

Memorandum to Messrs. P. W. McDaniel
J. L. Myers
H. B. Rhodes
G. L. Dickson
C. M. Offenhauer
M. Peters

Subject: Test Program Airborne Asbestos
Date: January 17, 1972
From: W. N. Johnson
Copy to: Mr. J. W. Rawlings
Mr. R. G. Woolery

The need for data on the amount of airborne asbestos existing under certain conditions and operations has been previously noted. A program to obtain the data was discussed at a meeting in Niagara on January 12. The following is my understanding of the arrangements agreed upon. I will appreciate hearing, as soon as possible, should there be any differing understanding.

- A. H. B. Rhodes will arrange for a survey to be made by Eugene Brown of employee exposure as experienced in customers' plants at or near Bartow, Florida. This survey will include samples representing conditions during:
- 1) Introduction of UCC asbestos into process.
 - 2) Introduction of amorphous silica into process.
 - 3) Spraying of polyester resins containing asbestos.
 - 4) Spraying of polyester resins containing amorphous silica.
 - 5) Spraying of polyester resins not containing either asbestos or amorphous silica.
 - 6) Sanding of surfaces built up from polyester resins containing asbestos.
 - 7) Sanding of surfaces built up from polyester resins containing amorphous silica.

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- 8) Drilling of polyester compounds containing asbestos.
- 9) Drilling of polyester compounds containing amorphous silica.
- 10) Other operations which could liberate fibers.

Sufficient background samples will be taken to allow analysis.

These samples will be evaluated by the Medical Dept. in New York and also will be examined by R&D in Niagara with the aim of developing an alternate technique including distinction of asbestos from other materials; e.g., atomic absorption.

Schedule — the samples will be taken the week of January 31 - February 4 and evaluated as soon as possible thereafter.

- B. Tests on conditions during spraying and sanding of paint containing asbestos will be run at Niagara. John Myers will see what samples of weathered and/or aged painted surfaces may be available. Messrs. Offenhauer and Peters will set up the tests at Niagara for these and those described under D and will advise W. N. Johnson. Arrangements will then be made with P. W. McDaniels for assistance in sampling and analyses.

These tests will include samples representing conditions during:

- 1) Spraying of latex paint containing asbestos.
- 2) Spraying of textured paint containing asbestos.
- 3) Sanding relatively fresh painted surfaces by hand, power sander, power sander with dust collector.
- 4) Sanding of aged paint surfaces by hand, power sander, power sander with dust collector.
- 5) Sanding of texture painted surface.
- 6) Sanding of tape joints where plaster contained asbestos.

Schedule — the sanding tests should be set up as soon as the materials are available and Medical Dept. assistance can be arranged — hopefully the first or

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second week in February. The spraying tests should follow consideration of problems encountered in analysis of polyester resin spray samples.

- C. Spraying of auto undercoat containing asbestos was discussed but tests deferred pending the other work. It is probable that the pitch material would not allow fiber/particle analysis by current techniques.
- D. Tests of conditions encountered during dumping of asbestos into open tank will be set up at Niagara. Gordon Dickson will arrange for bags of UCC pellets, UCC open fiber, Canadian fiber and amorphous silica to be available. As noted under B above, Messrs. Offenhauer and Peters will make the physical arrangements needed at the laboratory and will advise W. N. Johnson. Arrangements will then be made with P. W. McDaniels for sampling and analysis assistance.
- E. Previously obtained data on the structure of chrysotile as affected by temperature will be examined. W. N. Johnson will seek information on incinerator design and operation with the objective of determining usual conditions.
- F. Copies of the following publications will be obtained by W. N. Johnson and forwarded to Niagara:
 - 1) A summary of the data used by EPA in developing emission standards for asbestos as published in Federal Register, December 7, 1971.
 - 2) A copy of the American National Standard Practice for Respiratory Protection, §88.2 - 1969.
 - 3) A copy of the American National Standards Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI 39.2 - 1971.
 - 4) U.S. Bureau of Mines, 30 CFR, Part 12, Schedule 19B and Part 14, Schedule 21B.
- G. More definitive interpretation of subparagraphs e), f) and g) of Part 1910.93a of Title 20, Code of Federal Regulations (36 FR 10466) as amended December 7, 1971 will be sought to determine what content of asbestos is meant by "asbestos cement" etc.

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