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Date July 24, 1975

Originating Dept. "Calidria" Asbestos

Answering letter date

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Subject Dust Controlled "Calidria" Products

This is in response to your letter of May 20, 1975, requesting a delineation of the advantages of a dustless Super Visbestos product. Since the potential for dustless asbestos applies across much of our product line, the question will be discussed in general terms with Super Visbestos treated as a special case where appropriate.

Several of the most important advantages to be described depend on the interpretation of the law and of the federal regulations. Comments from counsel on the correctness of our understanding of the points of law are requested. If we are correct, the main advantages of dustless products can be summarized as follows:

1. The health risk to users of our product is not well defined and will not be defined in the foreseeable future. Whatever this risk may be, it will be very substantially reduced with dustless products.

2. Provides a strong defense against future product liability suits.

3. Provides a strong psychological counter to militant union activities against handling asbestos.

4. Provides a good defensible position that the OSHA monitoring and medical examinations do not apply. This position becomes very solid if the "action level" concept is incorporated in the revised regulations.

5. Provides a good defensible position that EPA source registration is not needed and bag disposal requirements are being met.

6. Reduces our shipping costs and largely eliminates the in-transit spout leakage problems which have been much improved by shrink-film but are still present.

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Before describing the reasoning for these advantages, it is necessary to define the vague term, "dustless." For purposes of this discussion, a dustless product is one which, under reasonably anticipated handling conditions while in the raw state, does not release airborne fibers at concentration levels which can be distinguished from background by analytical procedures prescribed in the OSHA regulations. These specific limitations are necessary because our data on spraying and sanding of materials containing wetted and/or bound asbestos indicated that airborne fiber levels that are very low but still distinguishable from background can be obtained from any asbestos-containing material if sufficient mechanical energy is applied.

One further point should be made in considering the "dustless" condition. It is possible to treat asbestos with water and render it dustless as long as a substantial proportion of the water remains. Spills and damaged packages, however, would dry out in a fairly short period and become about like unwetted asbestos. It is also possible to use higher molecular weight, relatively nonvolatile wetting material that would retain dust suppression activity for extended periods. This distinction can be important when looking at the interactions with the OSHA regulations.

The most fundamental question in assessing the need for a dustless asbestos is the possible health hazard to the users of our product. Dry, opened asbestos has a potential to become airborne in substantial quantities every time it is handled or disturbed. Although most of the fiber counts we have made are at or below the allowable limits, they do demonstrate that it takes only a little carelessness to exceed the ceiling limits by substantial margins for short-time periods. This is particularly true for random accidents that occur and are not picked up by the dust counts.

If the potential to become airborne were removed, it would largely remove the chance for the accidental high exposure and would also reduce the average occupational exposure level to our product by an order of magnitude or more. If the 1976 OSHA levels do in fact contain a good margin of safety, are generally being observed by industry, and random short excursions at high concentrations are not a significant factor, the health hazard problem is under control. If we are not quite confident that this is the case, however, the incentive for a dustless product becomes strong.

The other important aspect of health risk concerns general liability. In a recent memorandum, April 30, 1975, Ms. Marjorie Chamberlain discussed the doctrine of general liability and the Borel asbestos case. To quote a key point:

> "recognition has been given to those products which are inherently dangerous, incapable of being made safe, and yet their utility to the consumer market counter balances the risk."

The phrase, "incapable of being made safe," raises several interesting questions. There is considerable literature in existence right now about treating asbestos to control dust. The main competitive product to Super Visbestos has been water wetted to make it dustless. If the medical experts prove to be wrong and the two fiber limit does result in serious injury to a substantial

number of workers, wouldn't we be extremely vulnerable to the contention that the product was "capable of being made safe" and we chose not to do it? From the positive side, if we do make our products dustless, it would set us apart from most of the other asbestos products and give a strong argument to get out of the typical class action suits.

The last medically related problem to consider is militant union pressure againts handling asbestos. This is an emotional issue and is hard to combat when it is obvious to the worker than he is breathing asbestos dust and has it all over his clothes. An asbestos product that does not dust, comes clean from the container, and does not whiten the workers' clothes should have a very strong psychological effect to counter this growing problem.

The interaction of a dustless product with the OSHA regulations obviously depends on how the regulations are interpreted. If the "action level" concept is introduced in the revised regulations, as expected, the need for interpretation is largely eliminated and our position becomes that much stronger.

The biggest problems which our customers have with the present OSHA regulations stem from the monitoring and medical examination requirements. There have been sporadic, often nuisance problems with signs, housekeeping, and waste disposal.

Regarding monitoring, paragraph f(1) of the regulations states,

"every employee shall cause every place of employment where asbestos fibers are released to be monitored..."

With a dustless product as defined earlier, we should be able to demonstrate at a reasonable number of industrial locations that the airborne fiber counts are indistinguishable from background. On this basis, we should be able to take and, if necessary, defend the position that asbestos fibers are not released so monitoring is not necessary. The main weak spot here is that water is the most likely liquid to be used, particularly for Super Visbestos. Spills and broken bags may be a source of low levels of dust. If a 1 fiber/cc TWA Action Level goes into effect, however, the chance that this will be exceeded is quite small if the user exercises modest precautions.

Regarding medical examinations, paragraphs j(2), (3), and (4) require medical examinations in "occupations exposed to airborne concentrations of asbestos fibers." The same arguments used to show that monitoring is not necessary for the dustless product can be applied to the medical examination question.

In addition to the monitoring and medical requirements, the regulations state:

Paragraph (g) (1) Signs

"Caution signs shall be provided and displayed at each location where airborne concentrations of asbestos fibers may be in excess of the exposure limits..."

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Paragraph (h) (1) Housekeeping

"All external surfaces ... shall be maintained free of accumulations of asbestos fibers if, with their dispersion, there would be an excessive concentration."

Paragraph (h) (2) Waste Disposal

"Asbestos waste, scrap, debris, bags, ... which may produce in any reasonably foreseeable use, handling ... concentrations of asbestos in excess of the exposure limits..."

Although all of these paragraphs refer to concentrations over the allowable limit, we have had a number of cases where the inspector gave out citations without monitoring on the basis that asbestos was present in the plant. With the present opened products, our data show he was probably incorrect. It is, however, certainly possible to exceed the limits with gross mishandling. With a dustless product, the chances of such an occurrence are reduced essentially to zero. We should be able to convince OSHA these would be frivolous citations.

In the Super Visbestos market, unfortunately, we encounter all of these OSHA related problems. Asbestos is handled in individual bags at a great multiplicity of temporary field locations by transient labor. Although the men work for subcontractors, the ultimate safety responsibility in the drilling rigs goes back to the major oil companies with their large professional safety and industrial hygiene staffs. A number of the major companies have taken the position that there is no practical way to meet the monitoring and medical examination requirements and have stopped using asbestos in their rigs. Several of the smaller contractors have been inspected and when told that warning signs were required immediately stopped using asbestos. Our only competitor in the field, Johns-Manville has come out with a product wetted with water to make it dustless. If the decision is made to proceed with a dustless product, this market will be the first one attempted.

In the EPA area, our customers report that there has been little federal enforcement activity so far. We have no way of knowing how long this situation will continue and there are a couple of points in the regulations that can turn into serious problems with our specialty product customers if active enforcement gets under way.

The EPA regulations require the registration of all "stationary sources" that fall in the industrial categories covered by the regulations. A "stationary source" is defined as:

"... any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator."

In the majority of cases, the users are already in compliance with the other provisions of the regulations so registration is largely a formality. There is a great reluctance, however, to volunteer for another government list. It would seem that a dustless product would provide a very good argument that t the product would not fall under "may emit" and registration is unnecessary.

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The EPA regulations are now being revised to include much more stringent provisions on the disposal of asbestos shipping bags and asbestos containing waste. The final details are not settled but will undoubtedly be built around the "no visible emissions" criteria now in effect for manufacturing operations. Wetting to suppress dust has been emphasized in the proposed changes. A prewetted product should make it much more practical for our specialty customers to achieve compliance.

The foregoing advantages for a dustless product are primarily customer oriented. There are two additional points relating to shipping that involve us more directly.

First, our opened fiber products are packed in valve pack bags which leak asbestos whenever the bag is handled. This leakage has been largely eliminated with Super Visbestos by the fairly expensive procedure of shrink-filming the individual bags. With the other opened products, the entire pallet is shrink-filmed. The pallet shrink-filming has greatly improved but not eliminated the leakage problem. A dustless product in a suitable bag would eliminate both of these cumbersome procedures.

Secondly, a wetted product will have a bulk density of 40-60-lb./ft.^{3}, comparable to pellets. This will sharply reduce shipping costs.

This completes the six main advantages that we can see for providing dustless asbestos products. There are obviously some very strong reasons to move in this direction that must be balanced against the obvious disadvantages of added product cost. The key ingredient needed now is advice from counsel on the validity of the legal and regulatory points made. It is suggested that we move to obtain this and plan to meet during the first half of September to settle on a course of action for Super Visbestos.

H. B. Rhodes

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