

C O P Y - (MA - 11/2/53)

INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.
1400 Fifth Avenue
Pittsburgh 13, Pa.



November 5, 1951

Mr. V. K. Ayer, Engineer
United States Rubber Company
Stark Mills - Reid Mills
Hogansville, Ga.

Subject: Asbestos Dust Control Program at Hogansville Plant

Dear Mr. Ayer:

The following is a summary of the salient points on which I consulted with you at Hogansville on October 25 and 26.

I inspected the automatic hoods you have installed on some 13 of the looms and found the installation to be in accordance with our original recommendations. The measured air flow amounts to approximately 350 dfm. per loom exhausted through a slot disposed just above the warp threads back of the harness. You are to be complimented on the ingenious mechanical arrangement whereby pneumatic cylinders raise and lower the hood automatically as the machine is stopped and started.

While it was not contemplated that dust counts would reflect the improvement due to such a partial installation as this, (and in fact this was noted in our report of March, 1950,) nevertheless the dust counts that have been routinely obtained before and after the installation do indicate a marked improvement in dust control. From February to June the dust concentrations ranged between 5 and 9 million and since then, with the exception of one August dust count, they have ranged between 3 and 5 million.

With the aid of strong illumination and positioning of the exhaust hood at varying locations above the web, we were able to demonstrate dramatically the effectiveness of the exhaust in removal of fine dust, not only that originating at the top of the web, but also that in regions below that level. In short, this installation has fully met our expectations.

Control of fly originating at the front of the machine was not contemplated and a visible escape of moderate amounts is apparent.

Questions concerning this source were discussed and we agreed on the necessity for distinguishing between the fine dust as disclosed in dust counts which is related to considerations of health, and the nuisance aspects of fly. If at some later date it be deemed advisable to attempt suppression of the latter by supplementary exhaust means, it will be recognized as, principally, a reduction in fly nuisance.

11701

November 8, 1951

The brick dust house into which the exhaust system discharges acts as a settling chamber and the effluent air discharging into the open at roof level contains an almost imperceptible quantity of dust. In fact, if recirculation into the workroom were not contemplated, one could conclude that the present degree of cleanliness is satisfactory for outdoor discharge. It is much smaller in amount than that in the discharge from the card room exhaust system.

We approve of your plan to install a small Wheelstrator cloth bag dust collector and one of the Air Mat filter, operation of which units will afford a good opportunity to decide on the unit best adapted to your needs. The facts which are somewhat indeterminate at present and which warrant experimental installations of the type planned are:

- (a) the ease with which the accumulated cake of material on the filter can be dislodged
- (b) the pressure drop at the end of one-half day's operation, in relation to the size (filter area) and
- (c) the effectiveness of seal between dusty and clean air side of the filter as determined by dust counts in the effluent air.

Card Room

Since our last visit additional exhaust connections to the spaces under the carding machine enclosures have been installed. An inspection of dust concentrations for the ten months of 1951 indicate levels consistently within the range of 2 to 4 million, averaging around 3 million. This represents excellent dust control when compared with concentrations prevalent in other leading asbestos textile plants as tabulated in our previous report. For possible future reference we note that such dust as escapes appears to originate in large measure from the comb of the finisher card. As outlined in our previous report, it would seem feasible to install an exhaust slot directly above this comb.

Spinning Room

Dust counts made in 1951 indicate a range in dust concentrations from 3 to 5 million. These are comparable with those encountered elsewhere in the industry. Attempts have been made to reduce dust concentrations and fly in spinning rooms by installation of exhaust below the spinning frames and behind the bobbins. None of these methods have been successful in effecting a major reduction in dustiness, this because of the large area over which the dust sources are disposed.

Foster Winders

Concentrations of dust in the winding room are consistently low, i.e., below 3 million. Comments that have been made concerning dustiness in this area refer to fly which may be comprised in large part of cotton fiber. The dustiness in this area is the lowest of all departments. Exhaust systems have been applied to Foster winders in some other plants but in view of the characteristically low dust concentrations their value is not clear to the writer.

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November 8, 1951

Picker Room

The dust count record for the picker room shows concentrations of dust in the range primarily below 5 million, a marked reduction from early in 1950 when they fell principally between 5 and 10 million.

The accomplishments outlined above represent gratifying progress in the dust control program. Your plant with the completion of the exhaust system for the workrooms will rank with the best in the industry with which we are familiar. We were pleased to note that the Georgia Division of Industrial Hygiene will carry out another dust count survey for you within coming weeks. We would be interested in receiving a copy of the report when it is available.

In the meantime, we shall be pleased if you would keep in touch with us in the further development of the dust control system for the looms.

Very truly yours,

W.C.L. Hemeon
Engineering Director

WCLH/vmc

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.
1400 Fifth Avenue
Pittsburgh 13, Pa.

November 6, 1951



Mr. W. K. Ayer, Engineer
United States Rubber Company
Stark Mills - Reid Mills
Hogansville, Ga.

Subject: Asbestos Dust Control Program at Hogansville Plant

Dear Mr. Ayer:

The following is a summary of the salient points on which I consulted with you at Hogansville on October 25 and 26.

I inspected the automatic hoods you have installed on some 13 of the looms and found the installation to be in accordance with our original recommendations. The measured air flow amounts to approximately 350 dfm. per loom exhausted through a slot disposed just above the warp threads back of the harness. You are to be complimented on the ingenious mechanical arrangement whereby pneumatic cylinders raise and lower the hood automatically as the machine is stopped and started.

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The brick dust house into which the exhaust system discharges acts as a settling chamber and the effluent air discharging into the open at roof level contains an almost imperceptible quantity of dust. In fact, if recirculation into the workroom were not contemplated, one could conclude that the present degree of cleanliness is satisfactory for outdoor discharge. It is much smaller in amount than that in the discharge from the card room exhaust system.

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November 3, 1951

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Very truly yours,

W.C.L. Henson
Engineering Director

WCLH/vmc

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