

Statement of G A F
Prepared for Agency of Environmental Conservation
Informal Hearing
September 23, 1971

On August 27, 1971, a Notice of Violation was issued by the Vermont Agency of Environmental Conservation, Division of Environmental Protection, relating to the opacity of the discharges from the rock drying operations at our plant located near Hyde Park, Vermont. On September 14, 1971, GAF Corporation requested a hearing on the matter, for which we are present today.

First, we would like it to be known that GAF is actively concerned with all phases of environmental improvements. Some years ago, a Corporate Environmental Engineering Department was established to work with the plants and regulatory agencies in achieving compliance with pollution control regulations. At our Hyde Park plant, the management and engineering staffs of the plant, themselves, have devoted a great deal of effort to these problems, and we will appreciate an opportunity now to review those past efforts and to describe present and future plans.

The dust sources which are of immediate concern include the two rock dryers, and a number of dry material transfer points, between conveyors and between conveyors and stock or waste piles.

The problem of the dryer emissions was first investigated in 1967. During that year, and the following, a study was made to determine what

GAF 11173

control methods might be in use by others in the industry. Visits were made to the Canadian facilities of Johns-Manville Corporation and the Philip Carey Company and it was learned that Johns-Manville had developed a high-efficiency cyclone collector that was quite effective in operation.

The diagrams for this system were given to our Hyde Park plant by Johns-Manville, but some modifications were needed to suit our operation. Engineering design began in 1969, and the plans called for keeping an existing primary scalping cyclone in use, since the recovered material could be returned to process. Also, in anticipation of additional State air pollution control regulations, it was proposed to follow the secondary, high-efficiency cyclones with wet scrubbers.

The proposed control system was discussed with the Vermont Division of Industrial Hygiene late in 1969, and, since State control regulations had not yet been formulated, there were some reservations that the scrubber would provide the necessary final degree of control. It was decided that the most practical way of achieving an immediate reduction in emissions would be to proceed with the cyclone installations with the intention of installing follow-up collection devices after emission limits became known.

Accordingly, design was completed, the cost was estimated, and the funds were authorized in June, 1970. The equipment was built by Ducon, Inc. and the installation was completed by the end of 1970, at a cost of over \$50,000. Ducon guaranteed an 87% efficiency for the cyclones, at operating

GAF 11174

conditions of 22,000 A.C.F.M. and 11" H₂O pressure drop. The plant has verified the volume and pressure drop.

Various alternative methods of additional control are now under study. Information on venturi wet scrubbers has been obtained from Pulverizing Machinery Co. and Ducon, Inc. Data on bag collectors has been supplied by Research-Cottrell and Pulverizing Machinery. The Wheelabrator Company will also be requested to submit a proposal. A final choice of equipment will depend upon the potential hazard of creating a water pollution problem, the experience of other manufacturers in utilizing the equipment in similar service, and the ultimate emission limits that must be met.

With regard to the dust generated by the transfer of dry tailings from one conveyor to another, and from a conveyor to the waste pile, a number of options are being considered. A trial application of water to the dry fines was made earlier this year. It demonstrated considerable effectiveness in suppressing the dust, but the transfer chutes quickly became plugged. Redesign of the transfer chutes might eliminate that difficulty, but it remains to be determined if water could continue to be applied during the winter season.

As an alternative, small bag collectors could be installed at each transfer point. Research-Cottrell and Pulverizing Machinery have been asked to submit proposals. How power is to be brought to the various locations, and how the collector is to discharge the collected material, are questions that remain to be answered.

GAF 11175

One way of approaching the problem is to eliminate as many transfer points as possible, and the plant is studying the feasibility of using longer individual belts for that purpose.

We believe that GAF has shown a positive interest in improving dust conditions at its Hyde Park plant. Much was done even before air pollution control became of national concern. More needs to be done, of course, and our future course of action will be guided by regulation and engineering considerations.

Of prime importance are the regulations that will be put into effect by the State of Vermont and the Federal Government. The proposed national emission standards for the asbestos industry are very stringent and, if adopted, may require more elaborate control methods than those that are now under investigation. Since a decision is expected in the near future, it would be preferable to defer a final choice of control system until it is known.

In the meantime, however, engineering evaluations will be made of the equipment currently being considered. This will involve further visits to other asbestos mills that have had some experience with particular types of equipment. Also, we believe it would be of benefit to install one of the small bag collectors at a transfer point, for pilot purposes and to develop installation and design criteria for the other locations.

GAF 11176

At this time, it is difficult to predict the duration of the engineering phase, especially without knowing the specific emission limits that we will have to meet. If you wish us to proceed on the basis of the Vermont regulations, we estimate that a program for control of both the dryers and the transfer point emissions can be prepared and presented by December 31, 1971, and a schedule for compliance can be discussed at that time. Depending upon the enactment of Federal legislation applying to our industry, however, we may then need to revise the program and schedule.

As it has in the past, GAF will continue to cooperate with the Vermont Division of Environmental Protection, and propose to keep you informed of progress.

GAF 11177