PLAINTIFF'S
EXHIBIT
GF-1896

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JAN 3 1972

December 29, 1971

State of Vermont
Agency of Environmental Conservation
Division of Environmental Protection
Montpelier, Vermont 05602

Attention: Mr. Donald W. Webster, Director

Subject: GAF Corporation
Lowell, Vermont
Air Pollution Abatement

Gentlemen:

In accordance with Item No. (1) of the Assurance of Discontinuance and Agreement, resulting from a hearing held on September 23, 1971, and stipulated to by GAF on October 27, 1971, which states," GAF Corporation shall present to the State of Vermont, on or before December 31, 1971 a preliminary engineering proposal for air pollution abatement and control", GAF hereby submits that preliminary engineering proposal.

The engineering study that was conducted involved first, the identification of all sources of visible dust being emitted to atmosphere; second, a survey of existing control equipment at each location; and third, an investigation of the availability and suitability of control methods and equipment for the further reduction of emissions. Attached are preliminary data sheets nos. G10-4-1 and G10-4-2, dated December 11, 1971 and entitled "Elimination of Visible Dust Emissions Program". The data on these sheets summarize the results of that comprehensive study.

Twenty-two (22) individual sources of dust emissions have been identified. There are , of course, variations in magnitude

and in the importance of providing for further abatement. Based upon visual observations, the highest priority sources are considered to be the ore-drying operations, the mill waste conveyor transfers, the secondary crusher, and the quarry conveyor transfers. Although engineering emphasis was placed on the control of those emissions, the data sheet shows that due consideration was given to all others.

A number of systems has been tried in an attempt to satisfactorily control the dryer stack emissions, but these still remain of primary concern. They were originally provided with low velocity cyclone collectors, to which a bag collector was added in 1950. This combination operated for a short time with only limited success, and in 1970, high efficiency cyclone collectors were installed for use in place of the bag collector. The manufacturer of the new cyclones has been notified that his equipment is not performing at guaranteed efficiency, and their field engineers visited the plant in November, 1971 to investigate the problem.

In order to learn what methods of dust control were being evaluated elsewhere, GAF personnel visited three Canadian asbestos mining operations in late October. An electrostatic precipitator was observed in operation on an ore-dryer, but, according to the installing plant, it was far below design efficiency. The most effective control seen was provided by bag collectors of both shaken and pulse-cleaning types.

Consideration has also been given to wet collectors. Manufacturers' opinions are that the necessary degree of collection would be attained only by use of the venturi type, with a pressure drop of at least 40" H_2O. There would be attendant problems with slurry handling, waste water disposal, and freezing to be overcome,

but it does appear to be a possible alternative to a bag collector.

We have recently learned that a pulse-cleaning bag collector is being installed on an ore-drying facility located in Cassair, British Columbia. According to information from the manufacturer the design of the installation is similar to that needed at our own plant. The collector at Cassair is scheduled to be in operation early in January, and we are most interested in it's effectiveness and long-range reliability.

For the mill waste conveyor transfer points, GAF has implemented a pilot project, consisting of the application of a bag collector to control dust at one of the transfers. A Micro-Pulsaire unit was purchased, and it's installation is nearing completion. This will result in the development of size and design criteria for the further application of similar units to emissions at other transfer points.

Referring to the data sheets, it can be seen that the preliminary engineering has led to a preferential method of controlling dust emissions from the various sources, plus, in many instances, an alternative method. The need to dispose of the collected material has also been taken into account, as shown.

The final choice of control system will depend upon applicable regulations promulgated by the State of Vermont and the United States Environmental Protection Agency. It is GAF's intention to work toward compliance with all such regulations, and this engineering study is a significant contribution to that purpose.

Very truly yours,
GAF Corporation

W. J. Holloway
Corporate Environmental Engineer

Encl.

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P.S. to D. E. Eldred- Dennis, you did a great job....