

ILLINOIS POLLUTION CONTROL BOARD
September 30, 1971

NATIONAL GRAY IRON FOUNDRY,)
A DIVISION OF MOLINE MALLEABLE)
IRON COMPANY)) #PCB71-178
)
v.)
)
ENVIRONMENTAL PROTECTION AGENCY)

SIDLEY & AUSTIN, ATTORNEYS FOR PETITIONER
FRED C. PRILLAMAN, ATTORNEY FOR RESPONDENT

OPINION OF THE BOARD (BY MR. LAWTON):

Petition was filed by National Gray Iron Foundry, a Division of Moline Malleable Iron Company, requesting variance from the Rules and Regulations Governing the Control of Air Pollution until January 1, 1972, during which time Petitioner will install two Venturi Scrubbers, replacing existing collection equipment presently operating in the molding, shake-out, cleaning and core-making areas of its Belvidere plant and thereby control all non-cupola process emissions.

An Air Contaminant Emission Reduction Program (Acerp) relating to petitioner's two cupolas was approved by the Illinois Air Pollution Control Board on June 18, 1968 (Petitioner's Exhibit #7, R.37) which contemplated the installation of wet scrubbers on the cupolas, all of which were installed, completed and approved in 1969 (Exhibit #17) by the Board. It does not appear that any emission control program relating to the so-called in-plant or non-cupola portions of the operation, consisting of the molding, shake-out, cleaning and core-baking areas, was ever submitted to the Air Pollution Control Board, notwithstanding inquiry directed to the petitioner by the Technical Secretary of the Board dated December 19, 1967 (EPA Exhibit #1, R.73, 219).

The Agency recommends allowance of the variance, subject to the payment of a penalty and the submission of "a detailed plan for the control of all emission sources at the plant site so that when such emissions are controlled they will not, either alone or in combination with air contaminant emission from other sources, cause air pollution." The Agency also recommends

that a performance bond be posted and that compliance be ascertained by an independent testing firm.

We grant the variance to January 1, 1972, subject to the terms and conditions hereinafter set forth in the decretal portion of this opinion.

Petitioner is located in Belvidere, Illinois, and produces gray and ductile iron castings for automotive, agricultural and other industries. All operations, including the melting of raw metal, the molding of the castings, as well as shake-out and cleaning processes and the manufacture of cores, take place on the plant site.

Petitioner employs between 200 and 300 employees operating on a five-day week. The plant processes approximately 24,000 pounds of gray iron per hour and uses 150,000 pounds of sand in connection with its molding and cleaning operations. Excluding the cupola operation, which is not in issue in the present case, Petitioner's process weight rate is 175,000 pounds per hour. 2,000 pounds of particulate emissions, consisting primarily of sand and foundry dust are generated each sixteen-hour day, of which only approximately one-third is collected by equipment to be supplanted by the new equipment proposed to be installed pursuant to this variance request.

In simple terms, a gray iron operation consists of the melting of iron ore and scrap in cupolas, which molten metal is poured into molds, which, after cooling, are removed from the metal by a shake-out process and cleaned by sand blasting. The casting is then ground and polished. Cores made of sand and oil are processed at the plant and used in the mold operation. The shake-out, cleaning, blasting and core operations all generate a substantial amount of particulate emissions which presently are controlled inadequately by two wet collectors and four dry bag collectors, which are to be supplanted by two Venturi Scrubbers, one to be in the SPO and grinding room area and another in the so-called Taccone area. Schematic diagrams representing the present operations and proposed installations of both of these areas are in the record as Exhibits #27 and #28, respectively. Pursuant to permit granted by the Environmental Protection Agency (Petitioner's Exhibit #23, R.54), the installation is approximately 75% completed. The final completion schedule is for approximately November 1, 1971, and full operation of the new Venturis will be in effect by January 1, 1972. Upon operation of the two Venturi scrubbers, emissions from the in-plant operation would not exceed .05 grains per standard cubic foot, which is well within the applicable regulations relating to this operation. One of the present wet collectors will be used for control of emissions from the core-baking operation, which presently are uncontrolled. On the basis of the record, the amount of work done to date and the

short date proposed for final completion, there does not appear to be any reason why the variance should not be allowed. Denial of the variance would impose hardship on the petitioner and its employees and customers disproportionate with the burden likely to be suffered by the community if the variance is allowed for this short period.

A more difficult question relates to whether a penalty should be imposed as a condition to the variance because of petitioner's failure to file a proper air contaminant emission reduction program covering the very operations to which this variance relates. There is no question that petitioner filed an implemented Acerp relative to its cupolas, which, undoubtedly, would have been a major source of continuing nuisance, had these emissions not been abated. The record indicates that the cupola program was completed as planned without delay or procrastination on the part of petitioner. The record also supports the conclusion that notwithstanding petitioner's failure to file an Acerp relative to its in-plant operations, it was pursuing a program of emission control, albeit one that was not in compliance with applicable regulations. Numerous complaints relative to petitioner's operation have been received by the Agency, many of which are appended to this recommendation. Several witnesses appeared at the hearing and testified to the nuisance that was being caused by the operation, in many cases precluding outdoor activities and necessitating the closing of windows and deteriorating the paint on houses. The record indicates that some time lag has resulted from the contractor's failure to meet its precise time schedule, although at the present time, the installation program appears to be substantially consistent with that originally contemplated. On balance, in consideration of petitioner's abatement program relative to its primary source of emissions being those from the cupolas, the efforts pursued by it in correcting the in-plant emissions and the fact that even at the present time, petitioner appears far ahead of most foundries within the state in pursuing its obligations to abate its emissions and improve the environment, this does not appear to be an appropriate case for a penalty and none will be imposed.

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 a variance from the Rules and Regulations Governing the Control of Air Pollution in the operation of its in-plant portion of its foundries heretofore described, until January 1, 1972, subject to the following terms and conditions:

1. Prior to January 1, 1972, petitioner shall install two Venturi Scrubbers to collect emissions from its molding, shake-out, cleaning and grinding areas described as the

SPO area and Taccone area, so that emissions from all process sources other than the cupolas will comply with the Rules and Regulations Governing the Control of Air Pollution, as applies to petitioner's operation.

2. Petitioner shall post a performance bond in form satisfactory to the Agency in the amount of \$45,000.00, representing the approximate cost of the work remaining to be done to assure complete installation of the two Venturi Scrubbers by January 1, 1972 and compliance with paragraph 1 of this Order. On or before February 1, 1972, petitioner shall submit proof that the emissions from its in-plant operation are in full compliance with all applicable regulations of the State of Illinois relative to air pollution. Such testing shall be conducted by an independent testing firm and notice given to the Agency when such testing shall be conducted.
3. During the period of this variance, petitioner shall not increase the degree or intensity of its emissions beyond those presently being emitted.

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the above Opinion was adopted by the Board on the 30 day of September, 1971.


