

cc: Mr. John A. Jurgiel  
Industrial Hygiene Foundation  
of America, Inc.  
5231 Center Avenue  
Pittsburgh, Pa. 15232

MR - 1311-001

June 23, 1970

Dr. Sidney S. Pollack  
Mellon Institute  
4400 Fifth Avenue  
Pittsburgh, Pennsylvania 15213

Dear Sid:

Under separate cover I am sending you the first four of our series of dust samples for X-ray diffraction analysis. As discussed at our meeting with John Jurgiel, I ask that you make a preliminary qualitative examination of each of these samples; estimate the per cent crystalline material in each; identify the type or types of asbestos in each; and, wherever possible, estimate the per cent of each asbestos type. As we mentioned, we are also interested in the per cent of quartz or other crystalline  $\text{SiO}_2$ .

I am sending you these samples as they were collected on Whatman 41 filter paper; this material has already undergone a preliminary size separation and the samples represent the fine fractions of dust generated by using a power saw on slabs of commercial insulating material. They are identified by Roman numerals I, II, III, and IV.

Enclosed is our purchase order to cover the expense of handling these samples. If the amount or method of reimbursement is not satisfactory I shall be glad to consider an alteration.

I anticipate that other samples will be on their way within three weeks. If there is any question, please call me at (302) 366-3425. I enjoyed the opportunity of making your acquaintance, Sid, and hope that we shall see one another soon again.

Kindest regards,

Sincerely,  
ORIGINAL SIGNED BY  
JAMES E. MORGAN

James F. Morgan

JFM/bjd  
Enclosure

DUP 0973619

DU 045223

MR-1311-001

August 7, 1970

Professor William A. Burgess  
Department of Industrial Hygiene  
Harvard School of Public Health  
665 Huntington Avenue  
Boston, Massachusetts 02115

Dear Bill:

Under separate cover I am sending you today 36 millipore filter samples of dust for fiber counts at 430 x magnification phase contrast according to the method you used for our earlier samples. A list of the sample numbers is attached.

These samples were collected as part of our study of the dustiness of insulating materials under our project MR-1311. All of the materials we tested, with the possible exception of one (a group of 4 membrane filter samples, XXV, XXV-C, XXVI, XXVI-G) are believed to contain some asbestos, probably amosite. In addition, some or all will be found to contain other mineral fibers such as mineral wool from steel mill slag. Please give us a complete fiber count. We shall depend on learning asbestos content from separate X-ray diffraction analysis.

For reimbursement for this work please bill us under our purchase order number LOH-17804.

Kindest regards,

Sincerely,

ORIGINAL SIGNED BY  
JAMES E. MORGAN

James F. Morgan

JFM/bjd  
Attachment

cc: Mr. J. Lynch  
Harvard School of Public Health

T. L. Morrell  
Haskell Laboratory

DUP 0973620

DU 045224

Samples Submitted August 7, 1970 to  
Harvard School of Public Health

Fiber Counts - Membrane Filters

| <u>Sample No.</u> | <u>Date Collected</u> | <u>Material</u>        |
|-------------------|-----------------------|------------------------|
| V                 | 8-3-70                | Kaylo 10 STS           |
| V-C               | "                     | " "                    |
| VIII              | "                     | " "                    |
| VIII-C            | "                     | " "                    |
| IX                | "                     | Kaylo 20               |
| IX-C              | "                     | " "                    |
| X                 | "                     | " "                    |
| X-C               | "                     | " "                    |
| XI                | "                     | J.M. Silicated Thermo- |
| XI-C              | "                     | " bestos               |
| XII               | "                     | "                      |
| XII-C             | "                     | "                      |
| XIII              | 8-4-70                | Calsilite S.S.         |
| XIII-C            | "                     | "                      |
| XIV               | "                     | "                      |
| XIV-C             | "                     | "                      |
| XVII              | "                     | Super Caltemp          |
| XVII-C            | "                     | "                      |
| XVIII             | "                     | "                      |
| XVIII-C           | "                     | "                      |
| XIX               | "                     | Unibestos              |
| XIX-C             | "                     | "                      |
| XX                | "                     | "                      |
| XX-C              | "                     | "                      |
| XXI               | "                     | Thermasil              |
| XXI-C             | "                     | "                      |
| XXII              | "                     | "                      |
| XXII-C            | "                     | "                      |
| XXIII             | 8-5-70                | Calsilite S.S.         |
| XXIII-C           | "                     | "                      |
| XXIV              | "                     | "                      |
| XXIV-C            | "                     | "                      |
| XXV               | "                     | I&B Mat'l #1185-31, 32 |
| XXV-C             | "                     | & 3                    |
| XXVI              | "                     | (consecutive &         |
| XXVI-C            | "                     | simultaneous)          |

DUP 0973621

DU 045225

cc: Mr. John A. Jurgiel  
Industrial Hygiene Foundation  
of America, Inc.  
5231 Center Avenue  
Pittsburgh, Pa. 15232

ML-1311-001

August 12, 1970

Dr. Sidney S. Pollack  
Mellon Institute  
4400 Fifth Avenue  
Pittsburgh, Pennsylvania 15213

Dear Sid:

Our project on the dustiness of insulating materials, MR-1311, has met with several difficulties and delays. We have at long last resumed collection of material and I have seventeen (17) samples of fine dust on filter papers ready for X-ray diffraction analysis according to the scheme you and I discussed in May. Samples are being forwarded under separate cover. Attached is a list of their identities and weights.

Our principal interest remains in: a) estimated per cent crystalline material; b) identity of crystalline species; c) estimation of per cent asbestos by type.

Please do not hesitate to proceed from a qualitative appraisal of your initial scan to a quantitative estimate with internal standards, as you may deem necessary. I shall be available if you have any questions for me.

For reimbursement please bill me under Haskell Laboratory Purchase Order LOB-17777.

Kindest regards,

Sincerely,

ORIGINAL SIGNED BY  
JAMES F. MORGAN

James F. Morgan

JFM:bjd  
Attachment

DUP 0973622

DU 045226

Samples Submitted  
Carnegie-Mellon University  
X-Ray Diffraction - Whatman 41 Filter Paper

| Series No. | Paper No. | Date Collected | Wt. of Sample<br>(grams) |
|------------|-----------|----------------|--------------------------|
| V          | 11        | 8-3-70         | 0.0993                   |
| VIII       | 12        | 8-3-70         | .0274                    |
| IX         | 13        | 8-3-70         | .0388                    |
| X          | 14        | 8-3-70         | .0003                    |
| XI         | 15        | 8-3-70         | .0701                    |
| XII        | 16        | 8-3-70         | .0367                    |
| XIII       | 17        | 8-4-70         | .1235                    |
| XVII       | 22        | 8-4-70         | .1113                    |
| XVIII      | 23        | 8-4-70         | .0459                    |
| XIX        | 24        | 8-4-70         | .0434                    |
| XX         | 26        | 8-4-70         | .0186                    |
| XXI        | 28        | 8-4-70         | .0773                    |
| XXII       | 25        | 8-4-70         | .0309                    |
| XXIII      | 27        | 8-5-70         | .0930                    |
| XXIV       | 29        | 8-5-70         | .0476                    |
| XXV        | 30        | 8-5-70         | .0142                    |
| XXVI       | 31        | 8-5-70         | .0024                    |

DUP 0973623

DU 045227