

ILLINOIS POLLUTION CONTROL BOARD

WAGNER CASTINGS COMPANY)
)
) No. 70-24
 v.)
)
 ENVIRONMENTAL PROTECTION)
 AGENCY)

OPINION OF THE BOARD (BY MR. LAWTON): January 6, 1971

Wagner Castings Company, a Delaware corporation, with its principal plant and foundry in Decatur, Illinois, petitioned for a variance to continue uncontrolled particulate emissions from its cupolas in an amount of approximately 100 pounds per hour of melt, melting at approximately sixteen hours per day and a total of 75,000 tons of scrap iron per year. (See petition). Petitioner proposes the installation of six nine-ton coreless electric induction furnaces which would, when installed, curtail emissions to a level well within the applicable regulations. Petitioner has represented, and the evidence indicates, that the equipment necessary for the foregoing installation will not be available prior to July 1, 1971, and that the furnaces will be installed and ready for operation by January 1, 1972. An additional six months of variation is requested for de-bugging and start-up of the six new furnaces bringing the date for final compliance to July 1, 1972. The Environmental Protection Act, Section 36(b), limits the granting of variances to a period of one year. This section further provides that such variance may be extended from year to year by action of the Board upon satisfactory showing of progress.

It is the decision of the Board that petitioner be granted a variance terminating January 5, 1972 upon the terms and conditions as hereinafter set forth.

Petitioner operates both a malleable and nodular iron casting facility in Decatur, Illinois. The subject matter of this variance request pertains only to the malleable foundry division. Electric furnaces had previously been installed in the nodular foundry division. It is anticipated that the entire installation of the six new furnaces will cost approximately \$1,500,000.00. Petitioner employs 1,200 employees.

On July 2, 1968, Petitioner filed an air contaminant emission reduction program with the Technical Secretary of the Air pollution Control Board indicating violation of existing regulations relative to

the cupola air furnace melting equipment and the dust-collection equipment for its sand system. The sand system was scheduled for compliance in December, 1969, and was, in fact, in compliance by September, 1969. The program called for replacement of the cupolas by electric induction furnaces by June of 1973. This air contaminant emission reduction program was approved by the Air Pollution Control Board on July 25, 1968. It should be noted that while the plan contemplated installation of the new furnaces by January of 1973, the phase-out of the existing equipment was not to be completed until June of 1975. The present request for variance was filed on October 19, 1970, and provided for an installation schedule as follows:

1. Work will begin during the Christmas shut-down of 1970 to remove existing equipment from the area to be excavated.
2. Approximately July 1, 1971, work will begin on the excavation and installation of the furnaces themselves.
3. The furnaces will be completed, ready to operate, by January 1, 1972.
4. Approximately six months will be consumed in de-bugging and start-up of the six furnaces. This will bring Petitioner into complete compliance by July 1, 1972.

The Environmental Protection Agency filed a recommendation with the Board setting forth the air contaminant emission reduction program as above indicated, and detailed the findings of its investigation made on October 26, 1970. Interviews with residents in the immediate area indicated that the uncontrolled emissions would produce a burden in the community, but the majority interviewed "could reluctantly live with the problem and the proposed compliance date".

The Agency recommended that a variance be granted for a period of six months, that any extension be granted only upon a showing of maximum expedited effort and the reasonableness of the resulting time schedule and petitioner post a sufficient performance bond or other security to assure compliance with the time schedule.

John A. Wagner, Jr., President of Wagner Castings Company, was a principal witness for petitioner. He testified that the corporation was engaged in the manufacturing of malleable and nodular iron castings and that approximately 1,200 persons were employed, of which 50% were black. The principal raw materials used in the manufacturing process were scrap iron and coke and that the contaminants discharged from the operation of the malleable plant were iron oxide and coke ash. Emission control equipment had been

installed for the sand mixing and grinding operations, but none exist at the present time on the cupolas of the malleable facilities. The witness testified that \$200,000.00 had been spent for dust-collecting equipment, and \$65,000.00 for control equipment in the grinding area, both in the malleable facility. Six nine-ton electric induction melting furnaces would supplant the two cupolas now used in the malleable operation. Purchase orders had been placed for the design, delivery and installation of this equipment with Brown-Boveri Company at an approximate cost of \$1,500,000.00. The purchase order was introduced in evidence (R21, Exhibit 1). The witness testified that while excavation and land preparation could take place immediately, the equipment would not be available for six months. Financing for the purchase and installation had been arranged. Mr. Wagner testified that the company had made a feasibility study to determine the best and most economical way to melt iron in the foundry operation. Ten to twelve different methods had been considered by the engineering agency of Lester B. Knight (R23-24). The furnaces to be installed were described as a higher-powered furnace with a greater degree of melt per hour than previous types of electric induction furnaces (R33). Consideration had been given to installation of control devices on present equipment (R30) but was rejected as being impractical and unduly expensive. The witness testified to the schedule of installation (R39) which contemplated complete installation and availability of operation with the new facility by January 1, 1972, plus an additional six-month period for testing and removal of existing equipment, contemplating full compliance by July of 1972.

The Hearing Officer stated that he was not satisfied with the evidence in the record relative to the availability of the equipment and of the need for the six-month delay before installation would begin. He suggested that the Board be furnished with a statement from Brown-Boveri Company indicating precisely what the requisite time would be for the equipment to be available for installation. The Hearing Officer also indicated that he felt the record should include zoning and use maps indicating the character of the locality of the area in which petitioner's plant was located and more detail on the contiguous and nearby residential and industrial uses. Letters were introduced from the Torrence Park Citizen's Committee urging denial of the petition for variance. By stipulation entered into between the petitioner and the Environmental Protection Agency, the Hearing Officer was permitted to examine the petitioner's plant. He observed emissions from the two furnaces of dark brown smoke resulting from the burning operation. An officer of petitioner advised him that when the cupola was charged by the loading of metal substantial particulates were emitted into the atmosphere for short periods of time. Considerable smoke and particulates on the inside of the plant where the malleable operation took place were observed. Inspection of the nodular plant which utilizes electric furnaces of a type similar to that contemplated for the malleable plant

disclosed an almost complete absence of smoke and particulates, both inside the plant and being emitted into the atmosphere.

The Wagner facility is located in a highly industrialized area, although residential neighborhoods are located in the immediate vicinity, both to the north and south. This area, as well as others in all directions, are subject to the odors and emissions of the A. E. Staley plant directly to the east, which has a pervasive impact on large portions of the City of Decatur.

On the closing of the hearing, the record remained open for the submission of additional material requested by the Hearing officer. Zoning and use maps have been received and incorporated into the record. A letter from Brown-Boveri Company was received, stating that it was in receipt of the purchase order dated December 1, 1970 from petitioner for the installation of six induction-type furnaces, and that Brown-Boveri Company would be unable to manufacture and ship the initial portion of this equipment until on or about August 1, 1971. This delay was attributed to the need to purchase copper from Switzerland and the fabrication of coils from this copper which would not be available until the summer of 1971. The statement indicated that Brown-Boveri would expedite the installation of this equipment in every way possible. An affidavit was also received from John A. Wagner, Jr. stating that its loan for the proposed installation would come from the Equitable Assurance Society of the United States.

It is the Opinion of the Board that the petitioner has sustained the statutory requisites for the granting of a variance. Requiring petitioner to shut down its operation for a period of a year in lieu of installation of the new furnaces as proposed, would constitute an arbitrary and unreasonable hardship upon petitioner without sufficient corresponding benefit to the public. While it is manifest that the present operation constitutes a violation of the existing regulations relative to the emission of particulates, the Board takes note of the fact that petitioner has been operating pursuant to an air contaminant emission reduction program granted by the Air Pollution Control Board. The proposed installation and time schedule would greatly accelerate the installation of pollution-free equipment and bring petitioner into compliance with the law. The Board is satisfied that the furnace equipment will not be available for installation until on or about August 1, 1971, so that a six-month variation would be inadequate. By the same token, the Environmental Protection Act limits a variance to a one-year period, making provision for extension upon a satisfactory showing of progress in bringing the operation into compliance, pursuant to the variation as allowed. Denial of the variation would result in the closing of the plant, the unemployment

of 1,200 workers and the elimination of petitioner's product from the market.

The foregoing opinion constitutes the Board's finding of fact and conclusions of law.

IT IS THE ORDER OF THE POLLUTION CONTROL BOARD THAT:

1. A variance is hereby granted to the Wagner Casting Company, expiring January 5, 1972, to permit emissions of particulate matter in excess of those permitted by the regulations in order to permit installation of six induction furnaces ordered from Brown-Boveri Company, New Brunswick, New Jersey, pursuant to purchase order dated December 1, 1970, received in evidence as petitioner's Exhibit 1. This variance shall be conditional upon the filing of a personal bond in the amount of \$50,000.00 with the Environmental Protection Agency to assure that petitioner will terminate particulate emissions in excess of those set forth in the applicable regulations, after January 5, 1972. The terms and conditions of this variance and the bond required hereunder, shall be modified or extended only by action of this Board.
2. During the period that this variance is in effect, petitioner shall not cause or allow an increase in the emissions of particulate matter in excess of that amount being emitted on the date of this order. Petitioner shall submit to the Environmental Protection Agency and to this Board, a report no later than August 1, 1971 setting forth the status of installation and availability of equipment relative to the six induction furnaces to be acquired and shall submit a monthly report thereafter to the Environmental Protection Agency and the Board stating the progress of its installation.

I, Regina E. Ryan, certify that the Board has approved the above Opinion this 6 day of January, 1971.


Regina E. Ryan
Clerk of the Board

I CONCUR

I DISSENT









