

GRACE

FILE
Maryland

APR 21 1987

Construction Products Division

W.R. Grace & Co.
200 Worcester Street
Cambridge, Mass. 02140

(617) 876-1400

April 17, 1987

PLAINTIFF'S
EXHIBIT
WRG-1016A

BY FEDERAL EXPRESS

Mr. Henry Koellein, Jr.
Commissioner
Division of Labor and Industry
501 St. Paul Place
Baltimore, Maryland 21202

Dear Commissioner Koellein:

W.R. Grace & Co. ("Grace") is concerned that the Division of Labor and Industry may unintentionally include prohibitions or restrictions on products containing trace quantities of naturally occurring asbestos contaminants in its occupational asbestos standard when it adopts the requirements of revised 29 C.F.R. § 1910.1001 and new § 1926. In this letter, Grace urges the Division to endorse the Occupational Safety and Health Administration's ("OSHA's") enforcement guidelines (Attachment A) limiting the requirements of 29 C.F.R. §§ 1910.1001, 1926 to activities posing asbestos risk to worker health.

As written, the new federal OSHA standards, 51 Fed. Reg. 22,612 (June 20, 1986), may be interpreted to apply to many activities that pose no unreasonable health risk because certain provisions do not define "asbestos-containing materials." First, both § 1910.1001(f)(1)(vii) and § 1926.58(g)(2)(iii) provide that

[m]aterials containing asbestos, tremolite, anthophyllite, or actinolite shall not be applied by sprayed methods.

Second, the construction standard establishes several requirements in § 1926.58(e)(6) & (j)(2) (negative pressure enclosures, designation of competent persons, and decontamination areas) for any asbestos "removal, demolition and renovation operations" unless they are "small-scale, short-duration." Third, the provisions in both the construction standard (§ 1926.58(l)) and the general industry standard (§ 1910.1001(b)) for housekeeping (regulating clean-up methods

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and waste disposal) also appear to apply to activities involving material containing any amount of asbestos.

Each of these provisions, given the absence of some lower limit cut-off, raises the specter of application of the asbestos standard in almost any construction activity. By contrast, the standards exempt from labeling any products containing less than 0.1% asbestos or posing no potential for exposures during foreseeable use above 0.1 fibers/cc. 29 C.F.R. §§ 1910.1001(j)(4); 1926.58(k)(2)(vi).

Responding to a request for clarification from Grace, Department of Labor Assistant Secretary Pendergrass established OSHA's enforcement policy as exempting mineral products containing de minimis asbestos levels:

In certain situations [], OSHA will not enforce the provisions of the standard which prohibit the spraying of asbestos-containing products. These situations will be limited to cases where the employer can show that the "fiber" concentration of the product is less than 0.1% by weight, is a natural contaminant, and where objective data . . . indicate that . . . employee exposures will not exceed the action level of 0.1 f/cc.

* * *

The intent of § 1926.58(j)(2) is to require a decontamination area and the other facilities listed above [clean rooms and showers] only where a regulated area is established.

* * *

OSHA [] did not intend its housekeeping and waste disposal provisions to be required for de minimis situations. As explained above, if materials contain only trace natural contaminants . . .

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and if employees can show, based upon objective data that employee exposure to and contact with, during anticipated usage and handling, cannot exceed the action levels, then the housekeeping and waste disposal provisions will not be cited.

During revision of California's asbestos standard, OSHA's headquarters and field office for Region IX endorsed adoption of this policy by states, finding it fully consistent with the requirements that State regulations be at least as effective as federal standards (Attachments B & C). Grace therefore respectfully requests that the Division endorse these policies by adopting a lower limit cutoff in its asbestos standard, either explicitly in the regulation or in interpretive guidelines.

I. GRACE'S INTEREST IN MARYLAND'S ASBESTOS REGULATIONS.

Grace mines vermiculite in Libby, Montana and Enoree, South Carolina and uses vermiculite in the manufacture of a number of construction, industrial and horticultural products. When mined, vermiculite ore contains tremolite, a form of asbestos, but the ore first undergoes a process of beneficiation and then is "expanded," so that the levels of tremolite contamination are but parts per million (ppm) in Grace vermiculite products. No Grace vermiculite-based product contains more than 50 ppm asbestiform tremolite fiber (0.005% by weight).

Grace vermiculite-containing products are used for several purposes. Perhaps the largest and most important use is in Monokote®, a product that has several unique properties making it particularly suitable for structural steel fireproofing. The great majority of structural steel fireproofing applied today in Maryland is Monokote® and virtually every office building constructed here over the past twenty years has been protected with this material. No product presently on the market provides equal performance in modern steel frame buildings at comparable cost.

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GRACE studies have found that asbestos exposures in the spray application of this product, which contains less than 10 parts per million (ppm) of asbestiform tremolite fiber by weight (0.001%), are significantly below both the revised OSHA 0.2 fibers/cc permissible exposure limit (PEL) and 0.1 fibers/cc action level. Monckote is applied as a wet, slurry-like plaster and cures to form a dense, hard and permanent coating. The trace amounts of asbestiform tremolite that may be present are tightly bound in place by hydrated gypsum.

Even though the use of Monckote® poses no threat of significant asbestos exposure and contains only trace tremolite concentrations, literal interpretation of the OSHA rules without an understanding of OSHA's clarifications might lead to conclusions that spray applications are prohibited because they would be "asbestos-containing materials." As OSHA itself and other agencies have recognized, however, such an interpretation would be both impractical and unnecessary.

II. THE UBIQUITY OF TRACE ASBESTOS CONTAMINATION.

Naturally-occurring asbestos is ubiquitous and found in trace quantities in a wide variety of minerals. As mineralogists have long recognized, both serpentine rock, which usually contains some proportion of chrysotile (asbestiform serpentine), and amphibole minerals (e.g., asbestiform tremolite, crocidolite, or amosite) occur very widely in sedimentary, igneous and metamorphic rock formations throughout the world. Such occurrences are typically rich enough to be mined for asbestos production in only a few areas, but trace levels are found widely in many mineral formations.

As University of Maryland Professor of Geology Dr. Ann Wylie testified at the OSHA hearings on its new asbestos standard: "Approximately thirty percent of the rocks found in the continental United States contain amphiboles [i.e., asbestos] as major constituents . . . [It] would be practically impossible to produce a commercial product from rock

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which occurs in a metamorphic terrain which did not contain any quantities of such fibers. 1/

2/ Many products formed from minerals and thus contain asbestos, although normally only at trace levels. Given the ubiquity of asbestos fibers in naturally occurring water, at concentrations typically from 1 to 10 million fibers/liter, and exceeding 200 million fibers/liter in certain locations, 2/ proper analysis might reveal the presence of asbestos in any product manufactured with water, which encompasses a vast array of goods.

Grace recognizes the desirability of regulating use of its products to assure safe working conditions. Nonetheless, Grace believes that the application of stringent regulations developed for products containing intentionally added asbestos are inadvisable for products that can be demonstrated to pose no potential for meaningful asbestos exposures.

III. THE CONSISTENT PATTERN OF NOT TRIGGERING REGULATORY REQUIREMENTS FOR DE MINIMIS EXPOSURES.

Recognizing that products containing trace contaminant concentrations do not pose a significant threat to human health, regulatory agencies in addition to federal OSHA have consistently excluded trace contaminant levels of asbestos from more general asbestos regulations. For example, the Environmental Protection Agency's ("EPA's") asbestos Clean Air Act National Emission Standard for Hazardous Air Pollutants ("NESHAPS"), including the spraying ban and waste disposal requirements, applies only to products containing more than 1% asbestos. 40 C.F.R. § 61.140 et seq.

1/ Testimony in the 1984 Hearings on the OSHA Asbestos Standard, OSHA Ex. 230, at 3, 9.

2/ See National Academy of Sciences, Asbestiform Fibers (1984).

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Similar exclusions have also appeared in other EPA and Consumer Product Safety Commission (CPSC) regulations.

1. EPA's Asbestos-in-Schools Rule. EPA requires all schools to look for friable materials to determine if they are asbestos, and if so, to notify building occupants. The regulation does not, however, apply to material containing less than 1% asbestos by weight. 40 C.F.R. § 763.103(c) (1984).
2. EPA's Information Collection Rule. When EPA collected comprehensive data on asbestos in 1982 in preparation for its rulemakings to ban and phase out asbestos, it excluded from the required data information on mixtures which "contain asbestos as a contaminant or impurity." 40 C.F.R. § 763.63(b).
3. EPA's Proposed Ban on Asbestos. Although proposing to ban and phase out asbestos use, EPA was careful to emphasize that the proposal did not apply to asbestos such as that encountered "in connection with mining of another substance such as vermiculite" that was "an unintended contaminant or impurity." 51 Fed. Reg. 3738, 3754, proposed 40 C.F.R. § 763.143(g) at 3757 (Jan. 29, 1986).
4. CPSC. Although rejecting a 1% cutoff below which asbestos would be permissible in patching compounds, the CPSC emphasized it did not intend to ban patching compounds in which there were unavoidable trace amounts of asbestos. 42 Fed. Reg. 63,354, 63,357 (Dec. 15, 1977). Similarly, CPSC's enforcement policy for the labeling of household products containing asbestos applies only where the asbestos has been

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intentionally added 51 Fed. Reg. 33,910,
33,912 (Sept. 24, 1986).

In sum, there has been a consistent regulatory policy not to include products such as vermiculite under regulations whose primary purpose was to control commercially exploited asbestos. Regulatory agencies have recognized that asbestos can be found as an impurity in many other materials and have thus exempted such materials so long as the asbestos was found only at minimal concentrations and/or did not cause significant airborne exposures.

* * * * *

Grace urges the Division to adopt a lower limit cutoff of 0.1% asbestos by weight in its asbestos standard. Such a cutoff would recognize that there is no reasonable rationale for applying the full panoply of regulations to products containing trace asbestos and would be consistent with federal OSHA's enforcement policy.

Grace would be glad to answer any questions you may have, or meet with your staff as appropriate.

Very truly yours,

John S. Hamilton, Jr./rup

John S. Hamilton, Jr.

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ATTACHMENT A

U.S. Department of Labor

Assistant Secretary for
Occupational Safety and Health
Washington, D.C. 20210



ALG 114956

Mr. Robert A. Bertacchi
Vice President
Construction Products Division
W. B. Grace & Company
62 Westmore Avenue
Cambridge, Massachusetts 02140

Dear Mr. Bertacchi:

This is in response to your letter of June 23 seeking interpretation of certain regulatory provisions contained in the standards for occupational exposure to asbestos, tremolite, anthophyllite and actinolite issued June 20 (51 FR 22612). Specifically, your concern is that certain provisions of the new standards may apply to many activities that pose no asbestos risk to worker health and that were not intended by the Occupational Safety Health Administration (OSHA) to be covered by the new standards.

Your letter raised interpretive issues about three provisions. The first provision states that: "Materials containing asbestos, tremolite, anthophyllite, or actinolite shall not be applied by spray methods" (51910.1001(f)(1)(vii) and 1926.58(g)(2)(iii)). As you pointed out, other government agencies which have restricted the application of asbestos materials by prohibiting spraying have included a percentage-by-weight exclusion. Your concern is that, since the OSHA provisions do not contain an exclusion, the OSHA regulation will inappropriately apply to a wide variety of sprayed products that contain trace amounts of naturally occurring levels of asbestos which you term "de-minimis."

OSHA recognizes that some mineral products that are sprayed may contain such small amounts of asbestos as to be considered "de-minimis" for purposes of administering these standards. In certain situations, therefore, OSHA will not enforce the provisions of the standards which prohibit the spraying of asbestos-containing products. These situations will be limited to cases where the employer can show that the "fiber" concentration of the product is less than 0.1% by weight, is a natural contaminant, and where objective data (as described in 51 FR 22712) indicate that, under foreseeable handling and usage, employee exposures will not exceed the action level of 0.1 f/cc. For purposes of administering the standards, OSHA compliance officers will be instructed that, in such situations, they should not issue a citation because of the de-minimis nature of employee exposure.

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Your second area of concern was whether §1926.58(j)(2), which imposes requirements for decontamination areas, clean rooms and showers, applies to all asbestos removal, decontamination and removal operations, or only those where airborne concentrations of asbestos, tremolite, anthophyllite, actinolite or a combination of those minerals exceed or can reasonably be expected to exceed the PEL prescribed in §1926.58(c). The intent of §1926.58(j)(2) is to require a decontamination area and the other facilities listed above only where a regulated area is established. Regulated areas are established only where concentrations exceed the PEL.

The third issue cited in your letter deals with similar provisions in the general industry and construction standards (§1910.1001(k) and §1926.58(l), respectively). As you stated in your letter, these are housekeeping provisions which regulate clean-up methods and waste disposal and are of particular concern to you if they apply to activities involving all materials containing any amount of asbestos, however small.

The Agency believes that proper housekeeping and disposal practices are essential parts of any effective asbestos control program. OSHA, however, did not intend its housekeeping and waste disposal provisions to be required for de-minimis situations. As explained above, if materials contain only trace natural contaminants of asbestos (defined as products with less than 0.1% asbestos by dry weight), and if employers can show, based upon objective data that employee exposure to such materials, during anticipated usage and handling, cannot exceed the action level, then the housekeeping and waste disposal provisions will not be cited.

Also, in an earlier letter to OSHA, dated November 14, 1985, concerning the draft revised standards, you expressed concern that the scope of the revised standards would include non-asbestiform tremolite, anthophyllite and actinolite. The revised standards have included these non-asbestiform minerals in their scope. You should note, however, that the revised standard only regulates fibrous forms of these minerals (defined as having a length-to-width ratio greater than 3 to 1). Further, on July 18, 1986, OSHA granted a temporary nine-month stay of the effective date of the revised standards (until April 21, 1987) insofar as they apply to occupational exposure to non-asbestiform tremolite, anthophyllite and actinolite. The purpose of the stay is to allow OSHA to review newly submitted information and to institute supplemental rulemaking on whether these minerals should continue to be regulated as presenting the same health risk as asbestos.

Enclosed is a copy of OSHA's July 18 letter to counsel for the
R. T. Vanderbilt Company which describes the stay in greater de-
tail. I hope this information will be helpful to you.

Sincerely,


John A. Fendergrass
Assistant Secretary

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ATTACHMENT B

JAN 12 1987

MEMORANDUM FOR: RUSSELL B. SWANSON
Regional Administrator - IX

THROUGH: JOHN S. MILES, JR., Director
Directorate of Field Operations

FROM: BROCE HILLENBRAND, Director
Federal-State Operations

SUBJECT: California's Asbestos Standard

We have been contacted by an attorney representing the W.R. Grace Company who is concerned about a problem with the pending revision to the California asbestos standard.

On August 14, 1986, in response to a question from Grace, OSHA issued the attached policy interpretation with regard to the spray application of materials that have only trace amount of asbestos. The new asbestos standard prohibits spraying of materials that contain asbestos without setting any minimum amounts. In our letter we indicated that our compliance policy would be that the spraying prohibition does not apply to products where the fiber concentration is less than 0.1% by weight.

We understand that W.R. Grace has discussed this issue with Cal/OSHA officials who indicated their philosophical willingness to honor this interpretation but felt that if they did Federal OSHA would find their standard "not at least as effective". While we believe that this issue would best be handled through an Administrative Interpretation, we would not object to adoption of this provision by Cal/OSHA.

Please discuss this issue with the State and make them aware of OSHA's position. We understand that Mary Lou Smith, of the Standards Board, has had discussions with Grace representatives on this issue. If we may be of assistance, please contact Barbara Bryant.

Attachments

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U.S. Department of Labor

ATTACHMENT C

Occupational Safety and Health Administration
450 Golden Gate Avenue
San Francisco, California 94102

Reply to the Attention of:



January 23, 1987

Mr. Ronald Rinaldi, Director
Department of Industrial Relations
P. O. Box 603
San Francisco, CA 94102

Dear Ron:

Enclosed are copies of correspondence from our National Office concerning an interpretation of the revised asbestos standards for general industry and construction. Federal OSHA is interpreting the provisions which prohibit the spraying of materials containing asbestos as not applying to products having a fiber concentration of less than 0.1% by weight.

The W. R. Grace Company requested and received this clarification and have since had discussions with Mary Lou Smith concerning the adoption of this provision by Cal/OSHA in its asbestos standard. In accordance with Bruce Hillenbrand's request, we hereby advise you that we would have no objection to such an action.

If there are questions or concerns regarding this matter, please do not hesitate to contact our Office of Technical Support.

Sincerely,

A handwritten signature in dark ink, appearing to read "Russell B. Svanson", is written over the typed name.

Russell B. Svanson
Regional Administrator

Enclosures

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Exhibit 1016