

ILLINOIS POLLUTION CONTROL BOARD
August 30, 1973

ENVIRONMENTAL PROTECTION AGENCY)
)
) #71-248
 v.)
)
 STERLING ALLOY CASTING COMPANY)

MICHAEL A. BENEDETTO, JR., ASSISTANT ATTORNEY GENERAL, APPEARED
ON BEHALF OF ENVIRONMENTAL PROTECTION AGENCY
ALEXANDER HAGLUND, APPEARED ON BEHALF OF RESPONDENT
OPINION AND ORDER OF THE BOARD (by Mr. Seaman):

Complaint was filed by the Environmental Protection Agency against Sterling Alloy Casting Company on August 20, 1971, alleging that Respondent, in the operation of its Rock Falls foundry, between January 18, 1967 and June 30, 1970, emitted contaminants into the air in violation of the Illinois Air Pollution Control Act and created a public nuisance as therein defined, and subsequent to July 1, 1970, Respondent emitted contaminants into the air so as to cause air pollution, in violation of Section 9(a) of the Environmental Protection Act. No proof has been made of any of the foregoing violations and the Attorney General has conceded that complainant does not intend to pursue these alleged violations.

The complaint further alleges that since April 15, 1968, Respondent's operation emitted particulates in excess of allowable limits so as to constitute violation of Rules 2-2.1, 2-2.5 and 2-2.54 of the Air Pollution Rules and Regulations and that Respondent has failed to file an Air Contaminant Emission Reduction Program (Acerp) in violation of Rules 2-2.22, 2-2.31(f) and 2-2.41 of the Air Pollution Rules and Regulations.

The first hearing was held on January 14, 1972, at which time a proposed stipulation was discussed. The hearing was continued to March 24, 1972, but as appears from the record, the Stipulation was never entered into and hearings were not resumed until May 1, 1973, at which time they were continued to June 13, 1973, pending the completion of stack testing. The last hearing was held on June 13, 1973, at which time the stack tests were testified to.

Respondent's operation facilities at Rock Falls consist primarily of a gray iron cupola used in the production of castings. Approximately 80 people are employed and gross sales in the year 1972 amounted to \$685,000.00. Respondent's initial efforts at air pollution abatement were somewhat primitive, and consisted primarily of

baffles installed in the cupola, which, even assuming Respondent's unsupported suggestion that this equipment was 50% to 60% efficient, would still not bring the operation into compliance. Computations made by the Environmental Protection Agency in December of 1971 (EPA Ex. 1) indicate that with a process weight rate of 10,667 pounds per hour allowable emissions based on the applicable tables contained in the Regulations, would be limited to 18.99 pounds per hour against an actual particulate emission rate of 90.67 pounds per hour based on standard emission factors (EPA Ex. 2). While this figure would be premised on uncontrolled emissions, even assuming Respondent's 50% to 60% efficiency from the baffle installation, the emissions would be substantially in excess of those permitted by the applicable Regulations. This condition maintained at least until November, 1972 (R. June 13, 1973, p. 26) when other equipment was installed. Between February, 1971 and January, 1972, Respondent considered the installation of a wet cap, but upon further reflection and receipt of advice from Environmental Protection Agency personnel, this proposed program was abandoned as being incapable of achieving the necessary compliance.

There does not appear to be any question at this point in the record that Respondent had failed to file its Acerp and was not in compliance with the relevant regulations. Subsequently, a used bag house with blowers was installed, together with three afterburners used to reduce carbon monoxide emissions. Additional bag house installations were made although the precise sequence of events is not clear from the record. However, by November, 1972, the installation was complete. (R. June 13, 1973, p. 26). The record is replete with evidence that Respondent has experienced difficulties in the operation of this equipment, as well as in the functioning and repair of its cupola including inefficiencies of components of the bag house installation, wear and corrosion attributable to high temperatures and leakage both from the bag house operation and charging doors. (R. 5/1/73, pp. 49, 102 and 104 and R. 6/13/73, pp. 63, 66, 275). Unquestionably, part of this inefficiency is a result of Respondent's failure to employ professional assistance in the installation of its various abatement facilities.

Subsequent to the second hearing and the absence of adequate testimony as to whether the facility was operating within the regulatory limitations, stack tests were proposed and the hearing continued, pending receipt of this information. We must conclude, based on the state of the record, that the stack tests neither prove nor disprove compliance with the Regulations.

The first stack test conducted on May 24 indicates compliance with the Regulations. However, it is evident that the scrap employed in the earlier test was not characteristic of that used in the operation but was abnormally clean (R. 5/1/73, pp.199-200), so as not to fairly represent the operation of the facilities. Furthermore, while 12

sampling ports were to be tested at 5 minutes per port, one port was sampled for 15 minutes and at least 3 other ports appear not to have been sampled at all. Further, deviations in isokinetic conditions indicate that the test was outside of the 10% deviation factor normally permissible in such testing (R. 5/1/73, pp. 232-233.)

In addition, the possibility of particulate emissions escaping through leaks in the system and defects in the charging door, suggest that the figures demonstrating compliance are subject to question. The May 25, 1973 test indicated that the abatement equipment was malfunctioning or inoperative in part, resulting in an actual emission of 18.69 pounds per hour against an allowable rate of 15.85 pounds per hour. Respondent endeavors to justify this discrepancy on the basis that several bags were disconnected and that malfunctioning in the system resulted in the higher results obtained. Even if this was true, it in no way can be construed as demonstrating compliance based on the second test. Accordingly, because of the aspects of the first stack test above referred to, being of such a nature as to cast question on the compliance figures demonstrated, and the failure to establish compliance based on the second test, we must reject the stack tests as demonstrating compliance so far as this record is concerned. (Respondent's Ex. 6).

In recapitulation therefore, we find that Respondent has failed to file an Acep, has been in violation of the Regulations at least until November, 1972 and has failed to demonstrate that it is presently in compliance. We will assess a penalty for the violations aforesaid in the amount of \$1,000 and because of the inadequate state of the record as to present compliance, direct Respondent to cease and desist its particulate discharges in violation of the Regulations, the achievement of such compliance to be accomplished by three months from the date of this order. We believe this will give Respondent adequate time to both make suitable testing to determine whether, in fact, it is meeting the relevant regulations and if not, to take such steps as are necessary, including the required installation to achieve such result. In assessing the penalty aforesaid, we are not unmindful of the difficulties encountered by foundries in achieving compliance. However, we believe that Respondent's amateurish efforts have unduly suspended compliance, where professional advice and a reasonable expenditure could have achieved the necessary results at a far earlier date.

We are not impressed by the financial data Respondent has submitted that it is incapable of bringing its operation into compliance. If, indeed, it has spent \$90,000 to purchase and install such equipment as it presently has on hand, a relatively modest

increased expenditure should bring it into compliance.

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

IT IS THE ORDER of the Pollution Control Board that:

1. Penalty in the amount of \$1,000 is assessed against Respondent for violation of Rules 2-2.22, 2-2.31(f) and 2-2.41 of the Rules and Regulations Governing the Control of Air Pollution for failing to file an Air Contaminant Emission Reduction Program and for emitting particulate matter in violation of Rules 2-2.1, 2-2.25 and 2-2.54 and Table I and II of Chapter II of the Rules and Regulations Governing the Control of Air Pollution between April 15, 1968 and November 1, 1972. Payment shall be made by certified check or money order, within 35 days from the date of this Order, and shall be sent to: Fiscal Services Division, Environmental Protection Agency, 2200 Churchill Drive, Springfield, Illinois 62706.
2. No later than 90 days from the date of this order, Respondent shall cease and desist all violations of the Rules and Regulations Governing the Control of Air Pollution and the Environmental Protection Act with respect to emission of particulate matter from its Rock Falls foundry. Respondent shall notify the Environmental Protection Agency when it believes it has achieved compliance, and stack tests shall be conducted jointly, within 15 days thereafter, by an independent testing agency and report thereof submitted to the Pollution Control Board. The Board reserves jurisdiction for such other and further orders as shall be appropriate based upon the receipt of the foregoing testing data.

I, Christan Moffett, Clerk of the Pollution Control Board, certify that the above Opinion and Order was adopted on the 30th day of August, 1973, by a vote of 3 to 0.

