

UC 149 :

PLAINTIFF'S EXHIBIT

UC-3588



INTERNAL CORRESPONDENCE

MAR 3 1980

METALS DIVISION

270 PARK AVENUE, NEW YORK, NEW YORK 10017

To (Name) G. R. Bailey
Division R. L. Folkman
Location R. W. Rebholz
Floor Number F. J. Shortsleeve

Date March 3, 1980

Originating Dept.

Floor Number

Copy to W. G. Alesio

Answering letter date

Subject Asbestos Strategy

Attached is a rough draft version of the asbestos strategic plan, which will be reviewed at our March 28 meeting.

A handwritten signature in dark ink, appearing to read "J. T. Kelly".
J. T. Kelly

JTK:tb

Attachment

UCC 008116

INDUSTRY DEFINITION

Those enterprises engaged in the worldwide production and marketing of short fiber asbestos and/or viscosity control agents.

BUSINESS DEFINITION

The mining, milling, chemical treatment and world-wide marketing of high quality short fiber asbestos.

ASBESTOS - GENERAL

UNITS ?

. TOTAL WORLDWIDE ASBESTOS SUPPLY/DEMAND

millions of short tons

	<u>PRODUCTION</u>	<u>CONSUMPTION</u>
USSR	2.7	
Canada	1.7	
USA	0.1	
Europe	0.2	
Japan	-	
S. Africa	0.4	
Rhodesia	0.2	
Others	0.6	
TOTAL	<u>5.9</u>	<u>5.9</u>

. SHORT FIBER ASBESTOS PRODUCTION

-- APPROXIMATELY 30% OF TOTAL ASBESTOS PRODUCTION IS
SHORT FIBER GRADES

-- MOST SHORT FIBER ASBESTOS IS OBTAINED AS A BY-PROD-
UCT IN LONG FIBER OPERATIONS. NOT ALL IS CURRENTLY
RECOVERED.

. MAJOR APPLICATIONS ~~OF SHORT FIBER ASBESTOS~~

~~CEMENT PRODUCTS, TILE, PAPER, FRICTION MATERIALS~~

~~Plastics, T. L. H. ASPHALT OIL-WELL MUDS~~

UCC OPERATION

KING CITY, CALIFORNIA

"CALIDRIA" ASBESTOS

- . MINING SITE AT COALINGA DEPOSIT, DISCOVERED IN 1957.
TOTAL COALINGA RESERVES -- 3MM + TONS
(100 + YEARS OPERATION)

- . SHORT FIBER ASBESTOS ONLY. HIGH QUALITY (PURITY, FIBER CONTENT)

- . MILLING OPERATIONS BEGAN IN 1964. CURRENTLY OPERATING AT
85% OF CAPACITY.

- . PRODUCT SOLD IN U.S.A., JAPAN, EUROPE

UCC COMPETITORS

. SHORT FIBER ASBESTOS

	<u>CAPACITY, M TONS/YR.</u>
-- CAREY (Quebec, Canada)	230
-- JOHNS-MANVILLE (Quebec)	800
-- ATLAS (California)	25

KING CITY	33
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. VISCOSITY CONTROL AGENTS

<u>PRODUCT</u>	<u>CURRENT OPERATING RATE % CAPACITY</u>
DE GUSSA	
CABOT	
NATIONAL LEAD	
BAKER	

KING CITY

UCC MARKETS
SHORT FIBER ASBESTOS

	<u>USA</u>		<u>JAPAN</u>		<u>TOTAL</u>	
	<u>TONS</u>	<u>% SHARE</u>	<u>TONS</u>	<u>% SHARE</u>	<u>TONS</u>	<u>% SHARE</u>
CAREY	61,000	47	33,000	73	94,000	53
JOHNS-MANVILLE	30,000	23	5,000	11	35,000	20
ATLAS	15,000	11	-	-	15,000	9
UCC	<u>25,000</u>	<u>19</u>	<u>7,000</u>	<u>16</u>	<u>33,000</u>	<u>18</u>
	131,000	100	45,000	100	176,000	100

VISCOSITY CONTROL MARKETS

. MAJOR APPLICATIONS

-- ADHESIVES, SEALANTS, COATINGS

. MARKET SHARE

	<u>SHARES %</u>			<u>TOTAL</u>
	<u>USA</u>	<u>JAPAN</u>	<u>EUROPE</u>	
DE GUSSA	25	70	70	40
CABOT	49	2	5	40
NATIONAL LEAD	10	2	3	3
BAKER	5	1	3	2
UCC	11	25	19	15

. UCC SUPPLYING THE ONLY ASBESTOS BASE PRODUCT.

PROSPECTS FOR INDUSTRY GROWTH & PROFITABILITY

. SHORT FIBER ASBESTOS -- low to moderate

The question of health hazards and associated governmental regulatory action and potential third party liability are expected to result in a zero-volume growth rate for this industry. Limited number of competitors and favorable pricing history are positive factors.

. VISCOSITY CONTROL AGENTS -- high

The unfavorable asbestos publicity and restrictive government regulations have been less of a negative factor in customer consideration. Applications for asbestos remain despite considerable effort to develop substitutes. Requirements for technical competence and capital investment in this area are high.

Viscosity control products represent only 3% of the tonnage at King City, but account for 60% of the plant margin.

INDUSTRY PROFILE

SHORT FIBER ASBESTOS

<u>CRITICAL ITEMS</u>	<u>INDUSTRY PROSPECTS</u>		
	<u>HIGH</u>	<u>MODERATE</u>	<u>LOW</u>
VOLUME GROWTH			X
VULNERABILITY TO SUBSTITUTION		X	
COMPETITION	X		
PRICING RESPONSE	X		
CUSTOMERS	X		
GOVERNMENT INTERVENTION			X
ACTIVIST INFLUENCE			X
THIRD PARTY LIABILITY			X
VOLUME GROWTH			X
EARNINGS QUALITY		X	
OVERALL ASSESSMENT		X	

INDUSTRY PROFILE

VISCOSITY CONTROL AGENTS

<u>CRITICAL ITEMS</u>	<u>INDUSTRY PROSPECTS</u>		
	<u>HIGH</u>	<u>MODERATE</u>	<u>LOW</u>
VOLUME GROWTH	X		
SUBSTITUTION	X		
COMPETITION	X		
BASIS OF PRODUCT COMPETITION	X		
CUSTOMERS	X		
VOLUME GROWTH	X		
EARNINGS QUALITY	X		
OVERALL ASSESSMENT	X		

^{HAZARDS}
HEALTH QUESTION

- . FOUR DISEASES CONNECTED WITH ASBESTOS EXPOSURE:

ASBESTOSIS

LUNG CANCER

MESOTHELIOMA

~~GASTROINTESTINAL CANCER~~

- . LATENT PERIOD VARIES FROM ^{ABOUT} 15 TO 50 YEARS.

- . MESOTHELIOMA IS THE MOST CRITICAL CONCERN.

CAN APPARENTLY BE CAUSED BY SHORT, RELATIVELY LOW
EXPOSURES AND IS NOT SMOKING RELATED.

REASON FOR SCHOOL CEILING & HAIR DRYER INCIDENTS.

- . DEFINITIVE SCIENTIFIC ANSWER TO QUESTION OF CANCER
RISK AT VERY LOW EXPOSURES WILL PROBABLY NOT BE
FORTHCOMING IN THE NEAR FUTURE.

ESTIMATE OF FURTHER REGULATORY IMPACTS
ON UCC ASBESTOS BUSINESS

1. WORKPLACE EXPOSURE LIMITS WILL BE REDUCED BY OSHA
FROM 2.0 FIBERS/CC TO 0.5-1.0 RANGE.
2. LITTLE CHANGE IN OTHER REGULATIONS.
3. NO MANDATORY SUBSTITUTION. (NO STATUTORY AUTHORITY
EXISTS AT PRESENT.)
4. "AFTER THE FACT" LEGISLATION WILL NOT SIGNIFICANTLY
AFFECT UCC.

UCC PRODUCT DIRECTIONS

- . EMPHASIZE DUST CONTROLLED "CALIDRIA" ASBESTOS PRODUCTS.
- . IMPROVE PACKAGING
- . CONCENTRATE ON END USES WHERE FREE FIBER GENERATION IS MINIMIZED OR ELIMINATED.

FINANCIAL SUMMARY

"CALIDRIA" ASBESTOS

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
SALES (\$MM)	4.3	4.9	5.3	7.2	6.4
NET INCOME (\$MM)	0.1	0.5	0.6	1.2	1.0
(¢/SHARE)	0.2	0.8	1.0	1.9	1.5
ROS %	2.3	10.2	11.3	16.7	16.4
ROA %	1.6	10.5	12.9	25.4	19.8
CASH GENERATED (\$MM)	0.2	0.1	1.1	1.0	1.2

SPU COMPETITIVE POSITION

. SHORT FIBER ASBESTOS -- STRONG/LEADING

High level of product quality and service to a diverse customer base overcome the disadvantage on costs of competing against a by-product situation.

. VISCOSITY CONTROL AGENTS -- STRONG

A strong technical service effort, the most varied product line, and superior cost position have helped to offset the health factor, which has limited market share and remains a threat to future participation in these markets.

SPU COMPETITIVE PROFILE

SHORT FIBER ASBESTOS

<u>CRITICAL ITEMS</u>	<u>LEADING</u>	<u>STRONG</u>	<u>FAIR</u>	<u>WEAK</u>
MARKET SHARE		*_____*		
PRODUCT LINE BREADTH		*_____*		
BREADTH/CUSTOMER BASE		*_____*		
COST POSITION			*_____*	
TECHNOLOGY POSITION		*_____*		
PRODUCT QUALITY	*_____*			
SERVICE/RELIABILITY	*_____*			
OVERALL		*_____*		

**Assessment of Principal Competitors
Relative to Key Competitive Factors**

Asbestos Category

	<u>UCC</u>	<u>Carey</u>	<u>Johns-Manville</u>	<u>Atlas</u>
Market Share	Strong	Leading Strong	Strong	Strong Fair
Product Line Breadth	Strong	Strong/ Fair	Strong	Weak
Breadth Customer Base	Strong	Strong	Strong	Weak
Total Cost Position	Fair	Strong	Leading/ Strong	Fair
Technical Position	Leading Strong	Weak	Strong	Weak
Product Quality	Leading	Strong/ Fair	Fair	Strong
Customer Service/Dependable Supplier	Leading	Weak	Strong	Weak
Overall	Leading/ Strong	Strong/ Fair	Strong	Fair/ Weak
Rank	1	3	2	4

SPU COMPETITIVE PROFILE

VISCOSITY CONTROL AGENTS

<u>CRITICAL ITEMS</u>	<u>LEADING</u>	<u>STRONG</u>	<u>FAIR</u>	<u>WEAK</u>
PRODUCT LINE BREADTH		*_____*		
BREADTH/CUSTOMER BASE	*_____*			
COST POSITION	*_____*			
TECHNOLOGY POSITION		*_____*		
PRODUCT QUALITY	*_____*			
HEALTH FACTOR				*_____*
OVERALL		*_____*		

**Assessment of Principal Competitors
Relative to Key Competitive Factors**

Non-Asbestos Category

	<u>UCC</u>	<u>Natl. Lead</u>	<u>Cabot</u>	<u>DeGussa</u>	<u>Baker</u>
Product Line Breadth	Strong	Fair/ Weak	Fair	Fair	Fair/ Weak
Breadth of Customer Base	Leading	Fair	Strong	Strong	Fair
Total Cost Position	Leading	Strong	Strong	Strong	Strong
Technical Position	Leading/ Strong	Strong	Strong	Strong	Fair
Product Quality	Leading	Strong	Strong	Strong	Strong
Health Factor	Weak	Strong	Strong	Strong	Strong
Overall	Strong ⁽¹⁾ / Fair	Strong/ Fair	Strong	Strong/ Fair	Strong/ Fair
Rank	2	2	1	2	2

(1) The health factor was weighted at 4 to 1 against other factors in the overall rating for UCC.

PROSPECTS FOR LONG-TERM INDUSTRY GROWTH AND EARNINGS QUALITY

COMPETITIVE POSITION	HIGH	MODERATE	LOW
LEADING		(UCC)	
STRONG	CABOT NAT. LEAD UCC DEGUSSA BAKER	(J.M.)	
FAIR		(CAREX)	
WEAK		(ATLAS)	

() ASBESTOS CATEGORY
 NON-ASBESTOS CATEGORY

KEY EXTERNAL ASSUMPTIONS

VOLUME GROWTH:

- . VISCOSITY CONTROL -- 8% PER YEAR
- . SHORT FIBER ASBESTOS -- 0% PER YEAR

GOVERNMENT:

- . CLEAR POSITION TAKEN ON HEALTH QUESTION WITHIN 2-3 YEARS.
- . NO WIDESPREAD BANS OR MANDATORY SUBSTITUTION
- . OSHA TLV NO MORE RESTRICTIVE THAN ~~1.0~~ FIBER/CC
0.5

COMPETITION:

- . NO NEW MAJOR EXPLOITATION OF COALINGA DEPOSIT
- . RUSSIANS DO NOT ENTER SHORT FIBER MARKET
- . VISCOSITY CONTROL COMPETITORS DO NOT REDUCE PRICES
- . MARKETING POLICY OF SHORT FIBER PRODUCERS UNCHANGED
- . ATLAS OPERATES THROUGH AT LEAST 1981

CUSTOMERS:

- . HEALTH FACTOR HAS NO SIGNIFICANT ADDITIONAL
IMPACT ON SHORT FIBER ASBESTOS MARKET
- . APPREHENSION OF CUSTOMERS IN THE VISCOSITY
CONTROL AREA WILL SUBSIDE IN 2-3 YEARS

CURRENT DIRECTION

THE ASBESTOS BUSINESS HAS BEEN OPERATED TO MAXIMIZE EARNINGS AND CASH FLOW. AGGRESSIVE MARKETING AND PRODUCT DEVELOPMENT PROGRAMS HAVE BEEN MAINTAINED. CAPITAL INVESTMENT HAS BEEN LIMITED TO DUST CONTROL IMPROVEMENTS AND OTHER MINOR REQUIREMENTS.

-- MAINTAIN POSITION WHILE MINIMIZING RISK IN VIEW OF MARKET UNCERTAINTIES.

SALES HISTORY

	<u>M TONS</u>				
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
SHORT FIBER	28.5	22.5	22.8	32.9	26.5
VISCOSITY CONTROL	1.6	2.1	2.1	2.4	2.2
TOTAL	30.1	24.6	24.9	35.3	28.7

CONSTRUCTION EXPENDITURES

	<u>\$ M.</u>
1975	542
1976	197
1977	47
1978	77
1979	57

STRATEGY SELECTION

<u>STRATEGY:</u>	<u>STRATEGIC DIRECTION</u>	
	<u>SHORT FIBER</u>	<u>VISCOSITY CONTROL</u>
CONSTANT CAPACITY (BASE CASE)	Maintain Position	Concede Position
SHORT FIBER EXPANSION	Improve Position	Concede Position
VISCOSITY CONTROL EXPANSION	Maintain Position	Maintain Position
UNIT ABANDONMENT	-	-

STRATEGY ASSUMPTIONS

CONSTANT CAPACITY (BASE CASE):

- . SHORT FIBER ASBESTOS
 - MARKET SHARE 18-20% OVER PLAN PERIOD
 - TOTAL VOLUME RELATIVELY CONSTANT

- . VISCOSITY CONTROL
 - MARKET SHARE 15% THROUGH 1982, DROPS TO 12% BY 1988
 - DUE TO CAPACITY LIMITATION OF CHEMICAL CURCUIT

SHORT FIBER EXPANSION:

- . SHORT FIBER ASBESTOS
 - INCREASE CAPACITY BY 25,000 TPY (75%) IN 1981,
AT CAPITAL COST OF \$6.3 MM
 - MARKET SHARE EXPANDED FROM 18% TO 32% BY 1982
(OBTAIN 12,000 TPY CONTRACT WITH GAF)

- . VISCOSITY CONTROL
 - SAME AS BASE CASE

VISCOSITY CONTROL EXPANSION:

- . SHORT FIBER ASBESTOS
 - SAME AS BASE CASE

- . VISCOSITY CONTROL
 - EXPAND CHEMICAL CURCUIT 1800 TPY (100%) BY 1983,
AT CAPITAL COST OF \$5.8 MM
 - MAINTAIN MARKET SHARE AT 15% THROUGH THE PLAN PERIOD

STRATEGY ASSUMPTIONS

UNIT ABANDONMENT

A - SHUT DOWN OPERATION

. CLOSE KING CITY PLANT IN 1980

-- DECOMMISSION COST \$1.2 MM

-- NET BOOK VALUE \$2.6 MM

B - SELL OPERATION

. 1980 SALE AT \$7 MM (7X EARNINGS)

RISK ADJUSTMENTS

DEPLETION ALLOWANCE

- . ASSIGNED 25% PROBABILITY TO THE LOSS OF DEPLETION
BY 1983

SALES

- . SHORT FIBER ASBESTOS VOLUME REDUCED BY 7-10%
STARTING IN 1984
- . VISCOSITY CONTROL PRODUCTS GROWTH RATE LOWERED
FROM 8% TO 6% FOR THE ENTIRE PLAN PERIOD

PLANT COSTS

- . INCREASED 3% ABOVE ANNUAL INFLATION RATE
DUE TO TIGHTENING REGULATIONS

CAPITAL COSTS

- . INCREASED 12.5% ABOVE PLAN

SALES VOLUME (RISK ADJUSTED)

M TONS

SHORT FIBER PRODUCTS

SHORT FIBER EXPANSION

BASE CASE

VISCOSITY CONTROL EXPANSION

VISCOSITY CONTROL PRODUCTS

VISCOSITY CONTROL EXPANSION

BASE CASE

SHORT FIBER EXPANSION

1979 80 81 82 83 84 85 86 87 88

RISK ADJUSTED FINANCIAL SUMMARY -- ASBESTOS

STRATEGY	1979 - 1988 IMPACT			1988 ANNUAL RESULTS			
	CASH FLOW \$ MM	EARNINGS \$/ SHARE	AVERAGE ROA	CAPITAL \$ MM	CASH FLOW \$ MM	EARNINGS \$/ SHARE	ROA
CONSTANT CAPACITY	12.0	.152	23	1.6	1.4	.017	36
SHORT FIBER EXPANSION	8.2	.128	10	8.5	1.8	.013	14
VISCOSITY CONTROL EXPANSION	7.8	.144	13	7.7	2.2	.021	19
UNIT ABANDONMENT							
-- SHUT DOWN	3.7	(.017)	-	0.3	-	-	-
-- SELL	8.0	.050	-	0.3	-	-	-

THIRD PARTY LIABILITY

CLASSES OF POSSIBLE PLAINTIFFS

- . INSULATION WORKERS
 - UCC HAS NO EXPOSURE

- . END USERS
 - LOW RISK TO UCC SINCE ASBESTOS IS "ENCAPSULATED"
IN MOST CUSTOMER PRODUCTS
 - POSSIBLE EXCEPTION IS TAPE JOINT COMPOUNDS.
CALIDRIA USED IN THIS APPLICATION FOR APPROX. 10 YRS.

- . CUSTOMER EMPLOYEES
 - DISSATISFACTION WITH LOW WORKERS' COMPENSATION AWARDS
MAY LEAD TO LITIGATION AGAINST ASBESTOS SUPPLIERS

THIRD PARTY LIABILITY

. WARNINGS TO UCC CUSTOMERS

- NO WARNING ON UCC PACKAGE FROM LATE 1965 TO JUNE 1978
- "WEAK" WARNING LABEL USED ON UCC PACKAGING BEGINNING
JUNE 1968
- OSHA WARNING LABEL PRESCRIBED IN JUNE 1972. NOT AN
ABSOLUTE BAR TO LIABILITY, BUT HAS NOT BEEN TESTED
IN COURTS
- MASSIVE GOVERNMENT EDUCATION CAMPAIGN IN 1978 A
FURTHER BASIS FOR CLAIMING PUBLIC HAS BEEN
ADEQUATELY WARNED

THIRD PARTY LIABILITY

ANALYSIS OF UCC EXPOSURE

- . 1963 - 1977
 - EXPECT 2-3 SETTLEMENTS PER YEAR @ \$60,000 EACH
 - WITH 20 YEAR INCUBATION PERIOD, CLAIMS WOULD
BEGIN IN 1983
- . POST 1977
 - ASSUME CLAIMS DROP TO \$40,000 PER YEAR TOTAL
- . RISK FACTOR
 - FIGURE LIABILITY 50% HIGHER THAN ABOVE ESTIMATES
- . ESTIMATE OF UCC EXPOSURE
 - CONTINUED OPERATION CASES -- \$4 MM
 - ABANDONMENT CASE -- \$3.5 MM

THIRD PARTY LIABILITY

ANALYSIS OF UCC EXPOSURE

IMPACT ON STRATEGY RESULTS

1979-1988 IMPACT (ZERO LIABILITY)

	<u>CASH FLOW</u> <u>\$ MM</u>	<u>EARNINGS</u> <u>\$/SHARE</u>	<u>AVERAGE</u> <u>ROA</u>
CONSTANT CAPACITY	12.0	.152	23
SHORT FIBER EXPANSION	8.2	.128	10
VISCOSITY CONTROL EXPANSION	7.8	.144	13
UNIT ABANDONMENT - SHUT DOWN	3.7	(.017)	-
- SELL	8.0	.050	-

1979-1988 IMPACT (ACCRUE FOR LIABILITY)

	<u>CASH FLOW</u> <u>\$ MM</u>	<u>EARNINGS</u> <u>\$/SHARE</u>	<u>AVERAGE</u> <u>ROA</u>
CONSTANT CAPACITY	9.9	.120	18
SHORT FIBER EXPANSION	6.1	.096	8
VISCOSITY CONTROL EXPANSION	5.7	.112	10
UNIT ABANDONMENT - SHUT DOWN	1.9	(.045)	-
- SELL	6.2	.022	-

RECOMMENDED STRATEGY

CONSTANT CAPACITY

- . HIGHEST EARNINGS QUALITY
- . LIMITED CAPITAL INVESTMENT
- . LOW RISK (POTENTIAL THIRD PARTY LIABILITY LARGELY
RELATED TO PRE-'77 OPERATION)

ANNUAL CHECK POINTS

- . GOVERNMENT REGULATORY ACTION.
- . STATUS OF ASBESTOS LITIGATION.
- . MARKET DEMAND.

ACTION PLANS

- . MAINTAIN STRONG TECHNICAL SERVICE IN VISCOSITY CONTROL AREAS.
- . CONTINUE TO WORK WITH GOVERNMENT AGENCIES ON ASBESTOS
REGULATORY MATTERS.
- . SPONSOR RESEARCH ON UCC CALIDRIA.