H

TO: #146-1 A. J. Falvo July 17, 1981

FROM: #147-5 C. M. Howard, Jr.

SUBJECT: U.S.G.'S NON-ASBESTOS PROGRAM

The attached Chronology of Events leading to our current business position is offered to supplement and elucidate the following summary of the most time-consuming, cost-affecting, ambitious undertaking in the history of our business.

BACKGROUND:

U.S.G.'s joinery business was deeply involved in the 3 to 4 year crater-free ready mixed program when the asbestos issue begin to peak . . . a program which brought a unique, saleable, quality improvement in the product while increasing our ready mixed capacity by 80% at a relatively low investment cost . . . and while increasing our market share by 4 points to 35%.

A major program of implementing terra alba filler at significant cost savings at 3 operating plants was additionally demanding of Product Management, Research, and Technical Service efforts.

PROBLEMS:

EXTERNAL

A.) Increasing government regulation and public concern over asbestos fiber as an alleged cancer producer.

B.) The subsequent threat of costly product liability claims.

C.) The potential for a costly competitive, non-asbestos breakthrough to our leadership position.

D.) The drywall mechanics who were generally unconcerned about the threat, but highly concerned that the product was not changed.

INTERNAL

Research evidence that asbestos fiber was the most critical and irreplaceable ingredient in our products.

OBJECTIVE:

FIRST STAGE: Reformulate products, with at least equivalent quality, with fiber content to meet increasingly lowered government regulations, at acceptable costs.

SECOND STATE: Reformulate without any asbestos fiber while maintaining performance properties regardless of cost.

THIRD STAGE: Refine the reformulated products, while holding quality, by reducing costs to acceptable levels.

5510

UNITED STATES GYPSUM COMPANY

GOAL:

To be the first producer to introduce a full line of asbestos-free products nationally in order to preserve our market position, leadership image, and role of concerned corporate citizen.

TIMETABLE:

All products converted to non-asbestos by July 1, 1976.

RESULTS:

TIMETABLE

1.) U.S.G. introduced the 1st non-asbestos product to market - a powder topping into CCPD - in 1972.

2.) U.S.G. completed conversion nationally June, 1976.

RESEARCH COSTS

$1,500,000

MARKET SHARE

Fell from 35% to 24% during the 1st two years of implementation. From 1976 to 1979 our I. P. moved to 32% - an 8 pt. increase, which represents a net sales penetration of $24,000,000. Further moved to 42% by April, 1981.

COMMENT:

If U.S.G. were producing the 1975 asbestos formulation today, the cost penalty would amount to $12,000,000 based on 1980 volume

cc: #147-1 R. P. Faust
#147-5 M. V. Cook

ATTACHMENT

Chronology of Internal and
External Events Effecting
U.S.G.'s Non-Asbestos Program

1. 1967 - Federal Register of Dept. of Labor published new Threshold Limit Value (TLV) allowing a maximum of 30 fibers of asbestos no greater than 5 microns length per milliliter of air.

2. 1968 - New Yorker Magazine - Quoted findings of Dr. Selikoff's research study at Mt. Sinai Hospital of City University of N.Y. contending that asbestos causes mesothelioma or cancer of lung cavities.

3. 1968 - Wall St. Journal article featured asbestos as cancer inducing substance.

4. 1968 - First U.S.G. position letter released to operating plants by G. R. Krug on Asbestos and Cancer.

5. 1969 - Federal Register published a reduced TLV of 12 fibers.

6. 1969 - Meeting(s) with Price, Cushman, Keck and Mahin, our attorneys, re: their letter urging U.S.G. to label its products so as to conform with the Federal Hazardous Substances Act and Federal Packaging and Labeling Act.

7. 1969 - Meeting at Research where a Hazardous Materials Committee of seven members was formed.

8. 1970 - Company decision that labeling would be "hazardous to our sales" if U.S.G. moved first.

9. 1970 - State of Illinois and New York City banned spraying of asbestos containing materials - the possibility of product liability claims began to build as a serious Company threat. A parade of state and municipal governments began legislating against asbestos.

10. 1970 - Attorney General of the State of Minnesota sent U.S.G. an Interrogatory regarding the shipping of asbestos containing products into its State.

11. 1970 - The Occupational Safety and Health Act, under the Department of Labor, was passed. The first regulatory body on TLV's.

12. 1971 (May) - Research manned the program to meet existing government codes/regula while searching for asbestos replacement. Product Management was to be the key element toward closely guiding, encouraging, directing/redirecting, and scheduling Research efforts into acceptable timely results throughout the next 7 years.

13. 1972 - National Institute for Occupational Safety and Health: Rated asbestos as the number one hazardous material; proposed warning labels on all containers, job sites, etc.

14. 1972 - O.S.H.A. announced a reduction in asbestos fiber TLV to 5 fibers per cubic centimeter of air on an 8 hour-time-weighted- average.

15. 1972 - U.S.G. Research programed to test all of its joint compound formulations (approx 40); contracted with NATLSCO (Kemper Insurance Co. technical arm) to prove its results as an independent agency - also, to determine if package labelling was necessary. Yet government specified no testing apparatus or procedure for determining the TLV. Our test results supporte that all of our formulations met know standards, except one. NATLSCO results supported that all our formulations met existing regulations.

16. 1972 - Company decision that labelling was necessary and a program was completed for labelling joint compound and texture containers.

17. 1972 - Consumer Products Safety Act identified and released regulations on hazardous substances, including asbestos.

18. 1972 - U.S.G. conducted first field tests on a non-asbestos formulation in CCPD with a powder topping compound. Subsequent trials proved acceptable, and was released to market as NV topping, and not non-asbestos, in order to ma security (lead time) on our overall program.

19. 1973 - N. Y. Times Newspaper - Sunday Magazine Supplement - Expose on asbestos as a cancer producing agent.

20. 1973 - Mr. Watt appointed Ken Freeman at Research, in conjunction with Legal, to be the official responder on outside inquiries regarding the asbestos fiber issue.

21. 1973 - First of many policy and position letters released by product management to the field on proper non-asbestos deportment with customers, etc.

22. 1973 - U.S.G. filed a patent on non-asbestos technology. Patent #3,891,453 was issued to Terry Williams on June 24, 1975. Reissued as 29,754 on August 16, 1977.

U.S.G. VS. NATIONAL

	PATENT ACTIVITY	
	FILED	ISSUED
National	February 26, 1973	September 23, 1975
United States Gypsum	July 26, 1973	June 24, 1975

U.S.G. produced notebook evidence that our laboratory work, preceded the patent file date by 1½ years - also, preceded National's notebook entry.

23. 1973 - E.P.A. issued regulations regarding the discharging of pollutants such as asbestos fiber and mercury (then a basic preservative) into air or water. Primarily affected our operating plants.

24. 1974 - Product Management compiled an O.S.H.A. Guideline's Booklet and a question and answer white paper for release to the field in order to help our people handle the flood of inquiries from government agencies, trade facto mass media, and interested 3rd parties. Product Management was the pivotal resource position in all this.

25. 1977 - Consumer Products Safety Commission opened hearings on non-asbestos products. John Bush read a prepared statement.

26. 1977 - Consumer Products Safety Commission proclaimed that asbestos containing pr could not be produced after January 15, 1978; none could be sold after June 15, 1978. This became the catalyst to help us redeem our costs/losses in converting to non-asbestos and to launch major gains in market share.

27. 1978 - U.S.G. contracted with Hilliard-Lyons Patent Management, Inc., Louisville, Ky to make them exclusive agent under our non-asbestos patent. For selling them the patent, they would grant us a non-exclusive license for producing product to U.S.G. and others . . . a capital gains device. The license with National Gypsum Co. currently appears fairly imminent.