INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

[redacted]

Memorandum on Plant of

Johns-Manville Corporation

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated J in the general report. The summary of dustiness in column J of Table 1 may be compared with all except plants C and I. There is a consistently higher dustiness in all operations in spite of the fact that large sums of money have been expended for dust control equipment.

The dust-count data do indicate satisfactory control of dust in weaving operations.

We suspect that the major cause of the poor dust conditions results from the practice of returning air from the bag house to the work room. This should be investigated (see discussion of recirculation, page 13, general report).

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1 of 2
Brown 11/12/81

Memorandum on Plant of Johns-Manville Corp., Supplementing the General Report, "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Data from this plant are not included in the tabulation of exhaust rates for cards (page 1, general report) because the single cards would not be comparable and the control of dust in this department is not good, as judged by dust counts. Observations of duct connections on Whitin cards indicate an original exhaust capacity of over 4,000 to 5,000 cfs.

Dust control arrangements in the new Whitin cards diverge from the best practices listed on page 9 (general report) as to items 2,3,6 and 7

The best combination of exhaust for this card would be worked out in the engineering phases of the long-term investigation proposed in the general report (see page 27, I and A).

Recirculation of air [illegible] has been [illegible] above.

The comments on page 13 are pertinent. We do not believe that the efficiency of a burlap dust house is adequate to permit recirculation of air from it back to the workroom as is the present practice. We do not rule out the possibility that safeguards can be devised that will permit the recovery of heat represented thereby.

Medical

The incidence of asbestosis in this plant is comparable to only one other plant (A). The medical problem of diagnosis is complicated in this plant by the fact that many workers have been employed in anthracite coal mines and some show evidence of anthraco-silicosis. The panel activity referred to on page 18 should be especially valuable in these circumstances.

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W.C.L. [illegible]

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Johns-Manville Corporation

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated J in the general report. The summary of dustiness in column J of Table 1 may be compared with all except plants C and I. There is a consistently higher dustiness in all operations in spite of the fact that large sums of money have been expended for dust control equipment.

The dust count data do indicate satisfactory control of dust in weaving operations.

We suspect that the major cause of the poor dust conditions results from the practice of returning air from the bag house to the work room. This should be investigated (see discussion of recirculation, page 13, general report).

JHM33045

Memorandum on Plant of Johns-Manville Corp., Supplementing the General Report, "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Data from this plant are not included in the tabulation of exhaust rates for cards (page 8, general report) because the single cards would not be comparable and the control of dust in this department is not good, as judged by dust counts. Observations of duct connections on Whitin cards indicate an original exhaust capacity of over 4,000 to 5,000 cfm.

Dust control arrangements in the new Whitin cards diverge from the best practices listed on page 9 (general report) as to items 2,3,6 and 7.

The best combination of exhaust for this card would be worked out in the engineering phases of the long-term investigation proposed in the general report (see page 27, I and A).

Recirculation of air from dust collectors has been touched upon above.

The comments on page 13 are pertinent. We do not believe that the efficiency of a burlap dust house is adequate to permit recirculation of air from it back to the workroom as is the present practice. We do not rule out the possibility that safeguards can be devised that will permit the recovery of heat represented thereby.

Medical

The incidence of asbestosis in this plant is comparable to only one other plant (A). The medical problem of diagnosis is complicated in this plant by the fact that many workers have been employed in anthracite coal mines and some show evidence of anthraco-silicosis. The panel activity referred to on page 18 should be especially valuable in these circumstances.

JHM330d6

W.C.L. Hemeon
Head Engineer

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on U.S. Asbestos (Manheim) Plant of

Raybestos-Manhattan, Inc.

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated A in the General Report. The range of concentration listed in Column A, Table 1, was fixed by an examination of the dust count data of recent years in company files with a little weight given to our own taken at the time of our visit. Dust count data for the preparation department were not adequate for estimating average exposures.

Dust control in carding is equalled by several plants, but is better, we believe, in the Charleston plant of this company.

Dustiness in weaving is believed to be the lowest in the industry.

Our own dust counts made on March 19 are as follows:

JHM33019

Memorandum on U.S.Asbestos (Manheim) Plant of Raybestos-Manhattan. Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute," of June, 1947.

Number	Elapsed Time	Location	Dust Count
1	10 Mins.	General air in finisher card room at take-off end of machines 3, 4, 11, 12.	2.4
2	6 Mins.	Similar to No. 1, but at machines 6 and 14.	2.9
3	10 Mins.	General air, taken while walking up and down aisles of spinning frames.	2.0
4	12 Mins.	General air, taken while walking up and down aisles of twisting machines.	5.8
5	10 Mins.	At operator of loom No. 10, a machine most distant from twisters.	2.1

Dust Control Practices

In the tabulation concerning carding machine exhaust systems this plant is shown to effect good results with the lowest rate of exhaust of any plant. However, dustiness in plant B is materially lower with only about 50 per cent greater air flow (the extra capacity distributed to auxiliary branches).

Medical

This plant has been included among those having had a recent x-ray survey, even though not especially systematic with respect to time because of the policy of voluntary examinations.

The incidence of asbestosis indicated by company records are equalled by one other plant, but in the case of the latter there is ground for doubt as to the accuracy of the diagnosis, according to the present medical director.

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on General Asbestos and Rubber Plant of

Raybestos-Manhattan, Inc.

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated in the general report as B.

The samples taken by us were all lower than one million, but since they were single samples and differed considerably from other data in company files we did not give them full weight in estimating the average range given in column B of Table 1 (page 5 of general report).

The company's dust count record indicates the longest period of low dustiness in the industry.

In spite of the span of years covered, the number of individual dust counts is much too small to constitute an adequate record. Management indicated that a re-survey was to be made after certain process changes were effected. However, it is our opinion that present concentrations are very

JHM33021

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Low and we would advise that arrangements be made with Mr. Fehnel for a thoroughly complete survey without waiting for such changes. A liberal number of samples in each operation is required to establish average figures.

Dust counts made by us are as follows:

Number	Elapsed Time (Mins.)	Location	Dust Count
1	10	General air near take-off end of cards, 4 machines distant from foreman's office.	0.2
2	10	In breathing zone of pulp spinner operator; following him during sampling.	0.4
3	10	In breathing zone of operator of Foster winder. (About 1/4 of duct branches plugged by bobbin.)	0.4
4	10	General air, taken while following within 6 to 7 feet of operator of ring spinning frame.	0.5
5	10	General air in vicinity of 4 exhausted looms (dry).	0.6
6	10	In breathing zone of operator of one loom.	0.3
7	10	General air, taken while walking up and down aisles of twisters. Exhausted.	0.9
8	10	Same as No. 7, but exhaust system shut off.	1.8

JHM33022

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

It is suspected that the unique fiber treatment in the preparation process may do much to reduce dustiness in subsequent textile operations. The tests described under "Inherent Dustiness of Stock" (page 26, general report) would illuminate this point when fully developed.

Carding

In the tabulation of card exhaust rates (page 8, general report) this plant has, we believe, somewhat better control than Plant A requiring about 50 per cent greater air flow per machine.

All of the eight good features listed on page 9 were observed on these cards.

We are of the opinion that the 2 inch ducts arranged to exhaust the space between ring doffers and main cylinder is not fully effective due to rapid plugging, but are convinced that the objective is worthwhile. The plugging is caused by ineffective distribution of planned air flow which, in turn, is the result of gross differences in friction loss between the small diameter and larger diameter branches (referred to under "Duct Work," top page 12).

Twisting

There is some indication from dust count data of value in the existing exhaust system but the data are fragmentary and inconclusive. We would like to see several "on and off" tests made alternately on same day for confirmation.

JHM3.3023

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Medical

This plant is one of those without adequate information as to the incidence (or absence) of asbestosis and we strongly recommend the institution of a system of medical supervision as indicated in this section of the general report.

The last paragraph on page 20 of the general report refers in part to this company. The information that could be gained from a statistical study of the incidence of asbestosis as related to working history in a plant with this record would be of very great value.

W.C.L. Hemeon
Head Engineer

IH2332004

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Philadelphia Asbestos Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as C in the general report, and the dustiness summarized in that column of Table 1. For reasons outlined in the general report, the values for preparation are probably not very representative in any of the plants and only approximate comparisons, therefore, can be made.

The data for carding and weaving confirm the observable fact of high dustiness in this plant. Only one other plant in the group is comparable to it.

Our own dust counts, which supplement those in the company files are as follows:

JHM33025

Memorandum on Plant of Philadelphia Asbestos Company, Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Number	Elapsed Time (Mins.)	Location	Dust Count
1	5	General air near mule spinner located nearest to office. Judged that no dust from any adjoining department.	5.7
2	5	At loom No. 94, dry weaving. Judged that most dust from weaving (although possible contribution from picker room).	14.6
3	5	At high speed, P & S, cards, at delivery end. Exposure of operator. Considerable dust contribution from older cards in adjoining room.	13.0
4	7	General air in old card room. Ineffective sheet metal canopy hoods over cards.	10.4
5	5	General air sample obtained while walking up and down aisles between twisting machines.	6.6

Dust Control Practices

Control of dust from the P & S cards cannot be very satisfactory while that from the older cards is uncontrolled. If their use is to be continued immediate steps should be taken to provide proper enclosures for them.

Ultimate exhaust of the P & S cards will doubtless differ in some details from other cards, but for the present the following points are to be noted. The existing arrangements differ from best practices listed on page 9, general report, as to items 1, 4, 6, 7 and 8. Especially disadvantageous is the large diameter (8 inch) branch duct from the top of the housing in combination with the narrow slot connection to the housing.

HH33026

Memorandum on Plant of Philadelphia Asbestos Company, Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

The practice of recirculation of air from the dust collector is questionable although it may appear that less difficulty will be experienced with this type of collector than some others in use. In order to follow any changes in pressure drop, a simple water U-tube should be installed that will indicate this value and can be frequently observed.

The greatest need in this plant is guidance in the control of dust from carding machines. This could be covered by the program outlined in the general report for the long term project.

Medical

The x-ray survey of this plant made recently showing only 3 to 4 per cent, is in sharp contrast to the experience of some other plants. Lacking information as to detail work history of the employees no explanation can be offered now, but the discrepancy should be investigated.

W.C.L. Hemeon
Head Engineer

JHH33027

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Kensbey & Nattison Company

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as D in the general report and an appraisal of its dustiness is summarized in that column of Table 1. For reasons outlined in that report, the values for the preparation department are not considered truly representative of any one plant and, therefore, only approximate comparisons can be made.

Our own dust count in the carding room was materially lower than those in the company's files reported by the State in 1944, but we have given little weight to our values because they are single samples and therefore subject to sampling limitations. We assume that no major modifications have been made for improved dust control since that time. On

TUM33028

Memorandum on Plant of Lansdey & Mattison Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

the whole we do not feel that existing dust count records are adequate to give a representative picture of dust conditions in this plant. This will be corrected by steps the company has taken to train a man to do this work.

Our own dust counts are given below:

Number	Elapsed Time (Mins.)	Location	Dust Count
1	10	In aisles between various spinning machines; 6 machines not in operation.	1.0
2	5	General air in carding room, at roving end of machines 4,5,6 and 7. About half of all machines shut down.	2.2
3	5	Between 2 looms at position 13 (Freeman's).	2.6
4	5	General air in weave room; 3 to 4 looms in operation.	0.9

Recirculation of air from the small bag house near the mixing operations is not good practice, and in this case there is obvious opportunity for leakage of dust through the burlap filtering element. (See discussion in general report, page 13.)

Medical

We have indicated in Table II (page 14, general report), that this company has had a recent x-ray survey although it was not complete because of its voluntary character. If the more extensive new survey

TM33029

Memorandum on Plant of Keasbey & Mattison Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

planned for May, 1947 shows the same incidence as indicated in the past (see page 15, plant D), some explanation should be sought in the work history or otherwise for the spectacular discrepancy between these figures and those for plants A, B and J.

W.C.L. Hemeon
Head Engineer

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Carolina Asbestos Company

Supplementing the

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as E in the general report and an appraisal of its dustiness is summarized in that column of Table 1.

Mr. Terry's dust count data carry heavier weight than the single ones made by us because they were more numerous and, therefore, provide a better average. The values given in the table, therefore, are heavily weighted by those figures.

The figures indicate that dust control is equal to that in the average "good" plants of the group. Slight differences between plants should not be taken too literally, since normal variations of some magnitude occur.

Memorandum on Plant of Carolina Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our own single dust counts are given below:

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	4	At outside doorway of preparation room. Visible dust from nearby bag house blowing in this direction. Taken to measure degree of possible recontamination.	0.5
2	6	General air around cards 1,2,3,4,5 and 6.	0.9
3	6	General air around cards 13,14 and 15. Visible dust escape from No. 14 breaker.	3.3
4	5	General air, while walking up and down aisles between twisters.	2.2

Dust Control Practices

The new carding exhaust system is good except that considerable dust was escaping at cards 14 and 15, the cause of which we did not establish.

The sheet metal enclosures may eventually need to be replaced due to wearing of holes in the sides at the rim of the main cylinder, and to crushing of covers. Before this becomes serious initial steps should be taken to make the conversion gradually since considerable time will be required to effect the change for all machines.

Medical

In Table II (page 14, General report) we have listed this company as not having had any x-ray survey, because of the fact that the State's

JHM33032

Memorandum on Plant of Carolina Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

findings are available only in a negative way. The fact is that no information is available to the company as to incidence of asbestosis.

The remarks in this section of the report relative t the importance of the periodic medical examination must be viewed in the light of the particular program of the State of North Carolina. Before extending specific advice on this point we would want to explore the practices and policies of the State to see what could be worked out with them. This exploration would be a part of the medical end of the long-term program, as outlined in the general report.

W.C.L. Hemeon
Head Engineer

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Southern Asbestos Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated by the letter F in the general report, and our appraisal of its dustiness summarized in that column in Table 1. Our own dust counts were much lower than those recorded in the company's files. Since they, however, were only single samples, great reliance cannot be placed on them. We have, therefore, not weighted them heavily in selecting figures to represent typical dustiness.

The figures indicate that dust control is equal to the average "good" plant of the group. Differences that may appear from a superficial comparison should not be taken too literally. Thus, there is no reason to believe that twisting is any less dusty in this plant than in any other.

TUM2002

Memorandum on Plant of Southern Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our dust counts are given below:

Number	Elapsed Time (Mins.)	Operations	Dust Count
1	5	At breathing zone of operator of looms 5 and 6. Dry weaving but lay beam exhausted (by 2 to 4 inch branches) and exhaust under ways at floor level.	0.4
2	5	At Thermoid looms 15 and 16, and in breathing zone of operator. Damp weaving.	0.6
3	5	General air, while walking up and down 2 aisles between twisting frames. Only 4 machines running.	0.5
4	5	General air, while walking up and down aisles between spinning frames.	0.5

Dust Control Practices

The company plans for installation of new carding machines will afford an opportunity for installation of a first class modern exhaust system. It also means that it will be of great importance to have specific test data enabling us to frame accurate specifications for the most effective and economical exhaust system for the particular make of cards installed. This is contemplated as a part of the proposed long term project.

The discussion on dust collectors (page 12) is pertinent to this plant. The long-term project includes as one of its earliest objectives the development of rational specifications for either construction or purchase of appropriate dust collectors.

Memorandum on Plant of Southern Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Medical

In Table II (page 14, general report) we have listed this company as not having had any x-ray survey, because of the fact that the State's findings are available only in a negative way. The fact is that no information is available to the company as to incidence of asbestosis.

The remarks in this section of the report relative to the importance of the periodic medical examination must be viewed in the light of the particular program of the State of North Carolina. Before extending specific advice on this point we would want to explore the practices and policies of the State to see what will be worked out with them. This exploration would be a part of the medical and of the long-term program, as outlined in the general report.

W.C.L. Hanson
Head Engineer

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

The Garlock Packing Company

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as G in the general report and an appraisal of its dustiness is summarized in that column of Table 1, page 5.

The differences between these values and those of other good plants are, on the whole, not significant and we rate this plant as average "good." However, this does not mean that dust control is entirely satisfactory in all respects as indicated in the general report.

There is an insufficient number of dust counts in the company files to constitute an adequate record of dustiness. Normal variations require a number of counts at each operation to provide a useful average.

JHM33037

Memorandum on Plant of The Garlock Packing Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our own single dust counts taken at the time of the visit are given below.

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	5	At operator end of 4 carding machines (Nos. 1,2,7 and 8).	1.5
2	5	General air in aisles of twisting machines.	3.0
3	5	General air, along row of looms; most windows open along the working aisle.	3.1
4	5	General air in aisles of spinning frames.	1.7

Dust Control Practices

Carding dust control is discussed on pages 7 and 9 of the general report. Reference is made to the exhaust system in this plant which accomplishes as good dust control as almost all the other "good" plants but at exhaust rates that would not be practical for other northern plants.

The dust collectors in use at this plant are of considerable interest because they include two types not in use in any other plant (Air Jet and Parsons) because commonly thought to be impractical. Test data on these units would therefore be valuable.

JHH33038

Memorandum on Plant of the Garlock Packing Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Engineering studies planned for the long term investigation of particular interest to this plant and outlined in the general report are: dust control in preparation, twisting and weaving, and efficiency of dust collectors.

Medical

In the medical section of the general report reference is made to the several companies who have no information as to the incidence of potential asbestosis in their plant. This company is one of those and we therefore wish to underscore here the recommendations concerning periodic x-ray examinations discussed particularly on pages 14 to 18.

W.C.L. Hemeon
Head Engineer

JHM33039

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Union Asbestos & Rubber Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This company is designated as U in the general report and an appraisal of its dustiness is summarized in that column of Table 1.

There is complete lack of previous dust count data in the company's files, and those taken by us are too few in number to provide a good average. We had a definite impression at the time of sampling of markedly greater dustiness than the final count results showed, but we have no explanation at this time.

The results are as follows:

JHM33040

Memorandum on Plant of Union Asbestos & Rubber Co., Supplementing the General Report "Preliminary Dust Investigations for Asbestos Textile Institute" of June, 1947.

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	6	General air in aisles of spinning-twisting frames.	7.7
2	4	General air in aisles of winders; same room as spinning-twisting.	5.3
3	5	On operating platforms of several brake lining looms.	4.5
4	4	Near operator of one broad loom on opposite side of room from Sample 3. Open window behind.	6.3
5	5	At roving end of 4 enclosed carding machines.	2.5
6	4	At far end of card room where visible dust escaping from enclosure at top.	5.5
7	5	At brushing end of single rope cards.	0.4

Dust Control Practices

The carding dust control system appears to be, fundamentally, as effective as the average of other "good" plants. In practice it is inferior due to operator carelessness in failing to replace portions of the enclosure. Most important is the panel on top designed to reduce the space through which the driving belts pass.

Spinning and twisting present a problem not directly comparable to other plants because of the unique combination of functions in one machine.

JHI133041

Memorandum on Plant of Union Asbestos & Rubber Co., Supplementing the General Report "Preliminary Dust Investigations for Asbestos Textile Institute" of June, 1947.

The spray humidifier employed at weaving machines does not fall into either of our categories of "damp" or "wet" weaving, and leaves something to be desired in the way of improved dust control.

Recirculation of air from dust collectors, practiced in this plant, is discussed in the general report on page 13. The commercial filters employed here are undoubtedly more efficient than the burlap bag house in common use, and would be the useful subject of tests in the long term investigations outlined.

Medical

This is the only company with a systematic x-ray examination program. The estimate of 5 to 6 cases of early asbestosis is a larger incidence than in any other plant. It seems that great contributions could be made to the proposed diagnostic panel (page 18, general report) by this company, and that it would also profit greatly.

W.C.L. Hemeon
Head Engineer

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

J.F. Burke and Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This company is designated by the letter I in the general report and a summary of its dustiness given in that column of Table I. The figures are based on some dust counts made by the State, but it is believed that some reduction has been effected, at least in carding, since that time.

The figures indicate a dustiness equalled by only one other plant. Of particular interest is the high degree of dustiness in spinning and twisting. In all but two plants those operations are practically identical, so dust counts are comparable. The figures show 3 to 4 times as much dust in this plant. The explanation for this was not apparent. It may result from a greater amount of dust in the stock due to differences in preparation methods, a quality we attempted to evaluate in a preliminary way (see page 26).

JHM33043

Memorandum on Plant of J.P. Burke and Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Several points in dust control in preparation and at carding machines were discussed briefly with Mr. Williams, Jr. at the time of the visit.

The long term investigations, however, would include systematic guidance in the details of dust control especially with respect to preparation, carding machines, the cause of excessive dust, and its remedy, in spinning and twisting, and selection of dust collectors. It is to be recognized that, because of the climate, this plant has a particular stake in the development of information that will permit safe recirculation of air from a dust collector.

W.C.L. Hemeon
Head Engineer

JHH33044

INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

[redacted]



Memorandum on Plant of

Johns-Manville Corporation

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated J in the general report. The summary of dustiness in column J of Table 1 may be compared with all except plants C and I. There is a consistently higher dustiness in all operations in spite of the fact that large sums of money have been expended for dust control equipment.

The dust-count data do indicate satisfactory control of dust in weaving operations.

We suspect that the major cause of the poor dust conditions results from the practice of returning air from the bag house to the work room. This should be investigated (see discussion of recirculation, page 13, general report).

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Brown 11/13/81

Memorandum on Plant of Johns-Manville Corp., Supplementing the General Report, "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Data from this plant are not included in the tabulation of exhaust rates for cards (page 1, general report) because the single cards would not be comparable and the control of dust in this department is not good, as judged by dust counts. Observations of duct connections on Whitin cards indicate an original exhaust capacity of over 4,000 to 5,000 cfm.

Dust control arrangements in the new Whitin cards diverge from the best practices listed on page 9 (general report) as to items 2, 3, 6 and 7

The best combination of exhaust for this card would be worked out in the engineering phases of the long-term investigation proposed in the general report (see page 27, I and J).

Recirculation of air [illegible] has been described upon above.

The comments on page 13 are pertinent. We do not believe that the efficiency of a burlap dust house is adequate to permit recirculation of air from it back to the workroom as is the present practice. We do not rule out the possibility that safeguards can be devised that will permit the recovery of heat represented thereby.

Medical

The incidence of asbestosis in this plant is comparable to only one other plant (A). The medical problem of diagnosis is complicated in this plant by the fact that many workers have been employed in anthracite coal mines and some show evidence of anthraco-silicosis. The panel activity referred to on page 18 should be especially valuable in those circumstances.

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Johns-Manville Corporation

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated J in the general report. The summary of dustiness in column J of Table 1 may be compared with all except plants C and I. There is a consistently higher dustiness in all operations in spite of the fact that large sums of money have been expended for dust control equipment.

The dust count data do indicate satisfactory control of dust in weaving operations.

We suspect that the major cause of the poor dust conditions results from the practice of returning air from the bag house to the work room. This should be investigated (see discussion of recirculation, page 13, general report).

JHM33045

Memorandum on Plant of Johns-Manville Corp., Supplementing the General Report, "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Data from this plant are not included in the tabulation of exhaust rates for cards (page 8, general report) because the single cards would not be comparable and the control of dust in this department is not good, as judged by dust counts. Observations of duct connections on Whitin cards indicate an original exhaust capacity of over 4,000 to 5,000 cfm.

Dust control arrangements in the new Whitin cards diverge from the best practices listed on page 9 (general report) as to items 2,3,6 and 7.

The best combination of exhaust for this card would be worked out in the engineering phases of the long-term investigation proposed in the general report (see page 27, I and A).

Recirculation of air from dust collectors has been touched upon above.

The comments on page 13 are pertinent. We do not believe that the efficiency of a burlap dust house is adequate to permit recirculation of air from it back to the workroom as is the present practice. We do not rule out the possibility that safeguards can be devised that will permit the recovery of heat represented thereby.

Medical

The incidence of asbestosis in this plant is comparable to only one other plant (A). The medical problem of diagnosis is complicated in this plant by the fact that many workers have been employed in anthracite coal mines and some show evidence of anthraco-silicosis. The panel activity referred to on page 18 should be especially valuable in those circumstances.

JHH330d6

W.C.L. Hemeon
Head Engineer

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July 11, 1947

Memorandum on U.S. Asbestos (Manheim) Plant of

Raybestos-Manhattan, Inc.

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated A in the General Report. The range of concentration listed in Column A, Table 1, was fixed by an examination of the dust count data of recent years in company files with a little weight given to our own taken at the time of our visit. Dust count data for the preparation department were not adequate for estimating average exposures.

Dust control in carding is equalled by several plants, but is better, we believe, in the Charleston plant of this company.

Dustiness in weaving is believed to be the lowest in the industry.

Our own dust counts made on March 19 are as follows:

JHH33019

Memorandum on U.S.Asbestos (Manheim) Plant of Raybestos-Manhattan. Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute," of June, 1947.

Number	Elapsed Time	Location	Dust Count
1	10 Mins.	General air in finisher card room at take-off end of machines 3, 4, 11, 12.	2.4
2	6 Mins.	Similar to No. 1, but at machines 6 and 14.	2.9
3	10 Mins.	General air, taken while walking up and down aisles of spinning frames.	2.0
4	12 Mins.	General air, taken while walking up and down aisles of twisting machines.	5.8
5	10 Mins.	At operator of loom No. 10, a machine most distant from twisters.	2.1

Dust Control Practices

In the tabulation concerning carding machine exhaust systems this plant is shown to effect good results with the lowest rate of exhaust of any plant. However, dustiness in plant 5 is materially lower with only about 50 per cent greater air flow (the extra capacity distributed to auxiliary branches).

Medical

This plant has been included among those having had a recent x-ray survey, even though not especially systematic with respect to time because of the policy of voluntary examinations.

The incidence of asbestosis indicated by company records are equalled by one other plant, but in the case of the latter there is ground for doubt as to the accuracy of the diagnosis, according to the present medical director.

JHM33020

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July 11, 1947

Memorandum on General Asbestos and Rubber Plant of

Asbestos-Manhattan, Inc.

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated in the general report as S.

The samples taken by us were all lower than one million, but since they were single samples and differed considerably from other data in company files we did not give them full weight in estimating the average range given in column B of Table 1 (page 5 of general report).

The company's dust count record indicates the longest period of low dustiness in the industry.

In spite of the span of years covered, the number of individual dust counts is much too small to constitute an adequate record. Management indicated that a re-survey was to be made after certain process changes were effected. However, it is our opinion that present concentrations are very

JHM33021

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

low and we would advise that arrangements be made with Mr. Fehnel for a thoroughly complete survey without waiting for such changes. A liberal number of samples in each operation is required to establish average figures.

Dust counts made by us are as follows:

Number	Elapsed Time (Mins.)	Location	Dust Count
1	10	General air near take-off end of card, 4 machines distant from foreman's office.	0.2
2	10	In breathing zone of pulp spinner operator; following him during sampling.	0.2
3	10	In breathing zone of operator of Foster winder. (About 1/4 of duct branches plugged by bobbin.)	0.4
4	10	General air, taken while following within 6 to 7 feet of operator of ring spinning frame.	0.5
5	10	General air in vicinity of 4 exhausted looms (dry).	0.6
6	10	In breathing zone of operator of one loom.	0.3
7	10	General air, taken while walking up and down aisles of twisters. Exhausted.	0.9
8	10	Same as No. 7, but exhaust system shut off.	1.8

JHM33022

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

It is suspected that the unique fiber treatment in the preparation process may do much to reduce dustiness in subsequent textile operations. The tests described under "Inherent Dustiness of Stock" (page 26, general report) would illuminate this point when fully developed.

Carding

In the tabulation of card exhaust rates (page 8, general report) this plant has, we believe, somewhat better control than Plant A requiring about 50 per cent greater air flow per machine.

All of the eight good features listed on page 9 were observed on these cards.

We are of the opinion that the 2 inch ducts arranged to exhaust the space between ring doffers and main cylinder is not fully effective due to rapid plugging, but are convinced that the objective is worthwhile. The plugging is caused by ineffective distribution of planned air flow which, in turn, is the result of gross differences in friction loss between the small diameter and larger diameter branches (referred to under "Duct Work," top page 12).

Twisting

There is some indication from dust count data of value in the existing exhaust system but the data are fragmentary and inconclusive. We would like to see several "on and off" tests made alternately on same day for confirmation.

JHM33023

Memorandum on General Asbestos and Rubber Plant of Raybestos-Manhattan, Inc., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Medical

This plant is one of those without adequate information as to the incidence (or absence) of asbestosis and we strongly recommend the institution of a system of medical supervision as indicated in this section of the general report.

The last paragraph on page 20 of the general report refers in part to this company. The information that could be gained from a statistical study of the incidence of asbestosis as related to working history in a plant with this record would be of very great value.

W.C.L. Hemeon
Head Engineer

IH2330024

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Philadelphia Asbestos Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as C in the general report, and the dustiness summarized in that column of Table 1. For reasons outlined in the general report, the values for preparation are probably not very representative in any of the plants and only approximate comparisons, therefore, can be made.

The data for carding and weaving confirm the observable fact of high dustiness in this plant. Only one other plant in the group is comparable to it.

Our own dust counts, which supplement those in the company files are as follows:

JHM33025

Memorandum on Plant of Philadelphia Asbestos Company, Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Number	Elapsed Time (Mins.)	Location	Dust Count
1	5	General air near mule spinner located nearest to office. Judged that no dust from any adjoining department.	5.7
2	5	At loom No. 94, dry weaving. Judged that most dust from weaving (although possible contribution from picker room).	14.6
3	5	At high speed, P & S, cards, at delivery end. Exposure of operator. Considerable dust contribution from older cards in adjoining room.	13.0
4	7	General air in old card room. Ineffective sheet metal canopy hoods over cards.	10.4
5	5	General air sample obtained while walking up and down aisles between twisting machines.	6.6

Dust Control Practices

Control of dust from the P & S cards cannot be very satisfactory while that from the older cards is uncontrolled. If their use is to be continued immediate steps should be taken to provide proper enclosures for them.

Ultimate exhaust of the P & S cards will doubtless differ in some details from other makes, but for the present the following points are to be noted. The existing arrangements differ from best practices listed on page 9, general report, as to items 3, 4, 6, 7 and 8. Especially disadvantageous is the large diameter (8 inch) branch duct from the top of the housing in combination with the narrow slot connection to the housing.

TM33026

Memorandum on Plant of Philadelphia Asbestos Company, Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

The practice of recirculation of air from the dust collector is questionable although it may appear that less difficulty will be experienced with this type of collector than some others in use. In order to follow any changes in pressure drop, a simple water U-tube should be installed that will indicate this value and can be frequently observed.

The greatest need in this plant is guidance in the control of dust from carding machines. This could be covered by the program outlined in the general report for the long term project.

Medical

The x-ray survey of this plant made recently showing only 3 to 4 per cent, is in sharp contrast to the experience of some other plants. Lacking information as to detail work history of the employees no explanation can be offered now, but the discrepancy should be investigated.

W.C.L. Hemeon
Head Engineer

JHM33027

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July 11, 1947

Memorandum on Plant of

Kennbey & Nattison Company

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as D in the general report and an appraisal of its dustiness is summarized in that column of Table 1. For reasons outlined in that report, the values for the preparation department are not considered truly representative of any one plant and, therefore, only approximate comparisons can be made.

Our own dust count in the carding room was materially lower than those in the company's files reported by the State in 1944, but we have given little weight to our values because they are single samples and therefore subject to sampling limitations. We assumed that no major modifications have been made for improved dust control since that time. On

TUM33028

Memorandum on Plant of Keasbey & Mattison Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

the whole we do not feel that existing dust count records are adequate to give a representative picture of dust conditions in this plant. This will be corrected by steps the company has taken to train a man to do this work.

Our own dust counts are given below:

Number	Elapsed Time (Mins.)	Location	Dust Count*
1	10	In aisles between various spinning machines; 6 machines not in operation.	1.0
2	5	General air in carding room, at roving end of machines 4,5,6 and 7. About half of all machines shut down.	2.2
3	5	Between 2 looms at position 13 (Yeoman's).	2.6
4	5	General air in weave room; 3 to 4 looms in operation.	0.9

Recirculation of air from the small bag house near the mixing operations is not good practice, and in this case there is obvious opportunity for leakage of dust through the burlap filtering element. (See discussion in general report, page 17.)

Medical

We have indicated in Table II (page 14, general report), that this company has had a recent x-ray survey although it was not complete because of its voluntary character. If the more extensive new survey

IHM33029

Memorandum on Plant of Keasbey & Mattison Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

planned for May, 1947 shows the same incidence as indicated in the past (see page 15, plant D), some explanation should be sought in the work history or otherwise for the spectacular discrepancy between these figures and those for plants A, B and J.

[illegible]
Head Engineer

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July 11, 1947

Memorandum on Plant of

Carolina Asbestos Company

Supplementing the

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as E in the general report and an appraisal of its dustiness is summarized in that column of Table 1.

Mr. Terry's dust count data carry heavier weight than the single ones made by us because they were more numerous and, therefore, provide a better average. The values given in the table, therefore, are heavily weighted by those figures.

The figures indicate that dust control is equal to that in the average "good" plants of the group. Slight differences between plants should not be taken too literally, since normal variations of some magnitude occur.

Memorandum on Plant of Carolina Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our own single dust counts are given below:

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	4	At outside doorway of preparation room. Visible dust from nearby bag house blowing in this direction. Taken to measure degree of possible recontamination.	0.5
2	6	General air around cards 1,2,3,4,5 and 6.	0.9
3	6	General air around cards 13,14 and 15. Visible dust escape from No. 14 breaker.	3.3
4	5	General air, while walking up and down aisles between twisters.	2.2

Dust Control Practices

The new carding exhaust system is good except that considerable dust was escaping at cards 14 and 15, the cause of which we did not establish.

The sheet metal enclosures may eventually need to be replaced due to wearing of holes in the sides at the rim of the main cylinder, and to crushing of covers. Before this becomes serious initial steps should be taken to make the conversion gradually since considerable time will be required to effect the change for all machines.

Medical

In Table II (page 14, General report) we have listed this company as not having had any x-ray survey, because of the fact that the State's

IHM33032

Memorandum on Plant of Carolina Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

findings are available only in a negative way. The fact is that no information is available to the company as to incidence of asbestosis.

The remarks in this section of the report relative t the importance of the periodic medical examination must be viewed in the light of the particular program of the State of North Carolina. Before extending specific advice on this point we would want to explore the practices and policies of the State to see what could be worked out with them. This exploration would be a part of the medical end of the long-term program, as outlined in the general report.

W.C.L. Hemeon
Head Engineer

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Southern Asbestos Company

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated by the letter F in the general report, and our appraisal of its dustiness summarized in that column in Table 1. Our own dust counts were much lower than those recorded in the company's files. Since they, however, were only single samples, great reliance cannot be placed on them. We have, therefore, not weighted them heavily in selecting figures to represent typical dustiness.

The figures indicate that dust control is equal to the average "good" plant of the group. Differences that may appear from a superficial comparison should not be taken too literally. Thus, there is no reason to believe that twisting is any less dusty in this plant than in any other.

Memorandum on Plant of Southern Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our dust counts are given below:

Number	Elapsed Time (Mins.)	Operations	Dust Count
1	5	At breathing zone of operator of looms 5 and 6. Dry weaving but lay beam exhausted (by 2 to 4 inch branches) and exhaust under ware at floor level.	0.4
2	5	At Thermoid looms 15 and 16, and in breathing zone of operator. Damp weaving.	0.6
3	5	General air, while walking up and down 2 aisles between twisting frames. Only 4 machines running.	0.5
4	5	General air, while walking up and down aisles between spinning frames.	0.5

Dust Control Practices

The company plans for installation of new carding machines will afford an opportunity for installation of a first class modern exhaust system. It also means that it will be of great importance to have specific test data enabling us to frame accurate specifications for the most effective and economical exhaust system for the particular case of cards installed. This is contemplated as a part of the proposed long term project.

The discussion on dust collectors (page 12) is pertinent to this plant. The long-term project includes as one of its earliest objectives the development of rational specifications for either construction or purchase of appropriate dust collectors.

Memorandum on Plant of Southern Asbestos Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Medical

In Table II (page 14, general report) we have listed this company as not having had any x-ray survey, because of the fact that the State's findings are available only in a negative way. The fact is that no information is available to the company as to incidence of asbestosis.

The remarks in this section of the report relative to the importance of the periodic medical examination must be viewed in the light of the particular program of the State of North Carolina. Before extending specific advice on this point we would want to explore the practices and policies of the State to see what will be worked out with them. This exploration would be a part of the medical and of the long-term program, as outlined in the general report.

W.C.L. Hemeon
Head Engineer

JHM33036

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July 11, 1947

Memorandum on Plant of

The Garlock Packing Company

Supplementing The

General Report

"Preliminary Dust Investigation For Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as G in the general report and an appraisal of its dustiness is summarized in that column of Table 1, page 5.

The differences between these values and those of other good plants are, on the whole, not significant and we rate this plant as average "good." However, this does not mean that dust control is entirely satisfactory in all respects as indicated in the general report.

There is an insufficient number of dust counts in the company files to constitute an adequate record of dustiness. Normal variations require a number of counts at each operation to provide a useful average.

JHM33037

Memorandum on Plant of The Garlock Packing Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Our own single dust counts taken at the time of the visit are given below.

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	5	At operator end of 4 carding machines (Nos. 1,2,7 and 8).	1.5
2	5	General air in aisles of twisting machines.	3.0
3	5	General air, along row of looms; most windows open along the working aisle.	3.1
4	5	General air in aisles of spinning frames.	1.7

Dust Control Practices

Carding dust control is discussed on pages 7 and 9 of the general report. Reference is made to the exhaust system in this plant which accomplishes as good dust control as almost all the other "good" plants but at exhaust rates that would not be practical for other northern plants.

The dust collectors in use at this plant are of considerable interest because they include two types not in use in any other plant (Air Jet and Parsons) because commonly thought to be impractical. Test data on these units would therefore be valuable.

JHH33038

Memorandum on Plant of the Garlock Packing Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Engineering studies planned for the long term investigation of particular interest to this plant and outlined in the general report are: dust control in preparation, twisting and weaving, and efficiency of dust collectors.

Medical

In the medical section of the general report reference is made to the several companies who have no information as to the incidence of potential asbestosis in their plant. This company is one of those and we therefore wish to underscore here the recommendations concerning periodic x-ray examinations discussed particularly on pages 14 to 18.

F.C.L. Hemeon
Head Engineer

JHM33039

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

Union Asbestos & Rubber Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This company is designated as U in the general report and an appraisal of its dustiness is summarized in that column of Table 1.

There is complete lack of previous dust count data in the company's files, and those taken by us are too few in number to provide a good average. We had a definite impression at the time of sampling of markedly greater dustiness than the final count results showed, but we have no explanation at this time.

The results are as follows:

JHM33040

Memorandum on Plant of Union Asbestos & Rubber Co., Supplementing the General Report "Preliminary Dust Investigations for Asbestos Textile Institute" of June, 1947.

Number	Elapsed Time (Mins.)	Operations	Dust Counts
1	6	General air in aisles of spinning-twisting frames.	7.7
2	4	General air in aisles of winders; same room as spinning-twisting.	5.3
3	5	On operating platforms of several brake lining looms.	4.5
4	4	Near operator of one broad loom on opposite side of room from Sample 3. Open window behind.	6.3
5	5	At roving end of 4 enclosed carding machines.	2.5
6	4	At far end of card room where visible dust escaping from enclosure at top.	5.5
7	5	At brushing end of single rope cards.	0.4

Dust Control Practices

The carding dust control system appears to be, fundamentally, as effective as the average of other "good" plants. In practice it is inferior due to operator carelessness in failing to replace portions of the enclosure. Most important is the panel on top designed to reduce the space through which the driving belts pass.

Spinning and twisting present a problem not directly comparable to other plants because of the unique combination of functions in one machine.

JHi133041

Memorandum on Plant of Union Asbestos & Rubber Co., Supplementing the General Report "Preliminary Dust Investigations for Asbestos Textile Institute" of June, 1947.

The spray humidifier employed at weaving machines does not fall into either of our categories of "damp" or "wet" weaving, and leaves something to be desired in the way of improved dust control.

Recirculation of air from dust collectors, practiced in this plant, is discussed in the general report on page 13. The commercial filters employed here are undoubtedly more efficient than the burlap bag house in common use, and would be the useful subject of tests in the long term investigations outlined.

Radical

This is the only company with a systematic x-ray examination program. The estimate of 5 to 6 cases of early asbestosis is a larger incidence than in any other plant. It seems that great contributions could be made to the proposed diagnostic panel (page 18, general report) by this company, and that it would also profit greatly.

W.C.L. Hemeon
Head Engineer

JHM33042

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PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of

J.F. Burke and Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This company is designated by the letter I in the general report and a summary of its dustiness given in that column of Table I. The figures are based on some dust counts made by the State, but it is believed that some reduction has been effected, at least in carding, since that time.

The figures indicate a dustiness equalled by only one other plant. Of particular interest is the high degree of dustiness in spinning and twisting. In all but two plants those operations are practically identical, so dust counts are comparable. The figures show 7 to 4 times as much dust in this plant. The explanation for this was not apparent. It may result from a greater amount of dust in the stock due to differences in preparation methods, a quality we attempted to evaluate in a preliminary way (see page 26).

Memorandum on Plant of J.P. Burke and Co., Supplementing the General Report "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

Dust Control Practices

Several points in dust control in preparation and at carding machines were discussed briefly with Mr. Williams, Jr. at the time of the visit.

The long term investigations, however, would include systematic guidance in the details of dust control especially with respect to preparation, carding machines, the cause of excessive dust, and its remedy, in spinning and twisting, and selection of dust collectors. It is to be recognized that, because of the climate, this plant has a particular stake in the development of information that will permit safe recirculation of air from a dust collector.

W.C.L. Hemeon
Head Engineer

JHM33044