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INTER ORGANIZATION COMMUNICATION

Raybestos Manhattan

Advanced Research Laboratory

DIVISION and LOCATION

TO: J. H. Marsh - Bpt.

DATE: March 4, 1974

SUBJECT: McGill Study

I have discussed the possible direction of continuing work at McGill with Dr. Gibbs. He has a number of interesting proposals relative to the distribution of fiber size and fiber geometry to carcinogenicity. This type of project would involve significant expenditures for information which will be of value at some indeterminable time in the future. This work should be done, but R/M is not in a position to fund this type of project from initiation to completion. I would think that R/M should definitely participate in this type of research as a member of AIA/NA, ATI or just as an interested party.

We do have access to the test chamber at McGill and a good working relationship with Dr. Gibbs. We also have a problem in that we know that safety garments are capable of producing unsatisfactory dust counts. We have documented the problem with Dr. Gibbs and he could document the solution either in the field or using the dust chamber.

The only possible solution for conventional fabric appears to be aluminizing the inside of hoods and the outside shoulder area such that the breathing zone is not exposed to open asbestos fabric.

However, filled Novatex has demonstrated its low dustiness for which safety garments appears to be a perfect application. Besides a decrease in dust counts during use, I'm sure that the Novatex would decrease the asbestos contamination of workers clothing after the safety garments are removed.

I discussed the possibility of aluminized conventional with M. Scowcroft a few months ago; he felt that it would be too expensive and also make the hoods too hot. He thought an increase of chemical surface coating would help, but I don't think this would be satisfactory.

The use of filled Novatex does pose an additional problem in that the fillers themselves are capable of producing poisonous gases upon thermal decomposition, e.g., neoprene could produce hydrochloric acid or possibly phosgene and nitrile could give off hydrogen cyanide gas. I have asked Dr. Gibbs about testing fabrics for emission of these gases at a McGill laboratory. His initial feeling was that they could do it, but he is checking into it further.

I would recommend then, as you suggested in your memo of 3/1/74, that M. Scowcroft and J. Hawkins consider immediate engineering improvements of conventional fabric. However, we should produce a commercial aluminized and filled Novatex (as per J. Trainor's memo to J. Orzechowski of 3/4/74).

PH: 00704



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I would recommend with respect to McGill that we:

1. Use the mitt tester to examine the dustiness of various filled Novatex samples from Novatex.
2. Request Dr. Gibbs to test in the field the new safety garments - either conventional or Novatex.
3. Examine the possibility of testing for poisonous gases at McGill and at other possible locations.
4. Let the program (specifically money investment) lag until suitable samples have been produced.



John J. Magenheimer

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cc: J. T. Trainor
cc M G Seever *fy*

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