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FEB 10 1981

ASBESTOS INDUSTRY QUARTERLY REPORT - 4Q 1980

Distribution

G. R. Adams

R. E. Byrne, Jr.

J. F. Collins

W. B. DeAtley

G. L. Dickson

R. L. Folkman

R. F. X. Fusaro/J. J. Sibley

B. L. Ingalls

R. D. Koch

G. M. Lincoln

T. P. Norris

H. B. Rhodes

[redacted]

J. E. Walsh

File

ASBESTOS INDUSTRY QUARTERLY REPORT - 4Q 1980

(J. L. Myers, 2/2/81)

Asbestos sales for 1980 are compared to Budget and Forecast IV in the following table:

	Actual Sales		% of Budget		% of Fcst IV	
	Tons	$M	Tons	$	Tons	$
Domestic	21141	3872	105	100	100	99
Export	8807	3306	90	110	96	97
Total	29948	7178	100	105	98	98

Export and total dollars set new records for annual sales, although the total was only $22,000 higher than 1978, the previous record year. Domestic sales were above budget for floor tile and drilling mud, while RG products finished at 85% of budget. By contrast, export sales of RG products were 122% of budget and tile sales were below budget due to our Australian customer discontinuing the use of asbestos in the second quarter. Sales to tile customers are tabulated below:

Customer	U.S. TILE CUSTOMER SALES, $M Actual	% Budget
Kentile	810	111
Uvalde	532	120
GAF	222	313
Flintkote	55	52
Winburn	5	23
Amtico	0	0
TOTAL	$1624M	116%

Sales to W. R. Grace, primarily for Europe, exceeded one million dollars for the first time; and Tomoe purchases for distribution in Japan set another record at $1.7 million. Following is a summary of export sales by country:

Country/Sales Rep.	1980 Sales, $M Actual	% Budget
Japan/Tomoe	1741	103
Europe/Grace	931	116
Brazil/UC	171	116
Canada/H & C	134	104
Australia/UC	115	87
Taiwan/UC	87	105
Mexico/Grace	37	--
S. Africa/Grace	29	--
S. Africa/UC	24	267
Argentina/Grace	17	--
Europe/Mercomed	9	64
Taiwan/Grace	6	--
Colombia/Grace	4	--

As indicated by the above, Grace has increased their activity in non-European countries and is competing with Union Carbide in S. Africa and Taiwan. This competition presents some complications, such as with pricing, but it does get the attention of the UC sales offices.

Highlights for 1980 are summarized as follows:

1. March and first quarter sales established monthly and quarterly records.

2. Domestic sales personnel were reduced from four to three. Geographical responsibilities were revised and Eastern Canada was assigned to export sales.

3. Flintkote shut down floor tile plants in Chicago (March) and Los Angeles (November), leaving Toronto as their only tile production facility. We were supplying LA about 75 TPM, but nothing to Chicago or Toronto. Winburn shut down in the second quarter, a loss of about 200 TPY.

4. Atlas experienced major operating difficulties in the first quarter and "officially" discontinued production in the second quarter.

5. Calaveras discontinued production of Grade 7 products in November, but this will have little effect on our sales in 1981.

6. We have obtained continuing business from GAF in Long Beach and Vails Gate because of the Atlas shutdown. This should continue in 1981, although GAF tile plants are now up for sale.

7. Auto maker policies on asbestos use and low auto production caused a significant loss of RG sales.

8. Drilling mud sales were strong all year and were 165% of budget at year end. This is due to the record number of rigs operating, but our market share continued to drop due to the marketing efforts on Flosal, a wetted and prilled product from J-M. We decided not to offer a wetted product but did supply about 100 tons of UNIVIS (1/8" SSG pellets) for field evaluation of dust generation and down-hole performance. Tests will continue in 1981 and improved packaging will be considered.

9. During the first half, Great Gulf Chemicals purchased about 500 tons of CSV from Montello to make silane-treated asbestos (SMF) under contract from Dresser Industries. Dresser blends SMF with other materials to make a product for use in oil-base drilling fluids. Great Gulf began experiencing severe production problems in the last quarter and singled out CSV as the cause for off-spec SMF. Although we are sure CSV was not at fault, they tested HPO from a regular distributor (D&F-Houston) and, by the end of the year, had essentially switched from CSV to HPO. Although we have an exclusive arrangement with Montello, the Law Dept. advised that we should not "get involved." The situation has been discussed with Montello and no significant problems are anticipated.

10. Although Canadian asbestos producers had some labor problems, all contracts were settled before there was any impact on our business. There is a considerable excess of Grade 7 fiber and by the end of the year it was becoming evident that we could expect unusual pricing pressures in 1981, especially in Japan and the Eastern U.S.

11. Although there was a constant threat of new regulations, none were promulgated which would have a serious effect on our business. The main threat to the asbestos industry was the continuing use of the media by the agencies to instill an unfounded fear of asbestos. We anticipate reduced regulatory pressures for the next four years.

12. Although sales were at a record level, financial performance was poorer than prior years because of unexpectedly high production costs, especially energy-related. Following is a summary of the last three years:

	NIFS		Gross Margin		Net Income		
	$M	% Budg.	$M	% Sales	$M	% Sales	%ROA
1978	7156	126	2944	41	1190	17	25.4
1979	6360	97	2439	38	1041	16	19.8
1980	7178	105	2139	30	827	12	16.6
1981 Budget	9356	--	2824	30	1255	13	21.8

13. The improved performance budgeted for 1981 can only be achieved by implementing large price increases to offset production and other cost increases. One distributor agreement was terminated at the end of 1980 which will result in a $46,000 savings in commissions in 1981.

14. Customer technical service activities for the year are summarized in the attachment.

UC 149-2

UNION CARBIDE INTERNAL CORRESPONDENCE

METALS DIVISION • P. O. BOX 579 • 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) J. L. Myers
Division UCC-Metals Division
Location Niagara Falls, NY

Date January 7, 1981
Originating Dept. "Calidria" Asbestos
Answering letter date

Copy to R. E. Byrne, Jr.
File

Subject Technical Service Activity Report, 4th Quarter - 1980 and Year End Summary of Activities

Technical Services activities for the 4th quarter 1980 are attached.

Dust monitoring services were provided at 16 customer facilities during 1980, a 43% decline from 1979. However, air monitoring programs in general and AIA/NA-DMAP related work increased substantially during 1980. Monitorings related to UNIVIS evaluations at drilling locations and special tests performed at select residential sites in California were considerably involved; both from the standpoint of field work and overall manpower.

Developmental investigations included two general areas of study; evaluations of asbestos physical properties and test methods, and product development. A general breakdown of specific areas of study is as follows:

<u>Asbestos physical properties & test methods</u>

1) Centrifugal techniques for particle sizing
2) Fann viscometer determinations of rheological characteristics
3) Marsh Funnel determinations of rheological characteristics
4) Development of an asbestos slurry solids determination test based on densimeter techniques

<u>Product Development</u>

1) LTX programs - Asbestos liquid thixotropes including, DIOP, polymer resins and oil treatments
2) Study - physical properties of Standard, Super-Standard and High Purity products
3) Silane treated RG-244 developmental products
4) Study of RG-244 physical & rheological properties and related test methods.

Approximate time allocations for the principle areas of activity, during 1980 were as follows:

Customer dust count services	15%
Routine Technical service	25%
Plant Assistance:	
Routine	10%
Special Air Monitoring study	20%
Developmental	25%
AIA/NA related projects	5%

B. L. Ingalls

B. L. Ingalls

BLI:dal
Attachments

Developmental Programs

and

Plant Assistance

4th Quarter - 1980

Month	Originated By	Job Description
Oct.	BLI	Study of new laboratory test methods (Main Circuit).
	WBD	Quality Control testing of monthly production composites.
Nov.	BLI/WBD	Investigation for new laboratory QC test method of RG-244
	WBD	Monitoring Program - Airborne asbestos concentrations in specific California residential sites.
	WBD	Quality Control tests of monthly production composites.
Dec.	FRA	Physical properties tests of select asbestos slurry samples prepared by UCC engineering department.
	WBD	Monitoring Program - Airborne asbestos concentrations in specific California residential sites.
	HBR	AIA/NA - DMAP evaluation of optical resolution determination slides prepared by DMAP.
	WBD	Quality Control tests of monthly production composites.

BLI:dal
1/8/81

Technical Services

4th Quarter - 1980

Month	Customer	UCC Rep.	Job Description
Nov.	Dresser Ind.	JLM	Evaluation of RG-244 in non-aqueous drilling fluids.
	AIA/NA	HBR	Evaluation of test resolution slides for DMAP.
Dec.	Montello	JEW	Evaluation of plenum chamber airborne emission characteristics of SSG products.
	Tomoe	REB	Physical properties testing of SG-130 product.
	W. R. Grace	REB	Investigation of customer complaint - SX-14 contamination.
	Bouffard Assoc.	GLD	Evaluation of plenum chamber emission characteristics of acetate treated RG-244.

Dust Counts Performed

at Customer Facilities

4th Quarter - 1980

Month	Customer
Nov.	Global Plastics

2WR

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ASBESTOS INDUSTRY QUARTERLY REPORT - 4Q 1979

(J. L. Myers, 2/15/80)

Asbestos sales for 1979 are compared to Budget and Forecast IV in the following table:

	Actual		% Budget		% Forecast IV	
	Tons	$M	Tons	$	Tons	$
Domestic	19577	3553	88	85	102	98
Export	9093	2804	101	117	95	94
TOTAL	28,670	6357	92	97	100	96

Sales of RG-244 and drilling mud products were, respectively, only 72% and 54% of budgeted tons. This was the main reason for below budget performance and erosion of sales in these areas is expected to continue due to health/regulatory effects unless "dust-free" products are developed and marketed. The Fisher-Body Division of GMC has issued an edict that no new formulations will be evaluated if they contain asbestos. Floor tile sales were above budget due to Kentile purchases which exceeded loss of sales to GAF. We anticipate no further sales to GAF unless we make a competitive price offer or their current supplier falters.

Although domestic sales were only slightly below budget, the disparity between regions was significant due to unexpected circumstances. The following table illustrates this:

	Actual Sales		% Budget	
Region	Tons	$M	Tons	$
East	3995	1034	177	122
Midwest	6855	1021	172	119
South	6711	1033	66	73
West	2060	465	35	44
TOTAL	19,621	3553	88	85

Export sales in the 4th Quarter were artificially low because of shipments which were made but not invoiced before the closing date. These will be picked up in January. Sales of RG-244-EX and SX-24 were below expectations because of plant problems in making specification product. This situation has now been corrected and normal shipments resumed although we have a lot of "catching up" to do. For the year, export sales were a record $2804M, 8% higher than 1978. Following is a summary by country:

	Actual		% Budget	
Country	Tons	$M	Tons	$
Australia	571	147	51	85
Brazil	105	166	181	227
Canada	144	102	49	79

Cont'd

Country	Actual Tons	Actual $M	% Budget Tons	% Budget $
Europe-Grace	579	678	118	126
Non-Europe-Grace	38	45	141	180
Europe-Mercomed	59	13	128	163
Hong Kong	3	6	--	--
Japan	7569	1584	113	121
S. Africa	10	22	200	220
Taiwan	18	41	106	121
TOTAL	9096	2804	101	117

As expected, the CAL-OSHA Standards Board ignored our testimony and established an action level of 0.1 f/cc to trigger monitoring and medical examinations. A copy of Dr. Rhodes 4th Quarter Activity Summary is enclosed.

Significant quantities of CSV are now being sold through Montello to Dresser's compounder for production of silane-treated asbestos for use in oil base muds. Considerations are being given to bulk shipments. Montello has had good response from "UNIVIS", an oil-wetted pellet, and an engineering study was begun to assist in determining whether or not we should make this product at King City. The development of a "liquid thixotrope" is continuing with a customer/compounder and distributor. Optimism for a successful market program is beginning to prevail. A summary of technical/customer service activities is enclosed.

John L. Myers

JLM:dal
Enclosures

UC 149-2

INTERNAL CORRESPONDENCE

METALS DIVISION • P. O. BOX 579 - 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 1430

To (Name) Division Location	Mr. E. W. Kantz - Niagara Falls Mr. R. G. Beverly - Grand Junction	Date	January 21, 1980
		Originating Dept.	Safety, Health and Environmental Affairs
		Answering letter date	
Copy to	Mr. J. L. Myers	Subject	Fourth Quarter Activity

A detailed listing of my time allocations and main activities during the last quarter of 1979 is attached. The time split was about 60% asbestos and 40% uranium, as anticipated.

The major uranium effort in this quarter was the completion of the AMC response to the GEIS and testimony in Albuquerque. I have also become involved with two new AMC Subcommittees:

1. Ad Hoc Subcommittee on Asbestos in Water - This group is preparing responses to the Calspan report on asbestos in water and the proposed EPA Water Quality Criteria Document on asbestos. It is anticipated that this group will phase out after this specific task is completed.

2. Subcommittee on Carcinogens - This is a new subcommittee whose initial job is to prepare a response to the EPA generic proposal for airborne carcinogens (Section 112, Clean Air Act). The specific charter is still being defined but it appears that this will be quite an active group.

It should be noted that both of these activities overlap very much with similar AIA/NA actions with which I am involved. The joint interest has resulted in good coordination, cooperation, and exchange of information between the two organizations, which should prove useful in the future.

The asbestos activities include the completion of the Proceedings of the Washington Colloquium and substantial time on the preparation of the technical report on the Round-Robin monitoring study. The latter has proven to be more complex than originally anticipated and will be a main effort for the first quarter of 1980. Moderate time was also spent in the preparation of comments on several regulatory responses prepared by Kirkland and Ellis. This will also be a major effort in the first quarter of 1980.

A proposed Position Charter, MOP's and appropriate action plan for 1980 will be submitted separately.

H. B. Rhodes

Harrison B. Rhodes

/rmm
Attach.

QUARTERLY SUMMARY

Year 1979 Quarter 4th

Major Job Designation	L-1 Monitor and Address	L-2 Forewarn & Inform Managers	L-3 Represent UCC at Asbestos Mtgs.	L-4 Working Relation-ships	S-1 Represent UCC at Meetings - Other Meetings	S-2 Provide Customer Service - Asbestos	Other	1.3 Preparation of Plans (General)		
URANIUM										
Regulatory										
1. EPA - Radioactive Waste Criteria										
2. EPA - 40 CFR-190	4				4					
3. EPA - Inactive Tailings (Nov. 8, 1979)										
4. EPA - Active Tailings (May 8, 1980)										
5. NRC - From GEIS	94									
6. NRC - From #3 (EPA Inactive Tailings)										
7. EPA - Generic Carcinogens	6				2					
8. EPA - Water Quality	12				8					
Legislative										
1. U.M.T.A. 78 + Amendments										
2. Co-Mingled Tailings										
Conferences and Training		4								
Miscellaneous							14			
TOTALS	116	4	0	0	12	0	14	0	146	38%
ASBESTOS										
General										
1. AIA/NA - Executive Committee			24							
" - Board of Directors			4							
" - Monitoring Committee										
" - Technical Committee										
" - Standards Advisory Committee	4		8							
2. Air Monitoring										
Round Robin	45									
OMAP	2		32							
Washington Colloquia	42									
3. Customer Service						12				
4. General Programs										
Help										
Distributors - Education										
Monitoring										
Worker Education										
Regulatory										
1. OSHA										
2. EPA (Water Qual., Work Prac.)	15									
NESHAPS										
TOSCA	6									
RECRA										
3. DOT										
4. CPSC	3									
5. California										
6. Other States										
Legislative										
1. School Ceilings	5									
2. Workmen's Compensation	2						2			
Conferences and Training										
Miscellaneous	2	18					9			
TOTALS	126	18	68	0	0	12	11	0	235	61%
GENERAL										
Planning								7		
Training										
TOTALS	0	0	0	0	0	0	0	7	7	1%
OVERALL TOTALS	242	22	68	0	12	12	25	7	388	100%

UC 149-2

UNION CARBIDE INTERNAL CORRESPONDENCE

METALS DIVISION • P. O. BOX 579 • 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Mr. J. L. Myers
Division UCC - Metals
Location Niagara Falls, NY

Date December 31, 1979
Originating Dept. "Calidria" Asbestos
Answering letter date

Copy to Mr. R. E. Byrne, Jr.
File

Subject Technical Services - Activity Report - Fourth Quarter 1979

Technical services activities during the fourth quarter are summarized in the attachments.

Dust monitoring services were provided at 28 customer facilities during 1979. Six monitorings were also conducted at Union Carbide facilities including Niagara Falls and King City. The technical service group participated in three developmental projects sponsored by the Dust Measurement Advisory Panel of the AIA.

Some 24 customer related technical service projects were performed during 1979. An updated and revised edition of the "Calidria" Asbestos Physical Tests and Procedures Manual was issued in December.

Developmental programs included silane-treated RG-244, UNIVIS (oil-treated SG-200X) and production related projects. Typical properties of standard, superstandard, and high-purity products were reviewed based on extensive testing of 1976, 1977 and 1978 production materials.

Mr. Fred Smith joined the technical services group in June. He has been in OJT programs pertaining to dust monitoring and counting projects and laboratory techniques. He attended the NIOSH Asbestos Count Program in September.

ON-THE-JOB-TRAINING

The writer attended two seminars during the year; Asbestos Materials Techniques, University of Lavel, and a course on Persuasive Communications by Nurenberg Communications.

B. L. Ingalls

Blair L. Ingalls

/rmm
Attachments

UCC 005687

Developmental Programs
and
Plant Assistance
Fourth Quarter - 1979

Month	Requested By	Job Description
October	B. L. Ingalls	Centrifugal test procedure study.
	S. Ramachandran	Silane-treated RG-244 patent evaluation.
	W. B. DeAtley	Monthly QC composite testing.
	W. L. Murphy	Niagara Falls plant OSHA compliance inspection.
November	W. B. DeAtley	Assisted King City plant with RG-244 circuit problems.
	W. L. Murphy	Established program for the disposal of laboratory toxic and hazardous wastes.
	S. Ramachandran	Silane-treated RG-244 patent evaluation.
	W. B. DeAtley	Monthly QC composite testing.
December	J. L. Myers	Pilot tests of UNIVIS production equipment at Combs and Company.
	H. B. Rhodes	DMAP-AIA specific field training slides evaluation.
	S. Ramachandran	Silane-treated RG-244 patent evaluation.

Technical Services
Fourth Quarter - 1979

Month	Customer	UCC Rep.	Job Description
October	State University at Brockport	Dr. F. Mumpton	SEM evaluation of volcanic tuff samples from Turkey.
	W. R. Grace	R. E. Byrne	Preparation of SEM photomicrographs of RG-144 and RG-244.
	-	J. L. Myers	Compilation of data for general marketing brochure.
	Karnak	G. L. Dickson	Customer complaint concerning moisture content of RG-244.
November	-	B. L. Ingalls	Compilation of asbestos physical tests and procedures manual.
December	-	R. E. Byrne	"Calidria" asbestos brochure revisions.
	-	B. L. Ingalls	Characterization of "Calidria" products typical properties.

Summary of Dust Counts
Fourth Quarter - 1979

Month	Customer	UCC Representative
October	Ceilcote Cleveland, Ohio	G. L. Dickson
	Durable Coatings Cleveland, Ohio	G. L. Dickson
	Michael-Walters Valier, Illinois	E. J. Kleber
November	Automotive Chemical Detroit, Michigan	E. J. Kleber
December	Mica Kote San Leandro, California	T. P. Norris
	UCC - Lab 114 Niagara Falls, New York	B. L. Ingalls
	UCC - Lab 118 Niagara Falls, New York	B. L. Ingalls
	UCC - Lab 205 Niagara Falls, New York	B. L. Ingalls

ASBESTOS INDUSTRY QUARTERLY REPORT - 1Q 1980

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MAY 13 1980

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[redacted]
J. E. Walsh
File

ASBESTOS INDUSTRY QUARTERLY REPORT - 1Q 1980
(J. L. Myers, 5/2/80)

Asbestos sales for the first quarter of 1980 are compared to budget in the following table:

	Actual		% Budget	
	Tons	$M	Tons	$
Domestic	5636	1020	112	106
Export	2519	1000	103	134
TOTAL	8155	2020	109	118

Record export and total monthly sales were established in March and the quarterly total of $2020M is higher than any previous quarter. Drilling mud sales made an unexpected turnaround and were more than double the 1979 average.

Domestic Sales by region are compared below:

	Actual Sales		% Budget	
Region	Tons	$M	Tons	$
East	717	208	91	97
Midwest	2081	284	138	106
South	2352	411	121	134
West	472	121	60	70

Salesmen were reduced from four to three with Ed Kleber's transfer to Al-Chem group at the end of the first quarter. Ed's territory has been reassigned to the remaining salesmen, which should improve the balance between regions.

Floor tile sales continued high, partially due to unexpected purchases by GAF because of Atlas production problems. GAF has indicated continuing purchases from us at modest levels. Shipments to Kentile-Chicago continue at a rate limited only by the turnaround time of 10 bulk cars. If this continues we will determine whether or not to add additional cars to the fleet. Flintkote shut down their Chicago plant, which we did not supply, and this could result in more business for their competitors, whom we do supply. Decreased housing starts have not affected our sales as yet but are expected to as the year progresses.

Although drilling mud sales are currently high, continued pressure from our competition with their wetted product is expected to erode our market share at an increased rate. Although we have dropped the oil-wetted pellet program, we will work closely with Montello to develop some type of lower-dust product.

RG sales are being restricted by auto makers desires to eliminate asbestos from all cars. Ford has now adopted a policy similar to GM but without the same "gusto". The decline in auto production will also have an adverse effect on sales.

Export sales were the real bright spot during the report period, mainly due to above budget sales of RG-244 (148%) and SX-24 (166%). Some shipments were carried over from December due to plant production problems, but sales have been strong through the end of the quarter. Sales to Brazil and Australia are over 200% of budget but are not expected to continue at these levels.

Regulatory activities continue at a high level although no new regulations have been promulgated. Dr. Rhodes reviewed activities during the first quarter for all concerned so they will not be repeated here.

Customer and other technical service activities are described in the attached report from Blair Ingalls.

After the annual weather problems, Atlas has resumed operations and appears to be supplying previous demand. Two Canadian companies are on strike but this does not effect us. Our main Canadian competitor's labor situation is such that workers could strike on 5/11/80. There are mixed reports on whether or not they will.

UC 149-2

UNION CARBIDE **INTERNAL CORRESPONDENCE**

METALS DIVISION

P. O. BOX 579 · 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Mr. J. L. Myers
Division UCC-Metals Division
Location Niagara Falls, NY

Date April 9, 1980

Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to Mr. R. E. Byrne, Jr.
File

Subject Technical Service Report
First Quarter - 1980

Technical Services activities for the first quarter-1980 are attached.

Customer complaints requiring technical assistance and dust monitorings have been lower this first quarter comparable to the past two years. Emphasis has been on laboratory experimentations pertaining to physical properties, procedural techniques, centrifugal, Fann rheological tests, etc.

Fred Smith is currently working full time in the laboratory under the direction of Bob Kennedy as part of his continuing on-the-job training program in laboratory testing and procedural techniques.

B. L. Ingalls

BLI:dal
Attachments

Technical Services
First Quarter - 1980

Month	Customer	UCC Rep.	Job Description
January	A. T. Callas Co.	E. J. Kleber	Plenum emissions test on Megaloid DETOX-H-1.
"	A. T. Callas Co.	"	Evaluation of Reichhold/ RG-244 LTX premix.
February	Evans Products	T. P. Norris	Prepared calcined HPO for customer evaluation.
March	Bouffard Associates	G. L. Dickson	Plenum emissions tests on Epoxide and treated RG-244.

Dust Counts Performed at Customer Facilities
First Quarter - 1980

Month	Customer
January	Global Plastics
"	Dolphin Chemical
February	Carboline Company
"	Protective Treatments, Inc.

Developmental Programs
and
Plant Assistance
First Quarter - 1980

Month	Requested By	Job Description
January	J. L. Myers	Replicate AEC testing of 1979 SVB product.
"	R. E. Byrne, Jr.	Evaluation of COF-25 LTX performance characteristics.
"	B. L. Ingalls	Study of centrifugal procedural techniques.
"	H. B. Rhodes	Evaluation of EMAP-AIA Specific Field Training Slides.
"	W. B. DeAtley	RG-244 Monthly QC replicate testing.
February		Chemical leached Ultra-pure chrysotile preparations for my reduction tests.
"	W. B. DeAtley	RG-244 monthly QC replicate tests.
	B. L. Ingalls	Study-physical properties of Standard, Super-Standard and HP products.
March	W. B. DeAtley	RG-244 monthly QC replicate tests.
"	V. D. Holt	Limiting air velocity characteristics of bulk Super Standard mini-pellets.
"	H. B. Rhodes	Evaluation of DMAP-AIA Specific Field Training Slides.

BLI:dal
4/9/80

ASBESTOS CPU

Definition

The Asbestos Business includes the mining, milling and marketing of short fiber, high quality asbestos. Sales activities are worldwide and export sales dollars are a significant 44% of the total for 1980.

External Environment

Of major importance is the negative impact of potential Government regulations. Although not currently expected to happen, TLV's proposed by NIOSH of 0.1 fiber/cc are probably not attainable by our plant or customers, and withdrawal from this business would be necessary. If regulatory compliance can continue to be achieved, the plant should operate at 90-100% of capacity for the next two years.

Component Objectives and Strategies

This business should be operated to maximize earnings and maintain a positive cash flow. Capital investment should be limited to dust control and packaging improvements and minor modifications to produce "low-dust" products, such as "UNIVIS". Plant expansion should not be considered under the current asbestos regulatory and "publicity" climate.

This business should earn one-half to one million dollars per year for the foreseeable future unless precluded by Government action. Alternate strategic plans for the asbestos business are presently being evaluated and recommendations regarding the preferred strategic direction will be presented to management in early 1980.

New Business Programs

None.

Budget Year Action Plans

- To continue the vigorous program directed toward minimizing needlessly burdensome regulations.
- To continue market development of special products, especially those with low-dust characteristics.
- To evaluate the future course of the Asbestos Business in light of Government regulations and the high profitability of the business.
- To continue aggressive sales activities outside the United States where regulatory pressures are less severe.

Financial Performance

Current Year (1979)

	1978 Actual	1979 Budget	1979 Est. Actual	% Budget
Net Sales ($MM)	7.2	6.6	6.6	100
Net Income ($MM)	1.2	0.6	1.1	183
ROA (%)	25.4	11.4	20.0	175
ROS (%)	16.7	9.2	15.9	173
Net Cash Generated ($MM)				
New Basis	0.5	0.4	1.1	-
Old Basis	1.0	0.6	1.4	-

Higher than budgeted earnings and cash generation were mainly the result of unbudgeted price increases. Plant operations were reduced from 20 to 15 shifts per week in September to control product inventories and improve cash flow.

Budget Year (1980)

	1979 Budget	1979 Est. Actual	1980 Budget
Net Sales ($MM)	6.6	6.6	6.9
Net Income ($MM)	0.6	1.1	0.6
ROA (%)	11.4	20.0	10.9
ROS (%)	9.2	15.9	8.2
Net Cash Generated ($MM)			
New Basis	0.4	1.1	(0.1)
Old Basis	0.6	1.4	0.2

Sales volume and income are budgeted to increase about 3% and 20-shift plant operation should be resumed by the end of the second quarter. No increase in sales prices is budgeted for 1980.

Following Year (1981)

	1980 Budget	1981 Forecast
Net Sales ($MM)	6.9	7.6
Net Income ($MM)	0.6	0.6
ROA (%)	10.9	11.3
ROS (%)	8.2	8.2
Net Cash Generated ($MM)		
New Basis	(0.1)	-
Old Basis	0.2	0.3

Increased sales volume of about 7% is expected in 1981, primarily due to an increased share of the drilling mud market with "UNIVIS" and modest increases in floor tile and export sales. The major uncertainty in the Asbestos Business will continue to feel the effect of government regulations and adverse publicity.

ASBESTOS CPU

CONTINGENCY PLANS

Plan Title	Activating Events	Plan Description
Government Regulations	OSHA Imposes More Stringent Limits on Exposure	Appropriate Recommendations Will be Made
Sales Volume	Loss of Sales to Competition Due to Unfavorable Pricing	Reduce Prices or Curtail Production

Fct III Asbestos

UC 149-2

UNION CARBIDE

INTERNAL CORRESPONDENCE

RECEIVED

JUL 15 1980

METALS DIVISION

P. O. BOX 579 • 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Messrs.
G. R. Adams

Division [redacted]

Location UCC-Metals Division
270 Park Avenue
New York, NY 10017

Date July 11, 1980

Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to Messrs.
R. E. Byrne, Jr.
W. B. DeAtley/G. L. Vessels
G. L. Dickson
B. L. Ingalls
T. P. Norris
J. E. Walsh
File

Subject Revised Fcst III-1980 and 1981 Preliminary Estimate

Attached is a copy of the Subject as revised on 7/10/80 and submitted to Mrs. Nielsen for financial analysis. The 6/18/80 version can be discarded.

The revised Fcst III shows a reduction of $311,000 from the original. June actual was $183,000 less than originally predicted and second half sales estimates for RG products have been reduced due primarily to low auto production and continuing losses for "health" considerations.

Tomoe (Japan) has advised that they will enter no orders for August shipment due to a slipping economy and high inventories. Our floor tile customer in Australia has reduced requirements due to a formulation change and Grace has also indicated a slowing of requirements for SYLODEX products.

Although all indications are that Atlas is shutdown, GAF will not admit it or provide any estimate of requirements if they can't get Atlas. Estimated sales have not been increased due to the Atlas situation. There have been major changes in the GAF pruchasing organization and we will approach the new personnel in early August.

The new Fcst III is 99% of budgeted tons and 102% of budgeted dollars. The 1981 preliminary estimates has been reduced by $212,000.

John

John L. Myers

JLM:dal
Attachment

UCC 005700

"CALIDRIA" ASBESTOS SALES FORECAST III 1980 By J. L. Myers Date Revised 7/10/80

PRODUCT	Thru 5/80		June Act.		1st Half Act		3Q		4Q		FCST. III		FCST. II		Budget		1981	
Domestic	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$
SG-103-5	718	87	0	0	718	87	341	41	341	42	1400	170	2150	261	2100	247	1400	170
SG-103-7	446	54	93	11	539	65	431	53	430	52	1400	170	1270	155	1560	184	2000	244
SG-103-9	270	33	23	3	293	36	47	6	0	0	340	42	240	30	200	24	0	0
SG-104	4837	506	380	40	5217	546	2392	250	2391	250	10000	1046	9760	1020	9400	940	10250	1073
SG-130	77	13	1	0	78	13	61	10	61	10	200	33	300	47	560	88	200	33
SG-200	180	26	0	0	180	26	90	13	90	13	360	52	360	52	360	49	350	51
SG-210	112	35	50	11	162	46	94	27	94	27	350	100	400	95	595	119	300	85
HPP	24	4	0	0	24	4	0	0	0	0	24	4	0	0	0	0	0	0
HPO	239	55	40	10	279	65	135	30	136	30	550	125	1000	210	1270	254	600	136
RG-100	192	97	0	0	192	97	60	30	0	0	252	127	320	160	320	144	300	150
RG-110	94	23	1	0	95	23	52	13	53	14	200	50	325	78	320	70	200	50
RG-144	180	109	-6	-2	174	107	113	64	113	64	400	235	450	263	490	245	400	235
RG-244	144	364	6	19	150	383	100	250	100	250	350	883	427	1090	520	1144	400	1017
SG-200-X	---	---	--	--	0	0	100	16	0	0	100	16	0	0	0	0	0	0
CSV	1147	183	665	106	1812	289	594	95	594	96	3000	480	2200	352	1800	259	3200	512
SHUR	326	53	120	19	446	72	227	36	227	36	900	144	700	112	600	86	900	144
Total Domestic	8986	1642	1373	217	10359	1859	4837	934	4630	884	19826	3677	19902	3925	20095	3853	20500	3900
Export																		
SG-100-EX	1453	182	0	0	1453	182	723	91	724	91	2900	364	3100	384	3100	372	3200	402
SG-102-EX	323	40	0	0	323	40	88	10	89	10	500	60	650	87	550	64	500	60
SG-130-EX	52	9	10	2	62	11	69	12	69	12	200	35	200	33	200	30	200	35
AS-200	451	63	169	24	620	87	230	32	230	32	1080	151	920	132	920	121	1100	154
HPP-EX	1059	195	187	34	1246	229	727	134	727	134	2700	497	2930	539	2930	498	2800	515
HPO-EX	347	76	201	44	548	120	176	39	176	39	900	198	800	176	665	135	900	197
T-135-P-EX	38	23	18	12	56	35	27	18	27	18	110	71	110	71	110	64	100	63
RG-144-EX	144	80	1	1	145	81	77	42	78	43	300	166	300	166	300	147	350	196
SX-14	54	22	8	4	62	26	34	14	34	14	130	54	130	51	130	47	150	63
RG-244-EX	200	460	25	57	225	517	88	202	87	202	400	921	400	920	370	766	450	1033
SX-24	275	416	35	53	310	469	120	181	120	181	550	831	600	900	540	756	650	982
SG-210	12	3	0	0	12	3	0	0	0	0	12	3	12	3	0	0	0	0
Total Export	4408	1569	654	231	5062	1800	2359	775	2361	776	9782	3351	10152	3462	9815	3000	10400	3700
TOTAL	13394	3211	2027	448	15421	3659	7196	1709	6991	1660	29608	7028	30054	7387	29910	6853	30900	7600

UC 149-2

Asbestos Fct II

UNION CARBIDE INTERNAL CORRESPONDENCE

RECEIVED

APR 1 1980

METALS DIVISION

P. O. BOX 579 · 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Division Location	F. J. Shortsleeve/R. W. Rebholz UCC-Metals Division 38th Floor 270 Park Avenue New York, NY 10017	Date	April 7, 1980
		Originating Dept.	"Calidria" Asbestos
		Answering letter date	
Copy to	Messrs. G. R. Adams R. E. Byrne, Jr. W. B. DeAtley/G. L. Vessels G. L. Dickson T. P. Norris J. E. Walsh File	Subject	Revised Fcst. II

Attached is a copy of the revised Forecast II which was verbally submitted to Mrs. Nielsen and Mr. Vessels on 3/27/80. Please discard the Fcst. II sent to you on 3/20/80.

Although several changes were made in the March estimates and on individual products, the year end difference is only about 2% less than the original Fcst. II.

Because of unexpected shipments and export invoices which cleared late in the month, March and 1Q estimates on the attached sheet are somewhat different than actual. Following is a comparison:

	1Q 1980 Sales, $M		
	Budget	Fcst. II	Actual
Domestic	960	966	1018
Export	746	988	1002
Total	1706	1954	2020

John L. Myers per RAB

John L. Myers

JLM:dal
Attachment

UCC 005702

CALIDRIA ASBESTOS SALES FORECAST II 1980 (GEM 3/17/80) (Rev. 3/27/80)

PRODUCT	JAN. & FEB.		MAR. Est.		1Q Estimate		2Q		3Q		4Q		FCST. II		Budget		Fcst. II % of Budget	
Domestic	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$
SG-103-5	278	34	72	8	350	42	600	73	600	73	600	73	2150	261	2100	247	102	106
SG-103-7	146	18	224	27	370	45	300	37	300	37	300	36	1270	155	1560	184	81	84
SG-103-9	62	8	178	22	240	30	0	0	0	0	0	0	240	30	200	24	120	125
SG-104	2138	223	722	75	2860	298	2300	241	2350	241	2350	240	9760	1020	9400	940	104	108
SG-130	32	5	18	3	50	8	83	13	84	13	83	13	300	47	560	88	54	53
SG-200	60	9	0	0	60	9	120	18	120	17	60	8	360	52	360	49	100	106
SG-210	56	14	24	5	80	19	107	25	106	25	107	26	400	95	595	119	67	80
HPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--
HPO	81	17	39	8	120	25	293	62	294	61	293	62	1000	210	1270	254	79	83
RG-100	64	32	66	32	130	64	63	32	64	32	63	32	320	160	320	144	100	111
RG-110	73	18	27	6	100	24	75	18	75	18	75	18	325	78	320	70	102	111
RG-144	48	30	40	23	88	53	120	70	120	70	122	70	450	263	490	245	92	107
RG-244	43	110	34	87	77	197	115	291	120	310	115	292	427	1090	520	1144	82	95
SG-200-X	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--
CSV	371	59	329	53	700	112	500	80	500	80	500	80	2200	352	1800	259	122	136
SHUR	170	27	80	13	250	40	150	24	150	24	150	24	700	112	600	86	117	130
Total Domestic	3622	604	1853	362	5475	966	4826	984	4833	1001	4768	974	19902	3925	20095	3853	99	102
Export																		
SG-100-EX	431	52	331	40	762	92	780	97	780	98	778	97	3100	384	3100	372	100	103
SG-102-EX	129	18	65	9	194	27	152	20	152	20	152	20	650	87	550	64	118	136
SG-130-EX	0	0	10	2	10	2	60	10	70	11	60	10	200	33	200	30	100	110
AS-200	225	31	113	16	338	47	200	29	200	29	182	27	920	132	920	121	100	109
HPP-EX	422	77	150	28	572	105	780	144	780	143	798	147	2930	539	2930	498	100	108
HPO-EX	174	37	128	28	302	65	166	37	166	37	166	37	800	176	665	135	120	130
T-135-P-EX	38	23	0	0	38	23	24	16	24	16	24	16	110	71	110	64	100	111
RG-144-EX	83	46	25	14	108	60	64	35	64	36	64	35	300	166	300	147	100	113
SX-14	18	6	0	1	18	7	37	14	38	15	37	15	130	51	130	47	100	108
RG-244-EX	87	155	24	103	111	258	96	221	97	221	96	220	400	920	370	766	108	120
SX-24	133	197	68	102	201	299	133	200	133	200	133	201	600	900	540	756	111	119
SG-210	0	0	12	3	12	3	0	0	0	0	0	0	12	3	0	0	--	--
Total Export	1740	642	926	346	2666	988	2492	823	2504	826	2490	825	10152	3462	9815	3000	103	115
TOTAL	5362	1246	2779	708	8141	1954	7318	1807	7337	1827	7258	1799	30054	7387	29910	6853	100	108

RLF
JFC
GRA
WNJ
GRB
FJS (file 1980 ABD Asbestos)

Rcd 1/15/80

I1

WNJ + GRB Pl note

The dues for membership in the Asb. Inf. Assoc/No America are being increased from $2000 for 1979 to $6,000 for 1980. I told John Myers that we will retain our membership + pay the $6,000

FJS

FJS

Written Consent to All the Directors to Action
Taken Without a Meeting

For your info. This will increase our annual dues from $2000 to $6000 for 1980, Per our telecon on 1/7/80.

JLM

WE THE UNDERSIGNED, being all the members of the Board of Directors of Asbestos Information Association/ North America, a Corporation organized and existing under the laws of the State of Delaware, DO HEREBY GIVE, OUR WRITTEN consent, pursuant to section 229 of the General Corporation Law of the State of Delaware and Article VI of the Corporation's By-Laws to the voting on the resolutions set forth in Exhibit A (attached hereto and consisting of one page) without a meeting of the Board. This written Consent may be executed in several counterparts, which together shall constitute a single document, and shall take effect as of the date set forth below.

The Secretary of the Corporation is directed to file this Written Consent with the minutes of proceedings of the Board of Directors.

RECEIVED
JAN 11 1980
F. J. SHORTSLEEVE

Check one

I hereby vote for the adoption of the Resolution in Exhibit A. ☒

I hereby vote against the adoption of the Resolution in Exhibit A. ☐

H. B. Rhodes by J L Myers
Director, AIA/NA

Union Carbide Corporation
Company

Date: 1/7/80

Return to: Executive Director (Secretary)
Asbestos Information Association/North America
1745 Jefferson Davis Highway, Suite 509
Arlington, Virginia 22202

EXHIBIT A

Whereas, the Board of Directors in meeting, December 12, 1979, unanimously agreed to poll the directors by mailed ballot as to a proposed Association budget for fiscal (calendar) year 1980;

It is hereby resolved that the Asbestos Information Association/North America budget for fiscal (calendar) year 1980, as presented and discussed at the Board of Directors meeting on December 12, 1979, totalling $1,013,400 of which $994,900 is to come from membership dues income, is adopted and authorized.

Filed 1/7/80

File 1980 ABB

Asbestos Assoc dues

1979	$2,000
1980	6,000

UC 119-2

UNION CARBIDE INTERNAL CORRESPONDENCE

1-FTS
2-RLR

OCT 11 1979

METALS DIVISION

P. O. BOX 579 · 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

RECEIVED OCT 11 1979

To (Name)	Dr. F. J. Shortsleeve	Date	October 10, 1979
Division	UCC - Metals	Originating Dept.	"Calidria" Asbestos
Location	270 Park Ave. - 38th Floor New York, NY	Answering letter date	
Copy to	Messrs. G. R. Adams R. E. Byrne, Jr. W. B. DeAtley Mrs. T. Nielsen	Subject	Preliminary 1981 Sales Estimate

Attached is a copy of the Subject which was recently requested by Thelma. The following comparison should put the numbers in perspective:

	Tons			$M			
	'79-IV	'80 Budg.	'81 Est.	'79-IV	'80 Budg.	'80-I	'81 Est.
Domestic	19250	20095	21600	3644	3853	4178	4380
Export	9555	9815	10400	2996	3000	3260	3525
Total	28805	29910	32000	6640	6853	7438	7905

Under $M, the column headed '80-I is my "private" estimate reflecting price increases averaging 8.5% which I hope to implement for 1980. I have not yet submitted any price increases for approval. Domestic salesmen have basically concurred with my proposals, Bob Byrne is checking Tomoe's "pulse" and I have advised Grace-Europe by telephone to expect a 9% increase (with no strong adverse reaction).

Thelma will not use the 1981 estimates without your prior approval.

John

John L. Myers

CALIDRIA ASBESTOS
PRELIMINARY SALES ESTIMATE FOR 1981
(JLM 10/10/79)

Product	Tons	$M*
Domestic		
SG-103-5	2500	300
SG-103-7	1500	180
SG-103-9	200	24
SG-104	10000	1050
SG-130	500	85
SG-200	400	61
SG-200-X	2000	320
SG-210	600	132
HPO	1200	264
RG-100	400	202
RG-110	300	72
RG-144	500	280
RG-244	500	1250
CSV	500	80
SHUR	500	80
Total Domestic	21,600 T	$4380 M
Export		
SG-100-EX	3200	400
SG-102-EX	600	74
SG-130-EX	300	49
AS-200	1000	144
HPP-EX	3000	552
HPO-EX	700	154
T-135-P-EX	100	65
RG-144-EX	350	196
SX-14	150	59
RG-244-EX	400	920
SX-24	600	912
Total Export	10,400 T	$3525 M
Total	32,000 T	$7905 M

*Dollars are based on prices expected to be in effect on 12/31/80.

ASBESTOS BUSINESS

(JLM 10/24/79)

Definition

The Asbestos Business includes the mining, milling and marketing of short fiber, high quality asbestos. Sales activities are worldwide and export sales dollars are a significant 44% of the total for 1980.

External Environment

Of major importance is the negative impact of potential Government regulations. Although not currently expected to happen, TLV's proposed by NIOSH of 0.1 fiber/cc are probably not attainable by our plant or customers, and withdrawal from this business would be necessary. If regulatory compliance can continue to be achieved, the plant should operate at 90-100% of capacity for the next two years.

Component Objectives and Strategies

This business should be operated to maximize earnings and maintain a positive cash flow. Capital investment should be limited to dust control and packaging improvements and minor modifications to produce "low-dust" products, such as "UNIVIS". Plant expansion should not be considered under the current asbestos regulatory and "publicity" climate.

This business should earn one-half to one million dollars per year for the foreseeable future unless precluded by Government action. Alternate strategic plans for the asbestos business are presently being evaluated and recommendations regarding the preferred strategic direction will be presented to management.

New Business Programs

None

Budget Year Action Plans

1. Continue the vigorous program directed toward minimizing needlessly burdensome regulations.

2. Continue market development of special products, especially those with low-dust characteristics.

3. Evaluate the future course of the Asbestos Business in light of Government regulations and the high profitability of the business.

4. Continue agressive sales activities outside the United States. Regulatory pressures are less severe and a higher percentage of high-priced products is sold through foreign affiliates and distributors.

Financial Performance

	1978 Actual	1979 Budget	1979 Est. Act. (8/1/79)	1979 % Budget	1980 Budget	1981 Forecast
Net Sales	$7.2MM	$6.6MM	$6.8MM	103	~~$6.9MM~~ 7.0 MM	$7.9MM
Net Income	1.2	0.6	1.0	167	0.8	
Cash Flow	1.0	0.6	1.0	167	0.9	
ROA	25.4%	12.1%	18.6%	154	16.8	

Current Year (1979)

Higher than budgeted earnings and cash generation were due primarily to price increases and favorable plant costs. Plant operation was reduced from 20 to 15 shifts per week in September to reduce product inventories.

Budget Year (1980)

Sales volume and NIFS are budgeted to increase about 3% and 20-shift plant operation should be resumed by the end of the second quarter. If anticipated price increases are successfully implemented at the beginning of the year, NIFS will be 8.5% higher than budget.

Following Year (1981)

Increased sales volume of about 7% is expected in 1981, primarily due to an increased share of the drilling mud market with "UNIVIS" and modest increases in floor tile and export sales. The major uncertainty in the Asbestos Business will continue to be the effect of government regulations and adverse publicity.

1980 CONTINGENCY PLANS

Plan Title	Activating Events	Plan Description
More Restrictive Government Regulations	OSHA Imposes More Stringent Limits on Exposure	Appropriate Recommendations Will be Made
Loss of Volume Sales	Loss of Sales to Competition Due to Unfavorable Pricing	Reduce Prices or Curtail Plant Production

John Myers

($ MILLIONS TO .X)

TABLE I
FINANCIAL SUMMARY

HISTORICAL 19 73	19 74	1975	19 76	19 77	CURRENT YEAR Budget 1978	CURRENT YEAR Estim. Actual 19 78	FINANCIAL SUMMARY	Budget 1979	Budget % Est. Act. Curr. Yr.	PROJECTED 19 80
3.8	3.8	4.3	4.9	5.3	5.7	6.9	Total Net Sales (1)	6.6	95	7.0
2.7	2.5	3.4	3.1	3.3	3.4	4.4	Domestic	4.2	95	4.2
1.1	1.3	.9	1.8	2.0	2.3	2.5	Export	2.4	96	2.8
				9.8			Total Net Sales Growth Rate			
102.7	121.4	119.9	164.1	176.6	137.5	184.3	Price Index (1972 = 100)	180.2		
37	31	36	30	30	41	37	Total Physical Volume (or Volume/Mix)	37		
				(4.5)			Total Physical Volume (or Volume/Mix) Growth Rate			
							Plant/Distribution Cost Index (1967 = 100)	-		
						52.3	Variable Margin % (If Available)	44.5		
1.4	1.2	1.2	1.9	2.0	2.0	2.8	Gross Margin $	2.2	77	
36.3	30.8	27.9	39.9	38.6	34.5	40.9	Gross Margin %	33.4		37.0
.1	.1	.1	.1	.1	.1	.1	Research and Development	-	97	
.8	.7	.7	.9	.8	.9	.7	Division Administration, Selling and General	.9	94	
	.1	.1	.1	.1	.1	.1	Corporate Overhead and Services	.1	105	
22.2	23.2	22.1	22.1	1.1	18.9	13.9	Total Overhead % of Sales	15.5		15.5
.2	.2	.3	.2	.2	.3	.3	Depreciation	.3	104	
.4	.1	.1	.6	.8	.6	1.6	Income From Operations	.9	56	1.2
7.9	2.6	2.3	12.2	14.8	11.0	23.3	Income From Operations % Sales	13.4		17.8
-	-	.1	.1	.2	.2	.2	Share of Loan	.1	100	
-	-	-	-	-	-	-	Other Income/Expense	-		
							Tax Rate			
.3	.1	.1	.5	.6	.4	1.1	Net Income After Tax	.6	55	.8
				44.3			Net Income After Tax Growth Rate			
7.9	2.6	2.3	9.4	11.9	7.1	15.8	% of Sales (ROS)	9.2		12.0
0.005	0.002	0.002	0.008	0.010	0.006	0.017	EPS	0.009		
11.5	2.6	1.6	10.5	12.9	8.5	23.4	ROA %	12.1		16.8
9.3	1.0	2.0	10.6	12.4	10.7	25.3	ROI %	13.7		
3.0	3.4	4.5	4.4	4.9	4.7	4.7	Net Assets Employed (BOY)*	5.0	106	5.0
(.1)	(.7)	.1	.1	1.1	.3	1.1	Net Cash Generated – Selected	.6	57	.9
.5	1.1	.5	.2	-	.3	.1	Consolidated Construction Expenditures	.2	248	.2
							Unconsolidated Construction Expenditures			
							% Consolidated Construction For Capacity Additions			
							Division Investment			
							NPV of New and Renewed Leases			
1.8	1.1	1.4	1.4	1.3	1.7	1.2	Accounts Receivable – Number of Months Sales	1.3		1.3
2.5	3.4	2.0	3.0	2.7	2.2	2.0	Inventories – Number of Months Sales	2.1		2.0
							Total Physical Vol. (or Volume/Mix) ÷ Exempt Emp.			
9.1	23.1	8.2	3.1	.7	4.1	1.4	Consol. Const. as a % Gross Fixed Investment	3.3		2.7
							Operating Rate (Average)			
.1	.1	.1	-	.2	-	-	Memo: Allied Sales Included Within Corp. Prod. Line (1)	-		-
3.7	3.6	4.3	4.9	5.1	5.7	6.9	Total Domestic & Export Customer Sales	6.6		7.0

DIVISION: METALS

SPU/CPU/APU: ASBESTOS

* Also Indicate Beginning of Year 1981 5.0

2

($ MILLIONS TO .X)

HISTORICAL					EST. ACTUAL	SPU CASH FLOW DATA	BUDGET	PROJECTED
19 73	1974	1975	1976	1977	19 78		1979	19 80
.3	.1	.1	.5	.6	1.1	NET INCOME	.6	.8
.2	.2	.3	.2	.2	.3	DEPRECIATION AND BOOK DEPLETION	.3	.3
-	.1	.1	.1	-	-	DEFERRED INCOME TAX	-	-
						OTHER		
.5	.4	.5	.7	.8	1.4	TOTAL CASH GENERATED FROM OPERATIONS	.9	1.1
.5	1.1	.5	.2	-	.1	CONSTRUCTION	.2	.2
						INVESTMENT		
.2	(.2)	.2	.1	-	.2	INCREASE (DECREASE) IN RECEIVABLES	-	-
-	.3	(.4)	.4	(.3)	(.1)	INCREASE (DECREASE) IN INVENTORIES	.1	-
		.1	(.1)	-	.1	OTHER	(.1)	-
.7	1.2	.3	.6	(.3)	.3	TOTAL CASH REQUIREMENTS	.3	.2
(.1)	(.7)	.2	.1	1.1	1.1	NET CASH GENERATED	.6	.9
1.2	2.7	.7	.8	(.3)	.2	INTERNAL DEPLOYMENT (TOTAL REQUIREMENTS ÷ TOT. GEN. FROM OPS.)	.3	.2
.4	.6	.3	.5	.6	.6	ACCOUNTS RECEIVABLE * – BOY	.9	.8
.8	.8	1.2	.8	1.3	1.1	INVENTORIES – BOY	1.1	1.2
1.8	2.0	3.0	3.1	3.1	3.0	NET FIXED ASSETS – BOY	3.0	3.0
3.0	3.4	4.5	4.4	4.9	4.7	NET ASSETS EMPLOYED – BOY	5.0	5.0
5.4	4.7	6.7	6.4	6.5	6.9	GROSS FIXED INVESTMENT – BOY	7.1	7.3

*Includes Accounts Receivable Discounted

ASBESTOS BUSINESS

(JLM 10/24/79)

Definition

The Asbestos Business includes the mining, milling and marketing of short fiber, high quality asbestos. Sales activities are worldwide and export sales dollars are a significant 44% of the total for 1980.

External Environment

Of major importance is the negative impact of potential Government regulations. Although not currently expected to happen, TLV's proposed by NIOSH of 0.1 fiber/cc are probably not attainable by our plant or customers, and withdrawal from this business would be necessary. If regulatory compliance can continue to be achieved, the plant should operate at 90-100% of capacity for the next two years.

Component Objectives and Strategies

This business should be operated to maximize earnings and maintain a positive cash flow. Capital investment should be limited to dust control and packaging improvements and minor modifications to produce "low-dust" products, such as "UNIVIS". Plant expansion should not be considered under the current asbestos regulatory and "publicity" climate.

out

~~It is unlikely that regulations will ever be relaxed enough to allow substantial growth in asbestos sales.~~ This business should earn one-half to one million dollars per year for the foreseeable future unless precluded by Government action. ~~If a business with such earnings is not necessarily attractive to Union Carbide, consideration should be given to selling the Asbestos Business during this period of high sales and earnings.~~

A

New Business Programs

None

Budget Year Action Plans

1. Continue the vigorous program directed toward minimizing needlessly burdensome regulations.

2. Continue market development of special products, especially those with low-dust characteristics.

3. Evaluate the future course of the Asbestos Business in light of Government regulations and the high profitability of the business.

~~alternate strategic plans for the asbestos business are presently being~~

A

Alternate strategic plans for the asbestos business are presently being evaluated and recommendations regarding the preferred strategic direction will be ~~made~~ presented to management.

1980 CONTINGENCY PLANS

Plan Title	Activating Events	Plan Description
More Restrictive Government ~~Intolerable~~ Regulations	OSHA ~~promulgation of 0.1 f/cc TWA~~ OSHA imposes more strict limits on exposure.	~~Withdraw from business~~ Appropriate recommendations will be made
Loss of Volume Sales	Loss of sales to competition due to unfavorable pricing.	Reduce prices or curtail plant production

Send via Telecopier 10/31

John Myers

($ MILLIONS TO .X)

HISTORICAL 1973	HISTORICAL 1974	HISTORICAL 1975	HISTORICAL 1976	HISTORICAL 1977	CURRENT YEAR Budget 1978	CURRENT YEAR Estim. Actual 1978	TABLE I FINANCIAL SUMMARY	Budget 1979	Budget % Est. Act. Curr. Yr.	PROJECTED 1980
3.8	3.8	4.3	4.9	5.3	5.7	6.9	Total Net Sales (1)	6.6	95	7.0
2.7	2.5	3.4	3.1	3.3	3.4	4.4	Domestic	4.2	95	4.2
1.1	1.3	.9	1.8	2.0	2.3	2.5	Export	2.4	96	2.8
				9.8			Total Net Sales Growth Rate			
102.7	121.4	119.9	164.1	176.6	137.5	184.3	Price Index (1972 = 100)	180.2		
37	31	36	30	30	41	37	Total Physical Volume (or Volume/Mix)	37		
				(4.5)			Total Physical Volume (or Volume/Mix) Growth Rate			
							Plant/Distribution Cost Index (1967 = 100)			
						52.3	Variable Margin % (If Available)	44.5		
1.4	1.2	1.2	1.9	2.0	2.0	2.8	Gross Margin $	2.2	77	
36.3	30.8	27.9	39.9	38.6	34.5	40.9	Gross Margin %	33.4		37.0
.1	.1	.1	.1	.1	.1	.1	Research and Development	–	97	
.8	.7	.7	.9	.8	.9	.7	Division Administration, Selling and General	.9	94	
	.1	.1	.1	.1	.1	.1	Corporate Overhead and Services	.1	105	
22.2	23.2	22.1	22.1	1.1	18.9	13.9	Total Overhead % of Sales	15.5		15.5
.2	.2	.3	.2	.2	.3	.3	Depreciation	.3	104	
.4	.1	.1	.6	.8	.6	1.6	Income From Operations	.9	56	1.2
7.9	2.6	2.3	12.2	14.8	11.0	23.3	Income From Operations % Sales	13.4		17.8
		.1	.1	.2	.2	.2	Share of Loan	.1	100	
–	–	–	–	–	–	–	Other Income/Expense	–		
							Tax Rate			
.3	.1	.1	.5	.6	.4	1.1	Net Income After Tax	.6	55	.8
				44.3			Net Income After Tax Growth Rate			
7.9	2.6	2.3	9.4	11.9	7.1	15.8	% of Sales (ROS)	9.2		12.0
0.005	0.002	0.002	0.008	0.010	0.006	0.017	EPS	0.009		
11.5	2.6	1.6	10.5	12.9	8.5	23.4	ROA %	12.1		16.8
9.3	1.0	2.0	10.6	12.4	10.7	25.3	ROI %	13.7		
3.0	3.4	4.5	4.4	4.9	4.7	4.7	Net Assets Employed (BOY)*	5.0	106	5.0
(.1)	(.7)	.1	.1	1.1	.3	1.1	Net Cash Generated – Selected	.6	57	.9
.5	1.1	.5	.2	–	.3	.1	Consolidated Construction Expenditures	.2	248	.2
							Unconsolidated Construction Expenditures			
							% Consolidated Construction For Capacity Additions			
							Division Investment			
							NPV of New and Renewed Leases			
1.8	1.1	1.4	1.4	1.3	1.7	1.2	Accounts Receivable – Number of Months Sales	1.3		1.3
2.5	3.4	2.0	3.0	2.7	2.2	2.0	Inventories – Number of Months Sales	2.1		2.0
							Total Physical Vol. (or Volume/Mix) ÷ Exempt Emp.			
9.1	23.1	8.2	3.1	.7	4.1	1.4	Consol. Const. as a % Gross Fixed Investment	3.3		2.7
							Operating Rate (Average)			
.1	.1	.1	–	.2	–	–	Memo: Allied Sales Included Within Corp. Prod. Line (1)	–		–
3.7	3.6	4.3	4.9	5.1	5.7	6.9	Total Domestic & Export Customer Sales	6.6		7.0

DIVISION: METALS

SPU/CPU/APU: ASBESTOS

* Also Indicate Beginning-of-Year 1981 5.0

2

($ MILLIONS TO .X)

HISTORICAL					EST. ACTUAL	SPU CASH FLOW DATA	BUDGET	PROJECTED
1973	1974	1975	1976	1977	1978		1979	1980
.3	.1	.1	.5	.6	1.1	NET INCOME	.6	.8
.2	.2	.3	.2	.2	.3	DEPRECIATION AND BOOK DEPLETION	.3	.3
-	.1	.1	.1	-	-	DEFERRED INCOME TAX	-	-
						OTHER		
.5	.4	.5	.7	.8	1.4	TOTAL CASH GENERATED FROM OPERATIONS	.9	1.1
.5	1.1	.5	.2	-	.1	CONSTRUCTION	.2	.2
						INVESTMENT		
.2	(.2)	.2	.1	-	.2	INCREASE (DECREASE) IN RECEIVABLES	-	-
-	.3	(.4)	.4	(.3)	(.1)	INCREASE (DECREASE) IN INVENTORIES	.1	-
		.1	(.1)	-	.1	OTHER	(.1)	-
.7	1.2	.3	.6	(.3)	.3	TOTAL CASH REQUIREMENTS	.3	.2
(.1)	(.7)	.2	.1	1.1	1.1	NET CASH GENERATED	.6	.9
1.2	2.7	.7	.8	(.3)	.2	INTERNAL DEPLOYMENT (TOTAL REQUIREMENTS ÷ TOT. GEN. FROM OPS.)	.3	.2
.4	.6	.3	.5	.6	.6	ACCOUNTS RECEIVABLE* – BOY	.9	.8
.8	.8	1.2	.8	1.3	1.1	INVENTORIES – BOY	1.1	1.2
1.8	2.0	3.0	3.1	3.1	3.0	NET FIXED ASSETS – BOY	3.0	3.0
3.0	3.4	4.5	4.4	4.9	4.7	NET ASSETS EMPLOYED – BOY	5.0	5.0
5.4	4.7	6.7	6.4	6.5	6.9	GROSS FIXED INVESTMENT – BOY	7.1	7.3

*Includes Accounts Receivable Discounted

8 -

1980 Budgets
Asbestos

9/11/79

SEP 14 1979

To: GR Adams

cc FJS
REB

George -

Attached are tentative expense budgets for asbestos sales (0623) and Technology (0624) for 1980. Each budget is done separately per your letter/instructions dated 8/30/79 and I have added a third sheet which combines the two accounts for a comparison between 1979 Estimated Actual and 1980 Budget. They must be reviewed together since there were personnel adjustments between the two accounts during 1979. All expenses are for the asbestos business.

At your request I have shown budget numbers adding to a total which is 103% of 1979 Est. Actual. The Est. Actual is "artificially" low since I did not add Mr. Smith until June, but Jack said I must use the numbers "as is." In order to reach 103%, I have included only 1/2 of a secretary for 0623 and made significant other reductions in both accounts which would be difficult to achieve without affecting the overall asbestos business. Specific comments follow:

(003) Salaries: 1980 includes Mr. Smith for the full year. Increases were estimated inividually at the 9-10% guideline - 70% are in the first half. If I must reduce 1/2 secretary, I will try to arrange with Dick Pope to "share" a girl. My ~~se~~ secretarial workload could normally be

handled by 1½ girls; but, being a sales office, somehow I need to arrange for "100%" phone coverage.

(060) Plans : 22.1 % of salaries

(090) Taxes : Actual FICA plus Federal and State unemployment.

(357) Product Development : Primary work would be on "wetted" products to reduce dust and associated applications development. Packaging improvement work would also be included here.

(419) Foreign Travel : In Dept 0623, this is for me to attend the Fourth International Conference on Asbestos, May 26-30, in Turin, Italy. I would also plan to visit W.R. Grace in Lausanne while in Europe. In 0624 I would plan for Byrne to visit Brazil, Australia or Japan, depending on circumstances as the year develops.

(580) NF Space & Services - Chynoweth has given me a firm committment on these numbers.

When my "salaries and related" are "up" over 10%, NF costs up 10% or more, and with travelling expenses up 10-15%, I don't see how I can live with only a 3% increase unless there are drastic reasons to do so. I would like the opportunity to discuss my budgets with you before they are finalized.

John 9/11/79

ASBESTOS SALES, DEPT. 0623, $M

Acct No.	Acct Description	1979 Budget	1979 Est. Act.	1980 Budget Realistic	1980 Budget "103%"
003	Salaries	200	174	174	169
060	Plans	40	35	38	37
065	PLV	0	2	2	0
090	Taxes	10	9	10	9
	SUBTOTAL	250	220	224	215
131	Office Supplies	1	1	1	1
142	Safety	1	1	1	1
181	LD Telephone-Outside UCC	7	7	8	7
350	Promotion	5	5	5	4
365	Samples	6	7	7	4
412	Co. Auto Exp.	1	1	0	0
413	Leased Auto Exp.	5	8	9	8
414	Conf. & Conv.	10	10	10	8
415	Business Meals	9	11	12	10
416	Entertainment	0	1	2	1
418	Domestic Travel	52	53	60	50
419	Foreign Travel	5	6	2	0
460	Auto Leasing	7	8	9	9
492	Training	2	5	5	0
	SUBTOTAL	111	124	131	103
171	LD Telephone-UCC	7	14	15	10
172	LCL Telephone-UCC	4	5	6	5
532	Rent, Atlanta & LB	8	8	9	9
580	NF Charges	43	43	48	48
	SUBTOTAL	62	70	78	72
	TOTALS	423	414	433	390

Personnel Included - Exempt: GLD, EJK, JLM, TPN, JEW (5)
Non-Exempt: DAL (1)

9/11/79

ASBESTOS TECHNOLOGY, DEPT. 0624, $M

Acct No.	Acct Description	1979 Budget	1979 Est. Act.	1980 Budget Realistic	1980 Budget "103%"
003	Salaries	74	98	123	123
060	Plans	15	20	27	27
090	Taxes	5	7	8	8
	SUBTOTAL	94	125	158	158
131	Office Supplies	1	1	1	0
181	LD Telephone-Outside UCC	1	1	1	1
357	Prod. Development	40	10	20	15
368	Tech Service	30	25	30	27
412	Co. Auto Expense	0	0	1	1
414	Conf. & Conv.	1	1	2	1
415	Business Meals	1	1	2	1
418	Domestic Travel	12	12	15	10
419	Foreign Travel	0	0	5	0
492	Training	1	1	3	0
	SUBTOTAL	87	52	80	56
171	LD Telephone-UCC	4	4	5	4
172	LCL Telephone-UCC	3	3	4	4
580	NF Space & Svces.	65	65	71	71
	SUBTOTAL	72	72	80	79
	TOTALS	253	249	318	293

Personnel Included - Exempt: REB, BLI (2)
Non-Exempt: RJK, RMM, FLS (3)
Hourly: One (1)

9/11/79

Acct No.	Acct Descr.	1979 Est. Actual			1980 Realistic Budget			1980 "103%" Budget		
		0623	0624	Total	0623	0624	Total	0623	0624	Total
003	Salaries	174	98	272	174	123	297	169	123	292
060	Plans	35	20	55	38	27	65	37	27	64
065	PLV	2	0	2	2	0	2	2	0	2
090	Taxes	9	7	16	10	8	18	9	8	17
131	Office Supplies	1	1	2	1	1	2	1	0	1
142	Safety	1	0	1	1	0	1	1	0	1
181	LD Telephone-Outside	7	1	8	8	1	9	7	1	8
350	Sales Prom.	5	0	5	5	0	5	4	0	4
357	Prod. Development	0	10	10	0	20	20	0	15	15
365	Samples	7	0	7	7	0	7	4	0	4
368	Tech Service	0	25	25	0	30	30	0	27	27
412	Co. Car Expense	1	0	1	0	1	1	0	1	1
413	Lease Car Expense	8	0	8	9	0	9	8	0	8
414	Conf. & Conv.	10	1	11	10	2	12	8	1	9
415	Business Meals	11	1	12	12	2	14	10	1	11
416	Entertainment	1	0	1	2	0	2	1	0	1
418	Domestic Travel	53	12	65	60	15	75	50	10	60
419	Foreign Travel	6	0	6	2	5	7	0	0	0
460	Car Leases	8	0	8	9	0	9	9	0	9
492	Training	5	1	6	5	3	8	0	0	0
171	LD Telephone-UCC	14	4	18	15	5	20	10	4	14
172	LCL Telephone-UCC	5	3	8	6	4	10	5	4	9
532	Atl & LB Offices	8	0	8	9	0	9	9	0	9
580	NF Offices	43	65	108	48	71	119	48	71	119
	TOTALS	414	249	663	433	318	751	392	293	685

9/11/79

UC 149-D

Asbestos Budget I

UNION CARBIDE INTERNAL CORRESPONDENCE

JUL 12 1979

METALS DIVISION • P. O. BOX 579 • 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Mr. J. T. Kelly
Division UCC-Metals Division
Location 38th Floor
270 Park Avenue
New York, NY 10017

Date July 10, 1979

Originating Dept. "Calidria" Asbestos

Answering letter date 6/20/79

Subject Plant Capacity
Sales Program

Copy to Messrs.
G. R. Adams
R. E. Byrne, Jr.
W. B. DeAtley
O. J. Malacarne
[redacted]
File

Attached is a copy of the Subject as referenced in your letter dated 6/20/79.

Except for RG-244/SX-24, this is a practical optimum sales estimate for capacity plant production. There is no way that we can sell 1800 TPY of RG-244/SX-24 unless there is a significant change in the status of the health/regulatory question.

John

John L. Myers

JLM:dal
Attachment

PLANT CAPACITY SALES PROGRAM
(JLM, 7-10-79)

Assumptions:

1. Regular plant capacity 33,000 TPY
2. RG-244 " " 1,800 TPY

Product	TPY
Domestic	
SG-103	6000
SG-104	10000
SG-130	300
SG-144	200
SG-200	500
SG-200-X	1700
SG-210	500
HPO	1300
RG-100	300
RG-110	400
RG-144	500
RG-244	700
CSV	1000
SHUR	1000
Dom. Total	24400
Export	
SG-100-EX	3000
SG-102-EX	1000
SG-130-EX	300
AS-200	1200
HPP-EX	2500
HPO-EX	700
RG-144-EX	400
SX-14	200
RG-244-EX	400
SX-24	700
Exp. Total	10400
TOTAL	34800

TO (NAME) E. J. Shortsleeve DATE 11/3/78

LOCATION NY-38 FROM John L. Myers - Marketing Manager

NOV 8 1978 R. J. SHORTSLEEVE

SUBJECT "Calidria" Asbestos LOCATION Metals Division-Niagara Falls, NY

Dear Red - Just wanted to be the first to congratulate you! Since you have taken over asbestos, we have - IN OCTOBER - set a new ANNUAL sales record. Thru October we are at $6,027,000 compared to previous annual high of $5,298,000. We will be over $7,000,000 for 1979.

REPLY IN SPACE BELOW - DETACH AND RETURN TRIPLICATE - RETAIN THIS COPY

All kidding aside I'm glad you're with us now and we look forward to the dinner and meeting with you and Bob on 11/16 & 17.

John

P.S. October was a new monthly sales record @ $815,391

ORIGINAL

UC 149-2

~~RWR~~ file! Asb 1980 ABB

UNION CARBIDE INTERNAL CORRESPONDENCE

NOV 1

METALS DIVISION • P. O. BOX 579 • 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 1430

To (Name)	Mrs. T. Nielsen	Date	October 24, 1978
Division	UCC-Metals Division	Originating Dept.	"Calidria" Asbestos
Location	38th Floor 270 Park Ave. New York, NY 10017	Answering letter date	
Copy to	Messrs. G. R. Adams R. E. Byrne, Jr. E. W. Shortridge [redacted] File	Subject	1980 Sales Estimate

RECEIVED 1978

Attached is a copy of the Subject per your request.

This is a conservative estimate, similar to the official 1979 Budget, and does not reflect salesmen estimates or objectives. Tonnage is essentially the same as 1979 and NIFS are increased about 11%, mainly due to anticipated price increases.

John

John L. Myers

JLM:dal
Attachment

"CALIDRIA" SALES BUDGET - 1980

PRODUCT	T	$M
Domestic		
SG-103	4000	480
-104	8000	850
-130	300	50
-200	400	50
-210	600	120
HPP	100	20
HPO	1200	250
CG-135	100	80
RG-100	200	100
RG-110	400	90
RG-144	600	300
RG-244	600	1300
CSV	2500	370
SHUR	1000	150
Domestic Total	20,000	4210
Export		
SG-100-EX	2000	250
-102-EX	1000	125
-130-EX	100	15
AS-200	1400	200
HPP-EX	2500	440
HPO-EX	1200	240
T-135-P-EX	100	50
RG-144-EX	300	150
SX-14	150	50
RG-244-EX	300	680
SX-24	430	610
Export Total	9,480	2810
TOTAL	29,480	7020

UC.149-2

UNION CARBIDE

INTERNAL CORRESPONDENCE

RECEIVED
JUN 11 1979
F. J. SHORTSLEEVE

RWK

METALS DIVISION

P. O. BOX 579 · 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

I

To (Name) Dr. F. J. Shortsleeve
Division UCC-Metals Division
Location 38th Floor
270 Park Avenue
New York, NY 10017

Date June 7, 1979

Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to Messrs.
G. R. Adams
R. E. Byrne, Jr.
W. B. DeAtley
G. L. Dickson
B. L. Ingalls
E. J. Kleber
T. P. Norris
J. E. Walsh
File

Subject 1979 Forecast III and Preliminary 1980 Sales Estimates

The following sheets for "Calidria" Asbestos sales are attached for your information (Mrs. Nielsen has been sent copies via the telecopier):

1979 Sales Forecast III Details
1979 Sales Forecast III vs. Budget and Other Forecasts
1980 Preliminary Sales Estimate

Forecast III is 104% of budget but $187,000 less than Forecast II. Most of the "slippage" is in domestic RG-244 and the drilling mud products, due to health/regulatory factors. Concerted efforts are underway to regain the losses and we anticipate an improvement in Forecast IV.

John L. Myers
John L. Myers

JLM:dal
Attachments

"CALIDRIA" SALES BUDGET - 1980 (At 1979 Prices)

PRODUCT	T	$M
Domestic		
SG-103	5000	590
-104	9000	900
-130	500	80
-200	400	60
-210	600	120
HPP	0	0
HPO	1200	240
CG-135	100	75
RG-100	300	165
RG-110	400	90
RG-144	600	330
RG-244	500	1125
CSV } or SG-200-X	2500	350
SHUR } or SG-200-X	1000	140
Domestic Total	22100	4265
Export		
SG-100-EX	3000	360
-102-EX	500	60
-130-EX	300	45
AS-200	1200	160
HPP-EX	3000	510
HPO-EX	700	145
T-135-P-EX	0	0
RG-144-EX	400	200
SX-14	200	80
RG-244-EX	350	735
SX-24	550	770
Export Total	10200	3065
TOTAL	32300	7330

JLM- 6/7/79

CALIDRIA ASBESTOS 6/6/79

1979 SALES BUDGET & FCSTS

PRODUCT	Budget		Fcst I		Fcst II		Fcst III		Fcst IV		Actual	
Domestic	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$	Tons	M$
SG-100/103	4025	451	4025	473	4500	531	4600	543				
SG-104	8700	336	8700	859	9000	880	9300	910				
SG-130	840	126	840	132	530	84	400	64				
SG-200	400	48	400	54	360	48	400	54				
SG-210	753	143	753	147	500	100	600	135				
HPP	80	13	80	13	80	15	50	9				
HPO	1284	246	1284	250	1300	260	1200	245				
CG-135-P	200	144	200	150	100	75	50	37				
RG-100	192	79	192	86	250	113	300	140				
RG-110	445	93	445	98	400	88	400	87				
RG-144	504	232	504	252	504	252	600	330				
RG-244	595	1190	595	1309	595	1250	500	1123				
VISB	400	50	400	56	0	0	0	0				
CSV	2550	346	2550	364	2300	328	1500	212				
SHUR	1042	142	1042	149	950	136	600	84				
SG-200X	--	--	--	--	--	--	100	16				
SG-144	176	24	176	26	176	25	100	16				
Total Domestic	22186	4163	22186	4418	21545	4186	20700	4005				
% Budget	--	--	100	106	97	101	93	96				
Export												
SG-100-EX	1800	192	1800	212	2700	312	2700	315				
SG-102-EX	1080	120	1080	125	800	96	250	30				
SG-130-EX	84	12	84	13	150	22	250	38				
AS-200	1320	168	1320	174	1200	157	1000	132				
SG-210	144	24	144	25	100	13	0	1				
HPP-EX	2400	384	2400	408	2800	474	2800	474				
HPO-EX	720	132	720	147	670	135	619	127				
T-135-P-EX	156	84	156	92	100	58	60	35				
T-135-0-EX	60	36	60	38	0	0	0	0				
RG-110-EX	204	48	204	52	0	0	1	0				
RG-144-EX	264	120	264	132	300	150	370	188				
SX-14	108	36	108	39	200	72	200	75				
RG-244-EX	276	516	276	574	300	628	330	694				
SX-24	408	528	408	564	515	724	520	731				
Total Export	9024	2400	9024	2595	9835	2846	9100	2840				
% Budget	--	--	100	108	109	119	101	118				
TOTAL	31210	6563	31210	7013	31380	7032	29800	6845				
% Budget	--	--	100	107	101	107	95	104				

CALIDRIA ASBESTOS SALES FCST III - 1979

6/6/79

PRODUCT	Actual Thru April Tons	Actual Thru April M$	May Est. Tons	May Est. M$	June Est. Tons	June Est. M$	1st Half Est. Tons	1st Half Est. M$	3rd Q Est. Tons	3rd Q Est. M$	4th Q Est. Tons	4th Q Est. M$	Fcst. III Total Tons	Fcst. III Total M$
Domestic														
SG-100/103	1560	187	352	42	170	20	2082	249	1259	147	1259	147	4600	543
SG-104	3029	296	918	90	650	64	4597	450	2350	230	2353	230	9300	910
SG-130	152	24	17	3	31	5	200	32	100	16	100	16	400	64
SG-200	180	24	0	0	60	8	240	32	80	11	80	11	400	54
SG-210	161	35	61	15	40	9	262	59	169	38	169	38	600	135
HPP	1	0	--	--	5	1	6	1	22	4	22	4	50	9
HPO	352	70	59	14	75	15	486	99	357	73	357	73	1200	245
CG-135-P	0	0	0	0	0	0	0	0	50	37	0	0	50	37
RG-100	153	72	64	29	0	0	217	101	42	20	41	19	300	140
RG-110	120	26	2	1	30	6	152	33	124	27	124	27	400	87
RG-144	170	94	35	19	40	22	245	135	177	97	178	98	600	330
RG-244	129	293	45	98	40	90	214	481	143	321	143	321	500	1123
VISB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSV	449	62	0	0	100	14	549	76	475	68	476	68	1500	212
SHUR	181	25	0	0	50	7	231	32	184	26	185	26	600	84
SG-200X	50	8	0	0	0	0	50	8	50	8	0	0	100	16
SG-144	0	0	0	0	0	0	0	0	50	8	50	8	100	16
Total Domestic	6687	1216	1553	311	1291	261	9531	1788	5632	1131	5537	1086	20700	4005
Export														
SG-100-EX	806	87	450	54	263	32	1519	173	590	71	591	71	2700	315
SG-102-EX	0	0	0	0	86	10	86	10	82	10	82	10	250	30
SG-130-EX	46	7	46	7	55	8	147	22	51	8	52	8	250	38
AS-200	281	37	112	15	0	0	393	52	303	40	304	40	1000	132
SG-210	0	1	0	0	0	0	0	1	0	0	0	0	0	1
HPP-EX	1238	209	225	38	113	19	1576	266	612	104	612	104	2800	474
HPO-EX	198	40	36	8	83	17	317	65	151	31	151	31	619	127
T-135-P-EX	0	0	0	0	19	11	19	11	20	12	21	12	60	35
T-135-O-EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RG-110-EX	1	0	0	0	0	0	1	0	0	0	0	0	1	0
RG-144-EX	137	68	25	14	45	25	207	107	81	40	82	41	370	188
SX-14	92	35	2	1	33	13	127	49	36	13	37	13	200	75
RG-244-EX	83	175	44	96	45	95	172	366	79	164	79	164	330	694
SX-24	184	259	32	45	52	75	268	379	126	176	126	176	520	731
Total Export	3066	918	972	278	794	305	4832	1501	2131	669	2137	670	9100	2840
TOTAL	9753	2134	2525	589	2085	566	14363	3289	7763	1800	7674	1756	29800	6845