FILE NAME: Johns-Manville (JMA)

DATE: 1976

DOC#: JMA031

DOCUMENT DESCRIPTION: Report - Built-Up Roofing Utilizing Asbestos Felts with Cover Memo

Johns-Manville

# Internal Correspondence

To P. Kotin, M.D.

Date June 15, 1976

From E. M. Fenner

Copies: R. L. Fricklas - 5S

Subject ASBESTOS FELT BUILT-UP ROOFING
R. L. FRICKLAS' PROPOSED COMMENTS TO WESTINGHOUSE

I have rewritten R. L. Fricklas' comments. A draft of my rewrite is attached.

E. M. Fenner

EMF:jh

# Built-Up Roofing Utilizing Asbestos Felts

The Occupational Safety and Health Administration (OSHA) of the U. S. Department of Labor published a temporary standard for occupational exposure to asbestos on December 7, 1971 and a permanent standard on June 7, 1972. Shortly after the promulgation of the permanent standard, Johns-Manville undertook a series of studies to determine fiber release during the tear-off and application of built-up roofing utilizing asbestos felts. The purpose of these studies was two-fold: (1) To ascertain if use of asbestos felts presented a health hazard to the roofing applicator. (2) To ascertain if the same use created a significant environmental hazard for the general public.

During the course of these studies nine job sites were monitored and fifty-two airborne samples taken. All samples were taken and analyzed by the monitoring technique specified by OSHA in their asbestos standard.

All monitoring results showed an extremely low level of fiber release. All samples were well below the present occupational exposure limit of 5 fibers per cubic centimeter and the limit of 2 f/cc effective July 1, 1976. In fact, with three exceptions all samples were below 0.5 f/cc (see data summary attached).

The very low level of fiber release during tear-off and application of built-up roofs confirms our belief that the asbestos fibers are firmly bound by the asphalt applied to

the felt during manufacture and the asphalt used to attach the felt to the roof. These levels are so low as to present no hazard to the health of the worker, and create no environmental hazard to the general public.

# J-M STUDIES ON ASBESTOS DUR & HEALTH

| DATE | REFERENCE | TYPE | FIBER RANGE |
|---|---|---|---|
| 1972-1973 | RSI Magazine | | |
| Hobart, Indiana | | New | 0.1 to 0.4 |
| U. Wisconsin-Parkside | | New | 0.1 to 0.3 |
| St. Regis Paper-Bridgeview | | Tear-off | 0.8 to 1.7 |

## RECENT TESTING TO PROVIDE STATISTICAL BASIS FOR RELEASE OF ASBESTOS FIBERS

| | | | |
|---|---|---|---|
| 3-14-74 | Gilmore Jr. H. S.<br>Racine, Wisconsin | New | 0.2 to 0.6 |
| 4-10-74 | Ben Davis H. S.<br>Indianapolis | Tear-off | 0.1 to 0.4 |
| 5-21-74 | Hess Dept. Store<br>Allentown, Pa. | Tear-off & New Roof | 0.0 to 0.2 |
| 7-25-74 | Tolletson Jr. H. S.<br>Gary, Indiana | Tear-off & New Roof | 0.1 to 0.3 |
| 11-20-74 | Cherry Creek H. S. #2<br>Denver, Colorado | New | 0.1 to 0.2 |
| 12-16-75 | John-Madden Bldg.-Inverness<br>Denver, Colorado | New | Less than 0.1 |