Calidria ASBESTOS

UNION CARBIDE

THE DISCOVERY COMPANY

UNION CARBIDE CORPORATION • MINING & METALS DIVISION • P.O. BOX 579 • NIAGARA FALLS, N. Y. 14302 • TEL: 716-278-3376

December 20, 1972

Mr. Denzil Crowe
Marco Chemical Division
W. R. Grace & Company
P. O. Box 1474
Bartow, FL 33830

Dear Mr. Crowe:

Enclosed is a report of our dust sampling at your plant. I think you will find it self-explanatory, however, should you have any questions, please do not hesitate to call me.

As you no doubt remember, we monitored the air during a silica addition and also during a "Calidria" RG-244 addition. Unfortunately, the mounting solution we use somehow renders silica transparent and we are unable to report any figures for that dump. There is a gravimetric method for sampling airborne dust, however, we are not equipped at this time to perform that type of count.

If we can be of any further assistance, please let us know.

Very truly yours,

E. J. Kleber cjb

E. J. Kleber
Customer Service Representative

EJK:cjb
Enclosure

CC: Mr. J. E. Walsh

PLAINTIFF'S EXHIBIT

UC-4512

X402371

AIRBORNE DUST COUNTS

for

Marco Chemical, Division of

W. R. Grace & Company

Bartow, Florida

November 29, 1972

Personnel Present: D. Marks
Marco Chemical

E. J. Kleber
Union Carbide Corporation

J. E. Walsh
Union Carbide Corporation

UNION CARBIDE CORPORATION
Mining and Metals Division
Niagara Falls, New York

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SUMMARY OF DUST COUNTS

N.B. No.	Field No.	Description	Fiber Count Fibers/ml. > 5μ
1929-40-1	43	Background (92 min.) - Blend room 2nd deck located 3 ft. above charge hole at thin tank No. 1	0.09
1929-40-2	51	Personal (21 min.) - Dumping approx. 15 bags RG-244 into thin tank No. 1	0.68
1929-40-3	91	Environmental (23 min.) - Bag disposal area - 5 ft. from charge hole directly over bags during dump	0.62
1929-40-4	64	Environmental (24 min.) - 1st deck on No. 1 thin tank during dump	0.3
1929-40-5	78	Environmental (24 min.) - Bag storage over bags after dump next to dust collector.	0.41

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Description of Plant and Tests

The tests were conducted at Marco Chemical, Division of W. R. Grace & Company, Bartow, Fla. on October 19, 1972. Marco Chemical is a major polyester producer.

"Calidria" Asbestos RG-244 was added to thin tank No. 1. The air was monitored not only on the operator, but also other likely areas of airborne asbestos.

Apparatus and Procedure

Sampling and dust counting were carried out in accordance with OSHA Regulation 1910.93a, using the Bayer, Zummalde and Brown method for counting asbestos fibers by phase contrast microscopy (Bureau of Occupational Safety and Health, Feb. 1969).

Battery powered air pumps (M.S.A. type) calibrated to 2 liters per minute were used to collect personal breathing zone and environmental samples of millipore membrane filters of 0.8 micron porosity.

Fiber counting was performed on a Leitz microscope utilizing phase contrast illumination at 400X and a Patterson Globe and Circle reticle.

Interpretation

The figures are reported as fibers, greater than 5μ in length, per milliliter. A fiber is defined as any material having an aspect ratio greater than 3:1.

The regulations have been established with the 5 fiber limit on a time-weighted average. This means the figures must be arranged to show the employee's average intake of fibers per milliliter on an 8-hour day. For example, the highest reading in the test was 0.68 fibers/ml. If this was the only contact with asbestos that day the 21-minute sample would be extrapolated to 8 hours giving a time weighted average of less than 0.03 fibers/ml.

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