

ILLINOIS POLLUTION CONTROL BOARD
March 14, 1974

NATIONAL CASTINGS DIVISION,)
MIDLAND-ROSS CORPORATION,)
)
Petitioner,)
)
vs.) PCB 73-531
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

Mr. John J. Pallam, Attorney, on behalf of Petitioner;
Mr. Peter E. Orlinsky, Attorney, on behalf of Respondent.

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

On December 14, 1973, National Castings Division, Midland-Ross Corporation, filed its Petition For Variance, seeking therein variance for a period of one year from the provisions of Rule 203(a) of the Air Pollution Regulations. Rule 203(a) governs particulate emission standards and limitations for new process emission sources. A hearing was held in this matter on February 25, 1974.

On January 24, 1974, the Agency recommended that the Board deny the variance, or in the alternative, dismiss the Petition with leave to file an Amended Petition. The Agency's recommendation was based upon the absence of a firm and viable compliance program. On February 4, 1974, Petitioner filed its Amended Petition For Variance, including therein its schedule of compliance. Based upon this compliance schedule, the Agency has recommended that the variance be granted, subject to certain conditions.

Petitioner is the operator of a steel foundry located in Melrose Park, County of Cook, Illinois. Petitioner manufactures 400 tons per week of steel castings and employs 350 persons.

Petitioner's facility utilizes a 20 ton electric arc furnace, 2 core sand mullers, 4 core ovens, 4 mold sand mullers, a shakeout operation, a sand reclaimer and other related sand handling and finishing operations. The Agency states that, with the exception of the uncontrolled shakeout

operation, the other operations are apparently adequately controlled with respect to particulate emissions.

Petitioner's shakeout operation is the subject of its Petition For Variance. The poured castings in the sand molds are conveyed to the shakeout area. This operation utilizes a vibratory floor to separate the sand from the castings. The dust generated from these big vibrating floors is collected by a side-draft hood with two 60,000 CFM fans. After being shaken out the castings are pulled away and the sand falls down through the floor.

The dust (sand) emissions generated from the shakeout operation are ducted directly to the atmosphere through the roof. A type of deflector cap has been added above the exhaust vents for the purpose of knocking some of the dust emissions out of the airborne plume and onto the roof. This was observed by the Agency to have a rather limited degree of effectiveness.

Petitioner processes 20,000 lbs. per hour of steel castings and 105,000 pounds per hour of 98.8% silica sand and 1.2% clay through its shakeout facility. The shakeout area operates during the day shift and stack tests have revealed emissions to be 54.8 pounds per hour. Allowable emissions are 21 lbs/hr, not 44.6 lbs/hr as stated in the Petition. Because Petitioner was in violation of the particulate regulations prior to April 14, 1973, it is consequently subject to Rule 203(a).

Petitioner has indicated to the Agency that until recently it was not aware that its emissions were in excess of those allowed by Rule 203 which became effective December 31, 1973. There are no published emission factors for shakeout operations similar to that of Petitioner. In July, 1973, Petitioner conducted a stack test, the results of which demonstrated that shakeout emissions were excessive. Petitioner immediately hired the Purity Corporation to conduct an engineering study in order to establish a control program. The results of that study led to the proposed installation of a Pentapure Impinger to control particulate emissions.

Petitioner's compliance schedule is as follows:

Present to 2-1-74

Obtain quotes from:

1. Purity Corporation
2. American Air Filter
3. Kirk and Blum, Inc.

3-1-74	Release contract for pollution equipment
3-1-74 to 6-1-74	Engineering
6-1-74 to 9-1-74	Installation
9-1-74	Startup and debug

Petitioner's compliance program states that the date for startup and debugging of the pollution control equipment is September 1, 1974. Petitioner has, however, requested a variance for one year. The Agency states that the proposed control equipment will bring Petitioner into compliance with Rule 203(a). The Agency believes that a one year project completion schedule is more realistic than one which envisions startup by September 1, 1974. Petitioner estimates the installation cost of the proposed control device to be \$150,000.

The nearest residential area is approximately 200 feet to the east of Petitioner's facility. A number of residents were contacted from this area. In general, the people contacted reported either no problems or minor dust problems. Not one resident contacted objected to granting of the variance.

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

IT IS THE ORDER of the Pollution Control Board that Petitioner be granted variance from the provisions of Rule 203(a) of the Air Pollution Regulations until December 31, 1974, subject to the following conditions:

1. Commencing 30 days from the date of this Order, Petitioner shall submit quarterly reports to the Agency detailing its progress toward compliance. Said reports shall be addressed to:

Environmental Protection Agency
Division of Air Pollution Control
Control Program Coordinator
2200 Churchill Road
Springfield, Illinois 62706

2. Petitioner shall apply for all necessary construction and operating permits from the Agency.

3. Within 30 days from the completion of installation of the subject pollution control equipment, Petitioner shall have performed a stack test acceptable to the Agency. The Agency shall be notified at least 5 days prior to the testing, and shall be allowed to have representatives present to observe the testing. The results of all tests shall be submitted to the Agency.

4. Within 35 days from the date of this Order, Petitioner shall post a performance bond in a form satisfactory to the Agency in the amount of \$25,000, guaranteeing the installation of the subject control equipment.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted on this 14th day of March, 1974 by a vote of 5-0.

Christan L. Moffett