To: D. D. Johnston

April 26, 1973

SUBJECT: WINDSOR MINERALS AND TALC

Bill Ashton and I visited with Roger Miller and Vernon Zeitz on April 18th. We covered a number of points of considerable concern.

1. It is our joint conclusion that we should not rely on the "Clean Mine" approach as a protective device for Baby Powder in the current Asbestos or Asbestos-Form controversy. We believe this mine to be very clean; however, we are also confident that fiber forming or fiber type minerals could be found. The usefulness of the "Clean Mine" approach for asbestos only is over.

2. It is possible that the technique of identification for asbestos or asbestos-form materials will be an optical approach. It probably will be some variation of the McCrone method. This method with appropriate concentrating techniques will permit a good laboratory to identify asbestos or tremolite in a talc sample.

3. The current medical research is confirming that it is particle shape, not chemical substance which is harmful as such fiber-like materials will be suspect. The argument rages as to whether an aspect ratio of 3/1, 5/1, or 10/1 will be adopted.

The problem then is two fold, one for Windsor and one for baby Powder.

a. At Windsor the mine is currently under the jurisdiction of the Bureau of Mines. The inspections of the mine indicate that we are well within the limits presently accepted for non-fibrous dust. Roger Miller feels that they could live within the current TLV values for fibrous talc of 5 parts per million. We don't know the impact of a TLV of 2 fibers per cubic meter.

The May 8th meeting will primarily be an information meeting on mine and manufacturing safety. We would not expect standards to be set, however, there will be agitation probably by OSHA, NIOSH, and the Consumer Groups (Selikoff), to lower the standards for the industrial exposure to the same level as asbestos.
Windsor is currently cooperating heavily with the local Bureau of Mines man out of Albany and in fact teaching him how to use microscopic techniques to identify the presence or absence of fibers.

We recommend that Windsor have a representative at the May 8th meeting as observers and that no other J&J representation should be had at the Bureau of Mines meeting. We will review this strategy next week after a meeting with the Johns Manville people.

b. As for Baby Powder, the entire thrust of our communications with the FDA has concentrated on asbestos as harmful fiber-like material. Sophisticated techniques have been proposed to make sure that fiber-form materials present in samples were identified as being asbestos.

The implication is that all other fiber-forms, if present, were talc or other minerals and these were safe. This posture will no longer be satisfactory.

If the FDA Food Division, which is moving more rapidly than the Cosmetic Division, publishes a standard, it will probably be to ban asbestos-form or fibrous material in talc. That could eliminate the current uses of talc in packaging materials. These talcs contain widely varying amounts of tremolite or fibrous talc. Our Baby Powder contains talc fragments classifiable as fiber. Occasionally sub-trace quantities of tremolite or actinolite are identifiable (optical Microscope) and these might be classified as asbestos fiber.

5. We have been pursuing several alternatives to better protect our powder franchise. These include:

a. An improvement in the flotation technique to better select platy talc, and perhaps reduce any tremolite or talc shards. The work is still in the lab and the timetable for commercialization is unknown. It is, however, a chemical procedure and therefore would probably not require major equipment change.

b. A program investigating two different ways of removing a large portion of the very fine particles presently found in talc. We have demonstrated the feasibility of both approaches. The equipment and process development would take between 9 and 12 months on a crash basis. Other approaches which might be less expensive or more effective, have only been talked about. A crash engineering program could be
undertaken with a good chance of success in this area. It should be cautioned, however, that no final product will ever be made which will be totally free from respirable particles. We are talking about a significant reduction in fine particle count but not 100% clean-up.

C. Corn Starch is obviously another answer. The product by its very nature does not contain fibers. Furthermore, it is assimilated by the body.

We would recommend that items "a" and "c" receive top priority. The Corn Starch program is primarily one of merchandising and the development of explosion proof facilities. We would recommend this program be spearheaded by a task force under Jim Dattre.

The flotation program is currently being worked on at Windsor by Vernon Feitz. We would propose a task force of Feitz, Goodman, and Ashton and Rolle, to identify the opportunities in removing fiber-like materials from the beneficiated talc, with a recommendation to Management in 30 days.

6. If we are agreed with the above, then the Battelle Program should be restudied to include cells of animals on a, b, and c. We might wish these to be new cells, or to delete certain cells now in the program.

D. R. Petterson

DRP/mm
cc: W. Ashton
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