



CHEMICALS AND PLASTICS

RIVER ROAD, BOUND BROOK, NEW JERSEY 08805

From: Mr. D. R. Albright
To: Chemicals and Plastics
From: Bound Brook, New Jersey

Date: November 8, 1972
Originating Dept.: Environmental Protection

Answering letter date

To: Mr. R. W. Cope - SC
Mr. R. A. DeCoudres - BB
Mr. J. L. Goodson - BB
Mr. N. L. Ketcham - SC
Dr. C. S. McKinley - BB
Mr. R. A. Rimicci - EB
Mr. F. A. Schillinger - BB
Mr. J. M. Swalm - BB
Mr. J. P. Zuccarelli - BB

Subject: Asbestos Dust Measurements

The September and October samplings of the Unit B and C work areas have afforded the opportunity of measuring the maximum concentrations of airborne asbestos expected when these units are running products of 29 to 33% asbestos content. The following are my conclusions and recommendations as the result of my samplings and observations to date.

1. Airborne asbestos concentrations to which molding materials mixer operators on the third floor are exposed while charging asbestos do not exceed 6 fibers/cc compared with the OSHA ceiling limit of 10 fibers/cc when sampled for 15-minute periods. The eight-hour time-weighted averaged concentrations measure under 3 fibers/cc compared with the present OSHA limit of 5 fibers/cc. When proper precautions are followed in the dumping and put-away of empty bags, it appears that airborne concentrations can be maintained below the 2 fiber/cc eight-hour TWA limit to be effective July 1, 1976.
2. Although the third floor operation appears "clean" by our measurements, there are conspicuous situations which could provoke citations under the "general duty" clause if observed by the compliance officer. It is recommended that departmental programs aimed at these items be intensified, not only to improve our margin of safety, but also to improve the morale of operators, some of whom see sources of asbestos contamination as a threat to their health despite the measurements taken. These situations are as follows:

A. Handling of Empty Bags:

This remains a visible dusting problem. Although operators can exercise due care in gathering empty bags and placing them in the gaylord liner bin, there is great variability between operators. Unless firmer supervision can be given to this area, it would appear that the installation of hoods over the two disposal bin locations will be required to minimize this source.

Deposition Exhibit No 14
5-14-87

PLAINTIFF'S
EXHIBIT

UC-1410

B. Condition of Incoming Asbestos Bags:

The palletized packages of asbestos bags are prone to being torn open from loading, shipping, and subsequent handling in our plant. The condition appears to have improved during recent sampling, evidently the result of attention to this problem. Close monitoring must be maintained to avoid spillage of asbestos, not only in the third floor area but in the warehouses and areas traversed by persons not aware of or protected from exposure to asbestos.

C. Work Habits of Personnel:

Operators have been observed using the air hose that hangs by the wall between Units B and C to blow dust from their clothing and gloves. Obviously, this fills the area with a cloud of dust. Use of vacuuming and/or disposable coveralls is recommended. Also, one operator was observed to dump asbestos without wearing a respirator, claiming inability to breathe through the "Dustfoe" respirator. All other operators wore their respirators while discharging asbestos.

D. General Housekeeping

Although the third floor appears to be swept frequently, there are accumulations of dust on equipment, ledges, and in corners which detract from the general appearance of the area. Additional vacuum connections with brushes and hoses should facilitate clean-ups.

3. Airborne asbestos concentrations in the areas of the first floor charge rolls present no problem, as indicated by the maximum measurement of 1.4 fibers/cc from the September samples. However, operators should be encouraged to wear respirators during malfunctions when they are shovelling quantities of raw mix for highly-loaded products.
4. Another (probably non-asbestos) dust source which could subject us to the "general duty" clause is the Tote Bin filling station at Unit C where heavy dusting has been observed during the filling operation. Whether or not dust from BMN 6935 Bk 25 product contains free asbestos fibers remains to be investigated; however, the nuisance factor to operators in the vicinity is high and could draw undue attention during a compliance inspection. An improved dust hood or better vacuum source should alleviate much of this dust.

Future plans call for additional sampling during production of high asbestos products to further measure sources. Meanwhile, we have arranged for a visit on November 13 by an industry consultant, Mr. W. Bradley, whose wide experience in asbestos testing will afford the opportunity of "shoulder-to-shoulder" comparisons with our test methods to further establish our measuring accuracy.

W.D. Neal
W. D. Neal

WDN:gb

ASBESTOS DUST MEASUREMENTS - OCTOBER 1972

Date	Unit	Product	Asbestos Loading		Area Sample Fibers/cc	Mixer Man Sample	
			%	No. Bags		15 Minute Fibers/cc	8 Hour TWA Fibers/cc
10-18-72	B	BMMA 5303	28.6	12	0.7	4.5	2.1
10-19-72	B	BMMA 5303	28.6	12	0.3	1.1	1.2
10-20-72	B	BMMA 5303	28.6	12	0.2	1.1	1.2
10-18-72	C	BMN 6935	30.0	25	1.1	6.0	2.4
10-19-72	C	BMN 6935	30.0	25	-	5.4	2.3
10-20-72	C	BMN 6935	30.0	25	0.8	3.8	1.9

NOTES: All samples taken over 15 minute intervals.

Eight hour TWA based on 8 mixes/8 hours for total of 2 hours at 15 minute concentration, 5 hours at 1.5 fibers/cc, maximum area concentration measured in September, and 1 hour at 0 concentration for time off station.

-Example: For Unit C, 10-18-72 sample:

2 hours	@	6.0 fibers/cc	=	12.0 fibers-hour/cc
5 hours	@	1.5 fibers/cc	=	7.5 fibers-hour/cc
1 hour	@	0 fibers/cc	=	0 fibers-hour/cc
8 hours				19.5 ÷ 8 hours = 2.4 fibers/cc

WDN:GB
11/8/72