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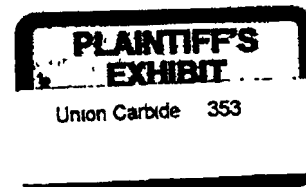
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Union Carbide ASBESTOS



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October 23, 1975

846-7444
Mr. Robert W. Flugge
Deputy Commissioner
Department of Environmental Quality
95 Franklin Street
Buffalo, NY 14202



Dear Mr. Flugge:

This letter and attachments provide the technical supporting information on the spraying of asbestos-containing materials which was mentioned in my comments presented on September 25, 1975, copy enclosed. These comments were directed to the proposed Erie County Air Quality Code, Article 111, Title 9, Section B, on Asbestos.

The spraying of asbestos has received substantial publicity as a health hazard, primarily as a result of the extensive use of sprayed-on asbestos as a fire proofing and insulation material. Industry recognized that this practice, which involved materials containing 10 to 80% asbestos and little or no permanent binder, was hazardous; and, accordingly, it has been discontinued. However, it is our firm belief that various materials containing small quantities of asbestos can be applied safely by spraying with no significant hazard either to the worker or the general public, and further that such spraying can be done in total compliance with the Federal OSHA Health Standard dealing with asbestos and the EPA National Emission Standard for Hazardous Air Pollutants. The subject applications generally involve the spraying of paints and coatings where asbestos is a minor but important constituent added to give critical properties to the material. These coatings are applied wet as a slurry or liquid thus precluding the generation of airborne asbestos dust in excess of accepted Federal threshold limits.

Our data were obtained at commercial locations under routine operating conditions. Samples were collected in the breathing zone of the operator during active spraying procedures and do not include breaks, lunch, and similar non-working conditions. The results thus represent the highest exposure level for each particular operation and the time-weighted average (TWA) during an eight hour shift would be much lower. Environmental exposures outside the work area would be even lower than the TWA due to dilution by other air. All samples were collected on millipore filters and counted at 400x using phase contrast illumination in accordance with Federal OSHA regulations.

The data were obtained at 21 different industrial locations throughout the United States. These or very similar operations are probably practiced to some extent in Erie County.

For convenience, the data are divided into four categories based on the characteristics of the binder, and are presented in this manner in Tables 1 through IV. Details of the type and quantity of binder, the main uses, and the asbestos content are supplied with each category. An overall summary is shown below:

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SUMMARY
AIRBORNE ASBESTOS FIBER CONCENTRATIONS
VARIOUS INDUSTRIAL SPRAYING OPERATIONS

Application	Binder Type	Binder % as Sprayed	Asbestos % as Sprayed	Locations Sampled	No. of Samples	Airborne Asbestos Fiber Concentration (Fibers/cc) ^{5M}	
						Range	Average
Wall and Ceiling Interior Texture Sprays	Starch, PVA, Casein etc.	2-4	1-5	7	24	0.0-1.6	0.6
Exterior Wall and Roof Sprays	Vinyl & Acrylic latex	10-20	4 max.	2	5	0.0-0.2	0.1
Resin-Based Coatings (Boat mfg., ship coating, Building maintenance coatings)	Polyester & Epoxy Resins	6-50	12 max.	9	19	0.0-0.6	0.2
Asphaltic Roof and Auto Under- coating	Asphaltic	45	15 max.	3	8	0.03-1.5	0.3
				21	56	0-1.6	0.4

It is noteworthy that the highest value found was 1.6 fibers/cc > 5 μ and only three out of the 56 samples gave readings higher than 1 fiber/cc. In the three highest cases other values for the same operation were below 1 fiber/cc. The overall average was 0.4 fiber/cc in the breathing zone of the operator performing the spraying.

On this basis we feel that the proposed Erie County ban on the spraying of asbestos or asbestos-containing materials is overly restrictive. In view of this the alternative wording in my presentation is proposed:

"No person shall cause, suffer, permit, or allow visible emissions of asbestos dust from spraying of asbestos-containing materials used for fireproofing and insulation."

Another alternative would be to modify your wording to exempt certain materials based on our supporting data, as follows:

"No person shall cause, suffer, permit, or allow surface coating by the spraying of asbestos or asbestos-containing materials, with the exception of water, resin, and asphaltic-based coating and laminating materials applied for decorative and/or maintenance purposes containing, as sprayed, an amount of binder not less than 50% of the weight of the asbestos present and a maximum of 15% by weight of asbestos."

We appreciate the opportunity to comment on your proposed rule-making. Please contact Dr. Rhodes or me if we can be of any assistance in the final development of your standard, or if you require additional information.

Very truly yours,

John L. Myers
 John L. Myers
 Marketing Manager

JLM/ejp
 cc: Dr. H.B. Rhodes

bcc: R.E. Byrne, Jr. R.L. Schult
 R.F.X. Fusaro W.C. Thurber.
 J.V. Murray

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