. The emission rate of cotton is not known but is characterized as being "small quantities and non-odoriferous". The hydrocarbon emissions are characterized as "non-photochemically reactive" and are emitted at a rate of approximately 181 lb./hr. The phenol emission rate is not known but according to the Agency is a potential odor problem.

According to the petitioner, no hazardous effects of nuisances were evidenced during the 10 years the plant operated prior to installing the afterburners. The Agency's interviews with people in the neighborhood did not find strong opposition to the granting of a variance, however, few had lived in the area prior to the installation of the afterburners.

From the facts presented in this case, it is unclear whether a variance from the rules cited is really needed. The burden is on Allen to show that compliance with the rules is impossible. It is therefore necessary that Allen perform a stack test to determine the emission levels from the facility with and without the afterburners operating. This would resolve the uncertainty with regard to Rules 203 and 205(f). In addition, since compliance with Rule 205(f) depends in part on the presence or absence of an odor nuisance, and since the Agency feels that a potential odor problem could occur, it will also be necessary to record any citizen reaction while operating without the afterburners.

All has made a good faith effort in attempting to solve their fuel shortage problem; they have petitioned the Federal Oil and Gas Board for a re-allocation so as to allow PetroTex to supply the needed propane; they have investigated and discarded the use of electric or coal-fired boilers and effluent gas scrubbing as being non-viable or too costly; and they are willing to investigate energy reuse (heat recovery) schemes such as afterburner heat exchangers. We will require them to continue their search for additional fuel and investigate the technical feasibility of heat recovery systems such as heat exchangers in the afterburners.

ORDER

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The variance petition of the Herrin facility of Allen Industries, Inc. is hereby granted with respect to Rules 203(a), 203(b) and 205(f) until July 1, 1974, subject to the following conditions:

- 1. Petitioner shall perform a stack sampling test on their emission sources with and without the afterburners operating and report the results to the Agency by June 15, 1974.
- 2. Petitioner shall study and report to the Agency by July 1, 1974 on the feasibility of energy recovery or reuse systems such as heat exchangers on the afterburners.
- 3. Petitioner shall continue all reasonable efforts to obtain additional supplies of natural gas and propane.
- 4. Petitioner shall operate the afterburners whenever fuel supplies or allocations permit.
- 5. Petitioner shall post a \$5,000 bond to be forfeited in the event of non-compliance with Conditions 1 or 2 of this Order.

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 28^{-4} day of February, 1974 by a vote of 5^{-4}

Christan L. Moff

Illinois Pollution Control Board