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Calidria ASBESTOS

UNION CARBIDE

THE DISCOVERY COMPANY

UNION CARBIDE CORPORATION • MINING & METALS DIVISION • P.O. BOX 579 • NIAGARA FALLS, N.Y. 14302 • TEL: 716-285-3311

February 4, 1972

Mr. R. W. Grigg
Commodity Purchasing Manager
Kaiser Gypsum Company, Inc.
Kaiser Center - 300 Lakeside Drive
Oakland, California 94604

Dear Mr. Grigg:

Walt Fitzpatrick has asked me to reply to your letter to him dated December 27, 1971 concerning asbestos toxicology. As we discussed all of your questions cannot be answered directly because federal regulations have not been finalized and/or explicitly defined.

We are in the process of preparing a lengthy Corporate "position paper" on asbestos, its uses, controls, etc. We hope to complete the paper by April; however, for expediency, I will answer your questions to the best of my personal ability. We will keep you advised of new information and send you a copy of the final Corporate document.

There are two separate federal agencies which have recently issued revised or proposed regulations concerning asbestos (copies attached). The Department of Labor through the Occupational Safety and Health Administration (OSHA) has issued "emergency" regulations lowering the Threshold Limit Value (TLV) for asbestos from 12 to 5 fibers per ml of air greater than 5 microns in length, and eliminated the total dust count as an alternate TLV. These regulations apply to employees handling asbestos in your plants as well as users of your products. On January 12, OSHA also published "proposed rule making" in the Federal Register, Vol. 37, No. 7.

The Environmental Protection Agency (EPA), under the 1970 Clean Air Act, has issued proposed standards which would govern emissions from plants and certain job sites. These standards will be reviewed in

March and will not be enacted until later this year. Of major mutual concern is their proposal to prohibit the spraying of asbestos or products containing asbestos, without regard to the amount of asbestos contained. We feel that the intent is to ban only the spraying of asbestos insulation and the gross negligence which has been inherent with this operation. We will prepare comments for the EPA and hope to get a favorable definition of "spraying" to fit the intent of the current proposed ban.

The comments below are in conjunction with the numbered questions in your letter.

1. Calidria Asbestos SG-210 is chrysotile asbestos, the same as Canadian grades 7RF, 7TF and 7DI. The biological effects and basic mineralogical or crystalline nature are the same.

   I have enclosed a copy of "Airborne Asbestos", a report issued by the National Academy of Sciences. It fully explains the health hazards and discusses them in an objective manner.

2a. Unless you have enough local ventilation to prevent fiber counts at breathing zones from exceeding the OSHA TLV, respirators should be worn when handling dry asbestos. The handling of pastes containing asbestos should present no problem. No dust will be generated once the asbestos fibers are wet with water or resin. Respirators should be worn during dry blending operations unless dust counts indicate levels below 5 fibers per ml greater than 5 microns long.

2b. Technically, when asbestos is heated to 700°C it is converted to forsterite, a non-toxic mineral. Emptied bags and other waste incinerated at temperatures above 700°C should presumably not emit asbestos fibers to the atmosphere. Because of inherent unanswered questions, we would not recommend this method of disposal. Emptied bags and other waste could be placed in large plastic bags and disposed of in land-fill operations. Under current and proposed regulations the latter method may be most practical and acceptable. Waste bags may be of interest to a local paper-maker but we have not explored this possibility.

2c. The type of respirator required depends on the dust levels to which an employee is exposed, see article 1910.93a (c) of the enclosed OSHA regulations. Your operations would probably require no more than the respirators referred to

in sub-paragraph (2). For comfort and efficiency we would recommend Willson's Model No. 1009 with R-520 filter or MSA's No. 86432 with type "H" Ultra-filter, both of which are approved by the Bureau of Mines.

2d. Dust monitoring techniques are described in the attached procedure issued by the ACGIH. I have also included suggested equipment and its approximate cost. We would be glad to advise your industrial hygiene personnel and could make dust counts in your plants, at your discretion. Such measurements would be for our mutual benefit, not in connection with any government agency inspection.

2e. Accidental "overexposure" to asbestos dust does not seem to be a relevant problem if you are referring to a "one-time" type exposure. All published studies indicate that exposures must be experienced for long periods, 20-30 years, to cause lung damage or associated physiological changes.

3. This is the most difficult question to answer since we have no data indicating asbestos fiber counts in dust generated in performing the jobs mentioned in your letter. We are collecting materials and equipment to perform tests in our Niagara Falls R&D labs. We will obtain dust counts during the spraying of ceiling textures and the application and sand papering of joint compounds. If you could send us a typical dry mixture we could include simulated job-mixing of such material in our tests. We would need mixing instructions and at least the approximate asbestos content.

The revised OHSA regulations answer your specific questions as follows:

3a. Article 1910.93a (e).
3b. Article 1910.93a (d)(3).
3c. Article 1910.93a (f) and (g).
3d. Article 1910.93a (d)(2). This may not apply to hand sand-papering but would require clarification.

These articles seem unnecessarily restrictive for your applications but we do not as yet have any data for argument.

4. Per our telephone conversation I would not attempt to discuss the scope of the regulations or interpret their many complexities.

There is a hearing concerning the EPA proposed standards in

Kaiser Gypsum Company, Inc.
Oakland, California

Los Angeles on February 15th at 10:00a.m. in the U.S. Courthouse, Room 1501, 312 N. Spring Street. Testimony will be presented by several companies and the Asbestos Information Association. I think you would find the hearing of interest and beneficial and would suggest that Kaiser Gypsum be represented. No advance notice is required except for those presenting testimony.

After reviewing the revised and proposed regulations, you may wish to make comments to the OSHA or EPA. If you do not want to do this directly, we would be glad to incorporate any information you have in our responses. OSHA comments are due by February 11 and responses to the EPA are due by March 6th. It is possible that the former date may be extended.

Although it seems somewhat out of place, and perhaps unnecessary, I would like to end this with a brief commercial. Your use of SG-210 is appreciated and we look forward to supplying more of your asbestos requirements in 1972. If our original formulating work was indicative, you should be using 30-50% less SG-210 compared to Canadian asbestos. This would reduce the total amount of asbestos you use and the amount in the products you sell. We also have asbestos in pellet form and they are essentially free of airborne-type dust. Although pellets would not be amenable to dry-mix, you may want to consider their use in ready-mix compounds.

My apologies for the delay in answering your letter - please let me know if we can be of any further assistance.

Very truly yours,

John L. Myers

John L. Myers
Marketing Manager

/cvb
Enclosures

cc: W. J. Fitzpatrick
J. S. Sheahan