

The enforcement and variance cases will be considered together in this Opinion.

General Fire Extinguisher states that the manufacture of fire extinguishers includes a charging of the casing with dry powder and that during this process some powder ordinarily escapes to the atmosphere. The Company alleges that in 1968 it began experimenting with methods of preventing this loss of powder. Control at that time included a cyclone and some dust collectors. The Company determined that better results would be obtained by enclosing this material completely within a pneumatic conveying system rather than the use of a conventional dust collecting system. This approach, which the Company calls "revolutionary" required custom designing (over 4000 hours of engineering time) and involved a greater delay in bringing the system to completion. Death of the Company Chairman in 1971 and changes in personnel resulted in further delay. New management apparently had problems in funding the one-half million dollar cost of the project.

Part of the system for handling bulk quantities of bicarbonate of soda became operational in August 1972. The system, when completed, will use six bag houses. It is expected that the entire system will be operational by October 15, 1973.

On June 6, 1972 the plant was inspected by an EPA surveillance engineer. Company officials informed the investigator that the annual consumption of sodium bicarbonate was 2,500 tons and that 2% of its production was lost. From this it was determined that 24.5 lbs. per hour was lost during processing. Of this amount approximately 16 lbs. per hour was being collected by control equipment or was settling to the ground. The Agency calculated that the plant was then emitting 8.50 lbs. per hour of sodium bicarbonate to the atmosphere. Under Rule 203(a) of Chapter 2, Part II of the Regulation the allowable emission rate for Respondent's operation is 2.95 lbs. per hour.

The Company also presented a process weight calculation of its particulate emissions. The Company calculated that it was emitting 1.5 lbs. per hour to the ambient air and was not in violation of the Regulation. The defense witness who made these calculations had used an emission factor applicable to a plant manufacturing sodium bicarbonate. General Fire Extinguisher does not manufacture sodium bicarbonate. We believe that the Agency calculation based upon information gained from officials of General Fire Extinguisher is more accurate.

We find that Respondent General Fire Extinguisher Corporation did violate the provisions of Rule 3-3.111 during its operation

between July 15, 1971 and September 29, 1972. No members of the public appeared. There is no testimony in the record regarding the impact of these emissions upon the community. For past violations we will assess a monetary penalty in the amount of \$1,000.

There was no proof of the alleged permit violation. Therefore, that portion of the Complaint which charged Respondent with installing equipment without a permit shall be dismissed.

We see nothing to be gained by denying the variance petition. The Agency has stated that the system which will be completed by October 15, 1973 will effectively reduce Petitioner's particulate emissions to the Standard set forth in the Rule. Under this method control is achieved by using a vacuum system for the transport of the powder. From the tank cars the powder is taken by air pressure through a pneumatic hose into a silo. The tankers are unloaded at a rate of 20,000 lbs. per hour using 520 cubic feet per minute of air. The air is then discharged to the atmosphere through a bag house. This control equipment is said to have a 99.6% efficiency. The Agency agrees that this system will bring the Company into compliance, however, the Agency is also of the opinion that the method is not revolutionary and that the Company took too much time in putting it into operation.

Also the Agency states that this control system does not yet reduce emissions coming from the filling stations. Emissions still occur when the fire extinguishers are filled with powder by gravity from hoppers. These emissions are principally sodium bicarbonate. Some mono ammonium phosphate and potassium bicarbonate are also emitted. However, these filling stations will be hooded and closed with emissions going to a bag house. When the system is completed, emissions will be about 0.24 lbs. per hour. Total cost will be \$400,000 to \$500,000.

The Agency recommends denial of the variance because of its belief that the Company delayed unnecessarily in installing the control equipment. That is one of the factors which we consider in imposing a \$1,000 monetary penalty. However, with both an enforcement and variance case before us, we see no reason to leave open the possibility of further prosecution for emissions of this type during this construction period. The Agency has had its opportunity to present a full case and the Company is now entitled to assurance that there will not be a second prosecution during this construction period for emissions which are of the same caliber. Therefore, the variance will be granted until October 15, 1973.

ORDER

It is ordered that:

1. Respondent General Fire Extinguisher Corporation shall pay to the State of Illinois by September 15, 1973 the sum of \$1,000 as a penalty for its past violations of Rule 3-3.111 as found in this proceeding. Penalty payment by certified check or money order payable to the State of Illinois shall be made to: Fiscal Services Division, Illinois EPA, 2200 Churchill Road, Springfield, Illinois 62706.
2. General Fire Extinguisher Corporation is granted a variance from the provisions of Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution until October 15, 1973.
3. General Fire Extinguisher Corporation shall cease and desist from its violations of Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution on October 15, 1973.
4. General Fire Extinguisher Corporation is adjudged not guilty on the charge that it installed equipment without a permit in violation of Section 9(b) of the Environmental Protection Act.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 31st day of July, 1973 by a vote of 4 to 0.

Christan L. Moffett