Calidria ASBESTOS

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

CARBIDE
THE DISCOVERY COMPANY

October 23, 1975

846-7444

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

PLAINTIFF'S EXHIBIT
Union Carbide 353

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 III, 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 catergories based on the characteristics of the binder, and are presented in this manner in Tables I 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>5μ 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.F.X. Fusaro
J.V. Murray
R.L. Schult
W.C. Thurber

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PRESENTATION TO

ERIE COUNTY AIR POLLUTION CONTROL DIVISION

September 25, 1975

My name is John L. Myers. I am Marketing Manager for Union Carbide's asbestos products with offices in Niagara Falls, N.Y. I have been involved with Union Carbide's asbestos business since 1966; and, since 1972 when the OSHA (Occupational Safety and Health Administration-Department of Labor) asbestos standards were published, I have also been heavily involved with federal, state, and local regulatory activities concerning asbestos. We presented testimony at the OSHA hearings on the asbestos standard in 1972; and I served as an industry representative on a committee to develop the federal EPA (Environmental Protection Agency) asbestos standards, which were promulgated in 1973. Asbestos standards are now being developed especially for the construction industry and I attended and presented testimony at a two-day hearing in Washington last week.

With me tonight is Dr. H.B. Rhodes, my Technology Manager. One of his main responsibilities is to supervise the air monitoring service which we offer to our customers. Dr. Rhodes is chairman-elect of the technical sub-committee of the Asbestos Information Association and is also actively engaged in the asbestos/health question and regulatory activities. He attended a symposium in England last week on asbestos and health and is preparing an article for publication on the health hazards of asbestos in certain segments of the construction industry. His training in air sampling and analysis was obtained at special courses offered by NIOSH (National Institute for Occupational Safety and Health-Department of Health, Education and Welfare). Dr. Rhodes has also performed extensive air sampling in connection with the use of asbestos in various compounds

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which are sprayed on surfaces. This was done to substantiate our position that relatively low levels of asbestos can be used in many products which, upon spraying, do not cause any significant amount of asbestos dust. At your discretion, we can send this supporting information to you in the next several days.

Union Carbide is engaged in the mining and milling of asbestos fibers at its plant in California, and we market asbestos fibers throughout the world. We supply asbestos as a raw material to compounders or manufacturers of various products, some of which are sprayed. We do not supply asbestos for use in spray fireproofing or insulation materials; and, in fact, neither does anyone else. Asbestos has essentially been eliminated from such products because of the attendant potential hazard to workers and the general public.

Our interest in regulatory actions is to prevent ambiguity and to avoid the promulgation of standards which are difficult or impossible to enforce because of their generality. We want to assist in the development of standards which eliminate or minimize asbestos exposure, but which do not effect an unnecessary prohibition against the general use of asbestos, especially in products which present no ultimate hazard to the general public. Following are some excerpted quotes from a 1971 report of the National Research Council: "At present, there is no evidence that the small numbers of fibers found in most members of the general population affect health or longevity....Asbestos is too important in our technology and economy for its essential use to be stopped.... Continued use at minimal risk to the public requires that the major sources of man-made asbestos emission into the atmosphere be defined and controlled." I think you would agree that these comments are closely aligned with mine.

It is my understanding that you are considering legislation with the following wording: "No person shall cause, suffer, permit, or allow surface coating by the spraying of asbestos or asbestos-containing materials." The spraying of asbestos-containing materials has received substantial publicity as a health hazard,

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primarily as the result of the extensive use of sprayed products for fireproofing and insulation. Industry, government, and health groups have recognized that this practice, which involved materials containing up to 80% asbestos with little or no permanent binder, was hazardous; and it has been discontinued. However, it is our belief, supported by the data previously discussed, that materials containing relatively small quantities of asbestos and suitable binders can be sprayed safely and in compliance with existing federal standards.

We are strongly in favor of legislation which would prohibit the spraying of asbestos-containing materials for fireproofing and insulation which generate visible dust emissions hazardous to the public environment. However, the wording which you have proposed would inadvertently prohibit the spraying of asbestos-containing materials even though they generate no asbestos dust. These applications would include automobile undercoating, roof coating, textured paints, airplane de-icing, and many others which would adversely affect activities involving thousands of jobs in Erie County.

We therefore propose the following revised wording for your legislation:

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

We are confident that the above wording will accomplish your purpose, and ours; and that the safety and health of the general public will not be compromised or impaired by this revision.

Thank you for your time and attention.

John L. Myers
Union Carbide Corporation
Metals Division

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