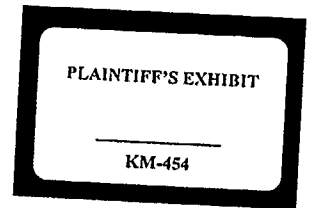


Tillinghast, Nelson & Warren, Inc.
CONSULTANTS • ACTUARIES

Tower Place
3340 Peachtree Road
Atlanta, Georgia 30026
(404) 261-5420

ATLANTA • BOSTON • CHICAGO • DALLAS • DENVER • FT. WORTH
HARTFORD • JACKSONVILLE • KANSAS CITY • LOS ANGELES
NEW ORLEANS • NEW YORK • SAN ANTONIO • ST. LOUIS



October 12, 1982

Mr. William E. Moore, President
Kelly-Moore Paint Company
987 Commercial Street
San Carlos, California 94070

Dear Mr. Moore:

Enclosed is a copy of the report on Kelly-Moore's asbestos liability exposure which Tillinghast, Nelson & Warren, Inc., prepared for Reed Decorative Products. Also enclosed is a copy of our September 8, 1982, letter to Mr. Wilks.

As noted in the report, this study was prepared solely for the internal use of Reed management. We are providing you with a copy at the express request of Mr. Wilks. We will be pleased to answer any questions that you may have.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. James MacGinnitie".

W. James MacGinnitie

WJM/jmw

cc: Mr. William Wilks

Enclosures

KMX 02111

Tillinghast, Nelson & Warren, Inc.
CONSULTANTS • ACTUARIES

200 Clarendon Street
Boston, Massachusetts 02116
(617) 267-4300

ATLANTA • BOSTON • COLUMBUS • DALLAS • DENVER • FT. WORTH
HARTFORD • JACKSONVILLE • KANSAS CITY • LOS ANGELES
NEW ORLEANS • NEW YORK • SAN ANTONIO • ST. LOUIS

September 8, 1982

Mr. William Wilks
Reed Decorative Products
Cloisters House
High Street
Rickmansworth, Herts
WD 31 BG
England

Dear Mr. Wilks:

This letter and its attachments have been prepared to reflect the newly released report by Dr. Selikoff. In the newly released report, Dr. Selikoff has revised his calculations as to population at risk and as to relative disease frequencies. We have reflected these revisions in our model and have developed revised estimates. These are shown in the attached exhibits, which are simply revisions from exhibits contained in our August, 1982 report.

Exhibit I is a revision of the exhibit from pages 10-11 of our report. The conclusion is that the expected total cost of asbestos-related claims is now \$5.7 million. (An upper bound estimate would be \$8.5 million.) This is about 25% less than the \$7.5 million estimate in our previous report, due to a lower number of expected mortalities, particularly for mesothelioma and asbestosis. Asbestosis mortalities are now calculated as being one-third the level of mesothelioma mortalities.

In his latest report, "Disability Compensation for Asbestos-Associated Disease in the United States," Dr. Selikoff revised his estimates as to population at risk and disease frequencies. In particular, the calculated number of people exposed to asbestos was increased, while the average duration of exposure was decreased. While these changes did not substantially alter Dr. Selikoff's conclusions, they did reduce the anticipated disease rate for construction workers. The revisions we made to our model's assumptions and the resulting calculations are attached here as Exhibit II, corresponding to page 12 of our report, and Section II, Exhibits I through V, corresponding to pages 36 through 62 of our report. Those assumptions which were revised have been noted with a double asterisk for your

KMX 02112

September 8, 1982

convenience. One assumption worth noting pertains to the expected filing percentages shown in Exhibit 1, Sheet 2. Based upon more recent information, we slightly modified upward our percentages for the years 1982 through 1985.

We have also prepared some additional information which you may find useful. The attached Exhibit A corresponds to the Exhibit A provided to you by Jim Hurley in his 7/29/82 letter. This exhibit displays the expected costs by calendar year of manifestation, and sums to the \$5.7 million noted above.

In regard to your recent cable to Jim MacGinnitie, we have investigated the four questions contained therein.

- 1) In regard to the population at risk, there is a reflection of K-M's increased market share in 1968. Please see Page 22 of our report.
- 2) To address the question of population at risk, we have attached Exhibit B, which is an expansion of the exhibit on Page 37 of our report. Exhibit B, Sheet 1, displays the calculation of the number of residential construction workers exposed each year to a K-M asbestos product, and the percentage those workers represent relative to all construction workers. On Sheet 2, this percentage is applied to Selikoff's new entrants to determine the number of new entrants who were exposed to K-M products.
- 3) We are still investigating the subject of growth in residential construction workers during the time period in question. The information we have seen so far does not seem to indicate that there has been a significant upward movement in the relative numbers of residential workers. We are currently seeking other sources of data on the subject.
- 4) We used a 25% rate of unsuccessful claims to reflect that not all claimants will receive damages from the company. Some claimants will simply not present a strong enough case to win a jury award. Manville has stated that 40% of the claims filed against them are unsuccessful, while other industry analysts have used the 25% figure. We felt the 25% figure to be appropriately conservative for our calculations.

KMX 02172

Mr. William Wilks

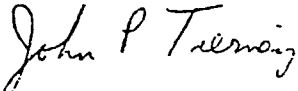
-3-

September 8, 1982

Finally, we have attached copies of recent news articles on the subject of Manville's bankruptcy filing.

If you have any questions on this material, please don't hesitate to call.

Sincerely,



John P. Tierney
Consulting Actuary

JPT:arc
Attachments

KMX 02173

KMX 02127

KEED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

CONSTRUCTION WORKERS --- ALL EMPLOYEES
(000'S)

CAL. YEAR	ARIZONA	ARK.	CALIF.	COLD.	HAWAII	KANSAS	OKLA.	OREGON	TENN.	TEXAS	UTAH	WASH.	WYOMING	TOTAL
1955	19.4	16.2	283.9	28.8	0.0	37.4	30.9	22.6	48.3	159.1	14.3	47.1	6.2	714.2
1956	20.9	15.7	302.3	31.4	0.0	37.1	29.9	24.8	45.9	163.1	15.6	45.7	6.8	739.2
1957	23.3	18.8	287.5	35.1	0.0	32.8	30.7	23.1	44.1	164.3	14.8	45.1	7.2	726.8
1958	26.6	17.9	286.7	35.1	12.7	35.8	31.7	23.9	42.2	158.8	14.9	44.0	8.0	738.3
1959	28.8	19.9	308.4	34.7	15.1	36.3	35.4	25.6	47.6	170.1	15.7	45.9	9.4	792.9
1960	31.6	24.4	294.8	34.6	17.6	33.8	35.8	26.1	48.5	170.8	14.9	44.6	10.7	788.2
1961	31.3	26.9	294.4	38.4	17.2	35.4	35.1	24.5	49.4	174.7	15.6	45.6	9.5	798.0
1962	30.9	29.6	307.7	36.8	15.1	36.5	36.1	26.1	51.3	178.9	17.8	44.8	8.8	820.4
1963	28.3	32.7	329.0	38.0	15.1	33.5	38.2	29.2	54.0	182.4	17.5	43.6	9.5	851.0
1964	27.8	32.5	340.4	38.2	16.3	31.2	37.0	29.8	56.2	191.0	17.0	41.0	9.0	867.4
1965	23.0	35.4	323.7	37.2	17.9	33.1	37.0	33.4	60.4	197.8	16.0	47.2	7.3	872.4
1966	24.3	38.4	305.6	37.2	19.0	32.2	35.8	33.0	65.4	213.5	15.5	55.9	6.6	882.4
1967	23.7	37.8	275.2	35.4	16.9	30.9	33.9	30.2	65.4	218.3	13.4	57.9	6.2	845.2
1968	26.8	36.3	290.7	37.9	18.9	34.0	36.0	31.1	66.7	227.9	13.7	60.9	6.9	887.8
1969	33.5	35.2	310.6	39.3	23.0	34.0	38.2	32.3	68.9	242.2	14.0	59.9	6.5	937.6
1970	37.1	31.2	303.0	42.4	25.7	31.9	38.9	29.5	65.3	238.6	14.7	55.8	6.9	921.0
1971	45.3	33.0	301.5	49.6	23.4	31.1	40.3	31.7	70.4	243.2	17.2	56.7	7.8	951.2
1972	57.5	34.6	320.7	62.8	23.6	33.6	44.1	36.8	78.6	259.3	21.0	54.6	9.2	1036.4
1973	65.7	33.9	344.8	73.0	26.6	35.9	47.4	39.0	86.1	283.2	23.8	58.1	11.6	1139.1
1974	58.3	35.6	334.0	65.4	27.9	38.9	49.5	39.0	87.8	301.4	24.3	57.1	14.0	1133.4
1975	43.8	33.5	303.3	53.4	26.3	38.8	45.9	35.3	76.0	290.0	24.3	59.5	14.3	1044.4
1976	41.5	34.5	317.6	55.1	21.4	42.5	46.1	36.6	73.8	320.4	27.9	67.0	14.9	1099.3
1977	52.2	37.2	366.1	61.8	19.7	45.6	49.5	42.6	78.4	345.8	31.8	77.6	17.0	1233.3
1978	71.0	39.9	417.5	72.6	20.7	48.1	57.3	48.8	87.3	381.8	34.7	92.7	19.3	1391.7
1979	86.5	41.9	463.3	80.2	23.4	49.9	59.1	53.0	89.2	416.2	35.6	104.4	20.8	1523.5
1980	75.2	37.7	431.3	77.0	23.9	46.4	57.6	43.7	81.2	428.2	31.5	91.0	20.1	1446.8

REED DECORATIVE PRODUCTS

ASBESTOS LITIGATION MODEL

PROBABILITY OF SURVIVAL (HPX)

AGE (X)	1PX	2PX	3PX	4PX	5PX	6PX	7PX	8PX	9PX	10PX	11PX	12PX	13PX	14PX	15PX
19	0.9981	0.9961	0.9941	0.9920	0.9899	0.9878	0.9856	0.9834	0.9812	0.9789	0.9765	0.9740	0.9714	0.9686	0.9658
22	0.9979	0.9958	0.9937	0.9915	0.9893	0.9870	0.9847	0.9823	0.9798	0.9771	0.9744	0.9715	0.9685	0.9652	0.9618
30	0.9975	0.9948	0.9920	0.9891	0.9859	0.9827	0.9791	0.9754	0.9713	0.9670	0.9623	0.9573	0.9518	0.9459	0.9396
40	0.9952	0.9899	0.9843	0.9782	0.9716	0.9646	0.9570	0.9488	0.9401	0.9307	0.9207	0.9100	0.8986	0.8864	0.8735
50	0.9892	0.9777	0.9655	0.9524	0.9386	0.9238	0.9082	0.8917	0.8742	0.8558	0.8363	0.8158	0.7943	0.7715	0.7474
60	0.9773	0.9533	0.9281	0.9015	0.8734	0.8438	0.8128	0.7803	0.7465	0.7115	0.6753	0.6381	0.6001	0.5614	0.5222
65	0.9661	0.9306	0.8934	0.8547	0.8146	0.7732	0.7306	0.6870	0.6427	0.5979	0.5527	0.5074	0.4622	0.4176	0.3737

AGE (X)	16PX	17PX	18PX	19PX	20PX	21PX	22PX	23PX	24PX	25PX	26PX	27PX	28PX	29PX	30PX
19	0.9627	0.9595	0.9561	0.9524	0.9485	0.9442	0.9397	0.9347	0.9294	0.9237	0.9175	0.9108	0.9036	0.8959	0.8876
22	0.9581	0.9541	0.9498	0.9452	0.9403	0.9349	0.9291	0.9229	0.9162	0.9090	0.9012	0.8929	0.8840	0.8745	0.8643
30	0.9327	0.9254	0.9175	0.9090	0.9000	0.8903	0.8799	0.8689	0.8572	0.8447	0.8314	0.8174	0.8025	0.7868	0.7702
40	0.8598	0.8453	0.8299	0.8136	0.7965	0.7784	0.7593	0.7392	0.7180	0.6956	0.6721	0.6473	0.6215	0.5946	0.5667
50	0.7221	0.6955	0.6678	0.6389	0.6089	0.5779	0.5461	0.5135	0.4804	0.4469	0.4131	0.3792	0.3455	0.3121	0.2793
60	0.4827	0.4431	0.4037	0.3647	0.3264	0.2891	0.2532	0.2190	0.1868	0.1570	0.1299	0.1056	0.0842	0.0659	0.0505
65	0.3310	0.2899	0.2507	0.2139	0.1798	0.1487	0.1209	0.0965	0.0754	0.0578	0.0433	0.0316	0.0225	0.0156	0.0102

AGE (X)	31PX	32PX	33PX	34PX	35PX	36PX	37PX	38PX	39PX	40PX	41PX	42PX	43PX	44PX	45PX
19	0.8788	0.8693	0.8592	0.8485	0.8370	0.8248	0.8119	0.7982	0.7836	0.7683	0.7520	0.7350	0.7170	0.6980	0.6780
22	0.8535	0.8420	0.8297	0.8167	0.8029	0.7883	0.7728	0.7565	0.7393	0.7212	0.7021	0.6820	0.6608	0.6384	0.6149
30	0.7527	0.7342	0.7148	0.6943	0.6727	0.6499	0.6260	0.6010	0.5750	0.5480	0.5201	0.4915	0.4622	0.4323	0.4022
40	0.5379	0.5082	0.4779	0.4471	0.4159	0.3845	0.3529	0.3215	0.2905	0.2600	0.2303	0.2017	0.1744	0.1488	0.1251
50	0.2474	0.2167	0.1874	0.1599	0.1344	0.1112	0.0904	0.0721	0.0564	0.0432	0.0323	0.0236	0.0168	0.0116	0.0077
60	0.0378	0.0276	0.0197	0.0136	0.0090	0.0054	0.0029	0.0011	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
65	0.0062	0.0033	0.0013	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

KMX 02116

REED DECORATIVE PRODUCTS, INC.

Projection of Loss Costs
Due to Asbestos-Related Liability

<u>Disease Type</u>	<u>Expected Number of Successfully Filed Claims(a)</u>	<u>Expected Average Cost In Current Dollars (Including Legal Expenses) (b)</u>	<u>Expected Total Cost (Current Dollars)</u>
Respiratory Cancer	156	\$12,750	\$1,989,000
Mesothelioma	140	21,000	2,940,000
Other Cancers (c)	32	12,750	408,000
Asbestosis	<u>33</u>	9,750	<u>321,750</u>
Total	361		\$5,658,750

(a) Exhibit I, Sheet 2.

(b) Exhibit II, Items (3), (4) and (5).

(c) Including non-occupational exposure.

KMX 02179

REED DECORATIVE PRODUCTS, INC.

Estimated Number of Successfully Filed Claims

<u>Disease Type</u> (1)	<u>Calendar Year</u> (2)	<u>Expected Manifestations(a)</u> (3)	<u>Expected Percentage To File(b)</u> (4)	<u>Expected Number Filed(c)</u> (5)	<u>Expected Number Successfully Filed(d)</u> (6)
Respiratory Cancer	1982	1.91	63.8	1.22	.92
	1983	2.13	67.8	1.44	1.08
	1984	2.37	71.8	1.70	1.28
	1985	2.62	75.8	1.99	1.49
	1986+	253.74	79.7	202.23	151.67
	Total	262.77	--	208.58	156.44
Mesothelioma	1982	.47	78.8	.37	.28
	1983	.55	83.8	.46	.35
	1984	.65	88.6	.58	.44
	1985	.77	93.6	.72	.54
	1986+	187.84	98.5	185.02	138.77
	Total	190.28	--	187.15	140.38
Asbestosis	1982	.35	56.3	.20	.15
	1983	.40	59.8	.24	.18
	1984	.46	63.3	.29	.22
	1985	.52	66.9	.35	.26
	1986+	60.53	70.4	42.61	31.96
	Total	62.26	--	43.69	32.77
All Other (e)	1982	.64	30.0	.19	.14
	1983	.70	31.9	.22	.17
	1984	.79	33.8	.27	.20
	1985	.88	35.7	.31	.23
	1986+	111.89	37.5	41.96	31.47
	Total	114.90	--	42.95	32.21
All Types	All	630.21	--	482.37	361.80

NOTES: (a) See Section II, Exhibit IV, Sheet 16.
 (b) See Exhibit II.
 (c) Column (3) x Column (4).
 (d) Column (5) x 75%.
 (e) Includes General Population exposure.

KMX 02178

REED DECORATIVE PRODUCTS, INC.

Calculation of Expected Costs
Due to Asbestos Liability

Assumptions

- ** (1) Percentage of expected asbestos disease victims filing claims by disease type:

<u>Calendar Year</u>	<u>Respiratory</u>	<u>Mesothelioma</u>	<u>Asbestosis</u>	<u>Other Disease</u>
1982	63.8	78.8	56.3	30.0
1983	67.8	83.8	59.8	31.9
1984	71.8	88.6	63.3	33.8
1985	75.8	93.6	66.9	35.7
1986+	79.7	98.5	70.4	37.5

- (2) Claims settling with indemnity cost: 75%
- (3) Average claim cost at current value: \$10,000
- (4) Legal expense factor: 50%
- (5) Claim cost relativity by disease type:

<u>Disease Type</u>	<u>Relativity</u>
Asbestosis	.65
Mesothelioma	1.40
All Other Cancers	.85
Average	1.00

- ** (6) One asbestosis death occurs for each three asbestos-related mesothelioma deaths.
- (7) General population contributes an additional 10% incidence to the otherwise indicated asbestos-related disease.

KMX 02128

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

POPULATION AT RISK
BY CALENDAR YEAR OF ENTRY

CONSTRUCTION WORKERS			
CALENDAR YEAR	TOTAL RESIDENTIAL- SELECTED STATES(A)	TOTAL- COUNTRY -WIDE(B)	ESTIMATED NUMBER OF NEW ENTRANTS BY CAL. YEAR OF ENTRY (C)
(1)	(2)	(3)	(4)
1950	0	2101000	0.0
1951	0	2343000	0.0
1952	0	2360000	0.0
1953	0	2341000	0.0
1954	0	2316000	0.0
1955	0	2477000	0.0
1956	0	2653000	0.0
1957	0	2577000	17304.4
1958	17387	2420000	1044.7
1959	18673	2577000	1122.0
1960	18562	2497000	1294.2
1961	18793	2426000	1310.3
1962	19320	2500000	1347.0
1963	20041	2562000	1397.3
1964	20427	2637000	1424.2
1965	20545	2749000	1432.4
1966	20781	2818000	1448.8
1967	19904	2741000	1387.7
1968	34846	2822000	2429.5
1969	36801	3012000	2565.8
1970	36149	2990000	2264.4
1971	37335	3071000	2338.7
1972	40679	3257000	2548.1
1973	44317	3405000	2776.1
1974	44478	3294000	2786.1
1975	40993	2808000	2567.8
1976	43148	2814000	2702.8
1977	48093	3004000	3012.6
1978	54624	3336000	3421.7
1979	0	3550000	0.0

KMX 02139

REED DECORATIVE PRODUCTS, INC.

Notes to Sheet 1

(A) Total number of employees from Exhibit I adjusted by following:

- (1) 15.7% to convert from total construction employees to residential construction workers.
- (2) 15% and 25% to reflect K-M's market penetration for the 1958-1967 and 1968-1978 periods, respectively (i.e., on average, approximately 15% or 25% of the workers come in contact with a K-M product).

[e.g., for 1960, $(.157) \times (.15) \times (788,200) = 18,562$]

(B) Total number of construction workers countrywide from U.S. Department of Labor.

** (C). Estimated number of newly exposed residential construction workers by calendar year of entry. Derived using Selikoff's estimate of population at risk.

(e.g., for 1960, $(18,562/26,764,000^*) \times 1,866,000^* = 472.3$)

** (D) Estimated beginning population is determined by taking average of the 1958, 1959 and 1960 new entrants and multiplying by the average duration of 15.0 years..

(i.e., $15.0 \times (1044.7 + 1,122.0 + 1,294.2)/3 = 17,304.4$)

** The Selikoff study summarizes new entrants into 10 year groups. Therefore, 26,764,000 is the 1960-1969 sum of values in column (3) of Sheet 1 and 1,866,000 is the Selikoff estimate of newly exposed construction workers in the 1960 - 1969 period.

KMX 02140

POPULATION AT RISK
BY AGE GROUP AND YEAR OF ENTRY

CALENDAR YEAR OF ENTRY	ESTIMATED REMAINING LIVES @ 1/1/82 BY ENTRY AGE GROUP							TOTAL
	<20	20-24	25-34	35-44	45-54	55-64	>64	
1957	1166.2	1666.4	3053.3	2779.3	1599.8	353.1	44.0	10662.0
1958	147.5	261.1	217.5	109.4	50.2	11.9	2.0	799.5
1959	159.3	282.5	236.8	121.0	57.6	15.0	2.7	874.8
1960	184.7	328.1	276.6	143.4	70.6	20.0	3.9	1027.3
1961	188.0	334.3	283.3	148.8	75.7	23.1	4.9	1058.0
1962	194.1	345.6	294.5	156.6	82.0	26.8	6.1	1105.6
1963	202.2	360.4	308.5	165.9	89.2	31.1	7.5	1164.9
1964	206.9	369.2	317.4	172.5	95.1	35.1	8.9	1205.1
1965	208.9	373.0	322.0	176.7	99.6	38.7	10.4	1229.3
1966	212.0	378.9	328.3	181.8	104.6	42.7	12.0	1260.3
1967	203.7	364.3	316.8	177.0	103.7	44.2	13.0	1222.6
1968	357.7	640.1	558.4	314.4	187.4	83.2	25.4	2166.5
1969	378.8	678.3	593.4	336.6	203.8	93.9	29.6	2314.3
1970	335.2	600.5	526.7	300.8	184.7	88.1	28.7	2064.8
1971	347.1	622.1	546.8	314.3	195.6	96.3	32.3	2154.5
1972	379.1	679.7	598.7	346.2	218.1	110.6	38.1	2370.5
1973	414.0	742.5	655.2	381.0	242.7	126.4	44.6	2606.4
1974	416.5	747.1	660.4	385.9	248.4	132.6	47.9	2638.8
1975	384.7	690.3	611.0	358.8	233.2	127.3	46.9	2452.1
1976	405.8	728.3	645.4	380.6	249.7	139.1	52.2	2601.2
1977	453.3	813.6	721.8	427.4	282.8	160.5	61.4	2920.6
1978	516.0	926.2	822.4	488.7	325.9	188.2	73.1	3340.3
TOTAL	7461.5	12932.4	12895.1	8367.2	5000.3	1987.8	595.4	49239.7

KMX 02141

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: <20

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	26.70	0.03	0.02	0.05	0.09	26.79
1983	28.29	0.19	0.04	0.06	0.29	28.57
1984	30.02	0.23	0.04	0.07	0.35	30.37
1985	31.92	0.28	0.05	0.09	0.42	32.33
1986	33.98	0.33	0.06	0.10	0.49	34.47
1987	36.22	0.39	0.07	0.13	0.58	36.80
1988	38.67	0.44	0.07	0.15	0.67	39.33
1989	41.29	0.50	0.08	0.18	0.76	42.05
1990	44.10	0.56	0.09	0.21	0.86	44.96
1991	47.12	0.62	0.10	0.25	0.97	48.09
1992	50.34	0.68	0.11	0.29	1.07	51.42
1993	53.78	1.11	0.16	0.33	1.61	55.39
1994	57.42	1.23	0.18	0.38	1.79	59.21
1995	61.28	1.34	0.19	0.44	1.98	63.25
1996	65.34	1.46	0.21	0.50	2.17	67.51
1997	69.62	1.57	0.22	0.57	2.37	71.99
1998	74.09	1.69	0.24	0.65	2.57	76.66
1999	78.77	1.78	0.25	0.73	2.76	81.53
2000	83.70	1.87	0.26	0.82	2.95	86.65
2001	88.91	1.95	0.27	0.92	3.14	92.04
2002	94.38	2.00	0.27	1.02	3.30	97.68
2003	100.05	2.03	0.40	1.09	3.51	103.56
2004	105.88	2.13	0.42	1.16	3.72	109.60
2005	111.81	2.18	0.44	1.23	3.86	115.67
2006	117.85	2.20	0.46	1.30	3.96	121.82
2007	123.97	2.22	0.47	1.37	4.06	128.03
2008	130.11	2.24	0.49	1.43	4.15	134.27
2009	136.26	2.20	0.49	1.49	4.19	140.45
2010	142.33	2.16	0.50	1.54	4.21	146.53
2011	148.30	2.11	0.50	1.60	4.21	152.50
2012	154.14	2.06	0.49	1.64	4.19	158.33
2013	159.81	2.02	0.48	1.68	4.18	164.00
2014	165.27	1.98	0.50	1.71	4.18	169.45
2015	170.44	1.81	0.49	1.72	4.02	174.45
2016	175.24	1.64	0.48	1.72	3.84	179.08
2017	179.61	1.49	0.46	1.71	3.66	183.28
2018	183.45	1.34	0.46	1.68	3.49	186.94
2019	186.67	1.21	0.44	1.65	3.30	189.97
2020	189.20	1.08	0.42	1.60	3.11	192.31
2021	190.97	0.97	0.40	1.54	2.91	193.88
2022	191.89	0.85	0.39	1.47	2.71	194.61
2023	191.91	0.75	0.38	1.39	2.52	194.42
2024	190.97	0.65	0.37	1.30	2.31	193.28
2025	189.09	0.57	0.32	1.21	2.10	191.18
2026+	2562.30	2.99	1.70	9.84	14.53	2576.83
TOTAL	7333.43	61.16	14.93	52.01	128.09	7461.52

KMX 02109

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: 20-24

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	54.31	0.04	0.03	0.07	0.15	54.46
1983	57.79	0.28	0.06	0.09	0.43	58.23
1984	61.60	0.35	0.07	0.11	0.53	62.13
1985	65.75	0.43	0.08	0.14	0.65	66.40
1986	70.22	0.52	0.09	0.17	0.78	70.99
1987	75.02	0.61	0.11	0.20	0.92	75.93
1988	80.18	0.70	0.12	0.24	1.07	81.24
1989	85.69	0.80	0.13	0.29	1.22	86.92
1990	91.59	0.91	0.15	0.34	1.39	92.98
1991	97.85	1.01	0.16	0.40	1.57	99.42
1992	104.50	1.11	0.18	0.46	1.74	106.24
1993	111.51	1.72	0.26	0.53	2.51	114.02
1994	118.89	1.92	0.28	0.62	2.82	121.72
1995	126.63	2.13	0.31	0.71	3.15	129.78
1996	134.72	2.34	0.34	0.81	3.48	138.21
1997	143.25	2.54	0.36	0.92	3.82	147.07
1998	152.24	2.74	0.38	1.04	4.16	156.40
1999	161.68	2.90	0.40	1.17	4.48	166.16
2000	171.49	3.06	0.42	1.31	4.79	176.28
2001	181.60	3.20	0.44	1.46	5.10	186.69
2002	191.91	3.29	0.45	1.62	5.36	197.27
2003	202.45	3.34	0.61	1.73	5.68	208.13
2004	213.15	3.53	0.66	1.84	6.03	219.17
2005	223.93	3.61	0.69	1.96	6.26	230.19
2006	234.76	3.64	0.72	2.07	6.43	241.19
2007	245.49	3.66	0.74	2.17	6.58	252.07
2008	256.11	3.69	0.77	2.27	6.72	262.83
2009	266.55	3.63	0.78	2.36	6.76	273.31
2010	276.75	3.56	0.78	2.45	6.78	283.53
2011	286.61	3.46	0.78	2.52	6.77	293.38
2012	296.04	3.37	0.77	2.58	6.73	302.77
2013	304.88	3.29	0.76	2.64	6.69	311.57
2014	313.03	3.22	0.78	2.67	6.67	319.70
2015	320.30	2.93	0.76	2.67	6.37	326.67
2016	326.57	2.65	0.74	2.66	6.06	332.63
2017	331.70	2.39	0.72	2.63	5.74	337.44
2018	335.55	2.14	0.71	2.57	5.42	340.97
2019	337.98	1.91	0.68	2.49	5.08	343.07
2020	338.85	1.70	0.65	2.40	4.75	343.59
2021	338.05	1.50	0.61	2.30	4.41	342.46
2022	335.58	1.31	0.58	2.17	4.07	339.65
2023	331.48	1.14	0.56	2.03	3.73	335.21
2024	325.84	0.97	0.55	1.87	3.39	329.23
2025	318.75	0.84	0.48	1.72	3.03	321.78
2026+	3634.98	3.97	2.25	12.17	18.39	3653.37
TOTAL	12733.78	98.05	22.97	77.65	198.66	12932.44

KMX 02110

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: 25-34

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	109.34	0.05	0.04	0.10	0.19	109.53
1983	116.62	0.48	0.08	0.12	0.68	117.31
1984	124.29	0.55	0.09	0.14	0.78	125.08
1985	132.36	0.61	0.10	0.17	0.89	133.25
1986	140.82	0.69	0.11	0.21	1.01	141.83
1987	149.64	0.77	0.13	0.24	1.14	150.77
1988	158.85	0.85	0.14	0.29	1.27	160.12
1989	168.58	0.93	0.15	0.33	1.41	169.99
1990	178.91	1.01	0.16	0.39	1.56	180.46
1991	189.78	1.09	0.17	0.44	1.71	191.49
1992	201.03	1.16	0.18	0.51	1.85	202.88
1993	212.51	2.08	0.30	0.58	2.95	215.46
1994	224.02	2.17	0.31	0.65	3.13	227.15
1995	235.65	2.26	0.32	0.73	3.31	238.97
1996	247.31	2.35	0.33	0.82	3.50	250.81
1997	258.87	2.44	0.34	0.91	3.68	262.56
1998	270.29	2.52	0.35	1.00	3.87	274.16
1999	281.36	2.58	0.36	1.10	4.03	285.39
2000	292.05	2.62	0.36	1.20	4.18	296.23
2001	302.31	2.65	0.36	1.30	4.31	306.61
2002	312.05	2.64	0.36	1.40	4.40	316.45
2003	321.16	2.59	0.55	1.42	4.56	325.72
2004	329.52	2.66	0.55	1.46	4.67	334.19
2005	336.94	2.67	0.55	1.49	4.71	341.65
2006	343.30	2.64	0.54	1.52	4.70	347.99
2007	348.36	2.60	0.53	1.54	4.67	353.04
2008	352.00	2.57	0.53	1.56	4.65	356.65
2009	354.08	2.47	0.51	1.57	4.55	358.63
2010	354.49	2.38	0.50	1.57	4.45	358.94
2011	353.12	2.25	0.47	1.57	4.30	357.42
2012	349.92	2.13	0.45	1.56	4.14	354.06
2013	344.89	2.02	0.43	1.55	4.00	348.88
2014	338.15	1.92	0.43	1.52	3.87	342.02
2015	329.89	1.70	0.41	1.48	3.59	333.47
2016	320.34	1.49	0.39	1.43	3.31	323.65
2017	309.73	1.30	0.37	1.37	3.03	312.76
2018	298.24	1.13	0.35	1.29	2.77	301.01
2019	286.02	0.97	0.33	1.21	2.51	288.53
2020	273.29	0.83	0.31	1.13	2.26	275.55
2021	260.34	0.70	0.28	1.04	2.02	262.36
2022	247.04	0.59	0.25	0.95	1.79	248.83
2023	233.07	0.48	0.24	0.84	1.56	234.63
2024	218.18	0.39	0.22	0.73	1.35	219.53
2025	202.49	0.32	0.18	0.64	1.14	203.64
2026+	1350.71	1.08	0.61	2.98	4.68	1355.39
TOTAL	12761.92	72.37	14.73	46.03	133.14	12895.06

KMX 02113

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: 35-44

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIIA	TOTAL EXCESS	
1982	168.07	0.04	0.03	0.08	0.14	168.21
1983	177.37	0.42	0.07	0.09	0.58	177.94
1984	186.60	0.45	0.07	0.11	0.63	187.22
1985	195.82	0.48	0.08	0.13	0.68	196.50
1986	204.95	0.51	0.08	0.15	0.73	205.68
1987	213.85	0.54	0.08	0.17	0.79	214.64
1988	222.49	0.57	0.09	0.19	0.84	223.34
1989	230.67	0.59	0.09	0.21	0.90	231.57
1990	238.36	0.61	0.10	0.24	0.95	239.31
1991	245.52	0.63	0.10	0.27	1.00	246.52
1992	252.09	0.65	0.10	0.29	1.04	253.12
1993	257.95	1.21	0.17	0.32	1.70	259.65
1994	262.98	1.18	0.17	0.35	1.69	264.67
1995	267.02	1.15	0.16	0.37	1.68	268.71
1996	270.00	1.12	0.16	0.39	1.67	271.67
1997	271.69	1.09	0.15	0.42	1.66	273.35
1998	272.00	1.07	0.15	0.44	1.65	273.65
1999	270.85	1.04	0.14	0.45	1.63	272.48
2000	268.16	1.00	0.14	0.46	1.61	269.77
2001	263.90	0.97	0.13	0.47	1.57	265.48
2002	258.10	0.93	0.13	0.48	1.53	259.63
2003	250.86	0.88	0.18	0.46	1.51	252.37
2004	242.37	0.88	0.17	0.44	1.49	243.86
2005	232.91	0.85	0.16	0.43	1.43	234.34
2006	222.76	0.81	0.14	0.41	1.37	224.13
2007	212.18	0.78	0.13	0.40	1.31	213.49
2008	201.40	0.75	0.13	0.39	1.26	202.66
2009	190.57	0.70	0.12	0.38	1.19	191.76
2010	179.93	0.65	0.11	0.36	1.12	181.05
2011	169.76	0.60	0.10	0.35	1.04	170.80
2012	159.83	0.55	0.09	0.33	0.97	160.81
2013	149.74	0.50	0.08	0.32	0.91	150.65
2014	139.15	0.47	0.08	0.30	0.85	140.00
2015	128.14	0.39	0.07	0.28	0.74	128.88
2016	117.22	0.32	0.06	0.25	0.64	117.86
2017	106.98	0.26	0.06	0.23	0.55	107.53
2018	97.27	0.21	0.05	0.21	0.47	97.74
2019	87.44	0.17	0.04	0.18	0.40	87.84
2020	77.64	0.13	0.04	0.16	0.33	77.97
2021	68.02	0.10	0.03	0.14	0.27	68.29
2022	58.74	0.08	0.03	0.11	0.22	58.96
2023	49.96	0.06	0.03	0.09	0.17	50.13
2024	41.79	0.04	0.02	0.07	0.13	41.92
2025	34.33	0.03	0.02	0.05	0.10	34.43
2026+	106.40	0.06	0.03	0.13	0.22	106.62
TOTAL	8323.80	26.48	4.37	12.54	43.39	8367.19

KMX 02114

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: 45-54

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	214.32	0.02	0.02	0.04	0.08	214.40
1983	218.75	0.23	0.04	0.05	0.32	219.06
1984	222.41	0.23	0.04	0.06	0.33	222.74
1985	225.16	0.23	0.04	0.06	0.33	225.50
1986	226.92	0.24	0.04	0.07	0.34	227.26
1987	227.49	0.23	0.04	0.07	0.35	227.84
1988	226.79	0.23	0.04	0.08	0.35	227.14
1989	224.77	0.23	0.04	0.08	0.35	225.12
1990	221.36	0.22	0.04	0.09	0.35	221.71
1991	216.56	0.21	0.04	0.09	0.34	216.91
1992	210.42	0.21	0.03	0.09	0.33	210.75
1993	203.05	0.34	0.05	0.10	0.49	203.54
1994	194.64	0.31	0.05	0.10	0.45	195.09
1995	185.49	0.28	0.04	0.10	0.42	185.91
1996	175.90	0.26	0.04	0.09	0.39	176.29
1997	166.11	0.24	0.04	0.09	0.37	166.48
1998	156.34	0.23	0.03	0.09	0.36	156.69
1999	146.74	0.22	0.03	0.09	0.34	147.08
2000	137.54	0.21	0.03	0.08	0.32	137.87
2001	128.99	0.20	0.03	0.08	0.31	129.30
2002	120.87	0.19	0.03	0.08	0.29	121.16
2003	112.75	0.18	0.03	0.07	0.28	113.03
2004	104.29	0.18	0.03	0.07	0.28	104.57
2005	95.57	0.17	0.02	0.06	0.26	95.83
2006	87.06	0.16	0.02	0.06	0.24	87.30
2007	79.30	0.14	0.02	0.06	0.22	79.52
2008	72.11	0.13	0.02	0.05	0.20	72.32
2009	64.84	0.12	0.02	0.05	0.18	65.02
2010	57.58	0.10	0.01	0.05	0.16	57.74
2011	50.45	0.09	0.01	0.04	0.14	50.59
2012	43.57	0.07	0.01	0.04	0.12	43.69
2013	37.05	0.07	0.01	0.03	0.11	37.16
2014	31.00	0.06	0.01	0.03	0.09	31.09
2015	25.46	0.04	0.01	0.02	0.07	25.53
2016	20.51	0.03	0.00	0.02	0.05	20.56
2017	16.17	0.02	0.00	0.01	0.04	16.21
2018	12.47	0.01	0.00	0.01	0.03	12.50
2019	9.42	0.01	0.00	0.01	0.02	9.44
2020	6.94	0.01	0.00	0.01	0.01	6.95
2021	4.98	0.00	0.00	0.00	0.01	4.99
2022	3.47	0.00	0.00	0.00	0.01	3.48
2023	2.32	0.00	0.00	0.00	0.00	2.32
2024	1.44	0.00	0.00	0.00	0.00	1.44
2025	0.78	0.00	0.00	0.00	0.00	0.78
2026+	0.40	0.00	0.00	0.00	0.00	0.40
TOTAL	4990.53	6.37	0.98	2.37	9.72	5000.25

KMX 02115

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR
AGE GROUP: 55-64

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	151.95	0.01	0.00	0.01	0.02	151.97
1983	146.52	0.05	0.01	0.01	0.07	146.59
1984	140.36	0.04	0.01	0.01	0.06	140.42
1985	133.66	0.04	0.01	0.01	0.06	133.72
1986	126.64	0.03	0.01	0.01	0.05	126.69
1987	119.49	0.03	0.01	0.01	0.05	119.53
1988	112.36	0.03	0.01	0.01	0.04	112.40
1989	105.37	0.02	0.01	0.01	0.04	105.41
1990	98.68	0.02	0.01	0.01	0.04	98.71
1991	92.48	0.02	0.00	0.01	0.04	92.52
1992	86.61	0.02	0.00	0.01	0.03	86.64
1993	80.75	0.02	0.00	0.01	0.04	80.79
1994	74.66	0.02	0.00	0.01	0.03	74.69
1995	68.38	0.02	0.00	0.01	0.03	68.41
1996	62.26	0.02	0.00	0.01	0.03	62.29
1997	56.70	0.02	0.00	0.01	0.03	56.73
1998	51.57	0.02	0.00	0.01	0.03	51.60
1999	46.38	0.02	0.00	0.01	0.03	46.41
2000	41.20	0.02	0.00	0.01	0.03	41.23
2001	36.11	0.02	0.00	0.01	0.03	36.13
2002	31.19	0.02	0.00	0.01	0.02	31.22
2003	26.54	0.01	0.00	0.01	0.02	26.56
2004	22.21	0.01	0.00	0.00	0.02	22.23
2005	18.25	0.01	0.00	0.00	0.02	18.27
2006	14.70	0.01	0.00	0.00	0.01	14.72
2007	11.60	0.01	0.00	0.00	0.01	11.61
2008	8.95	0.01	0.00	0.00	0.01	8.96
2009	6.76	0.00	0.00	0.00	0.01	6.76
2010	4.98	0.00	0.00	0.00	0.00	4.98
2011	3.57	0.00	0.00	0.00	0.00	3.58
2012	2.49	0.00	0.00	0.00	0.00	2.49
2013	1.67	0.00	0.00	0.00	0.00	1.67
2014	1.04	0.00	0.00	0.00	0.00	1.04
2015	0.56	0.00	0.00	0.00	0.00	0.56
2016	0.23	0.00	0.00	0.00	0.00	0.23
2017	0.05	0.00	0.00	0.00	0.00	0.05
2018	0.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00	0.00	0.00
2026+	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	1986.91	0.57	0.11	0.23	0.90	1987.81

KMX 02167

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

AGE GROUP: >64

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	53.76	0.00	0.00	0.00	0.00	53.76
1983	50.87	0.01	0.00	0.00	0.01	50.88
1984	48.00	0.00	0.00	0.00	0.01	48.01
1985	45.20	0.00	0.00	0.00	0.01	45.21
1986	42.56	0.00	0.00	0.00	0.01	42.57
1987	40.01	0.00	0.00	0.00	0.01	40.02
1988	37.43	0.00	0.00	0.00	0.00	37.44
1989	34.73	0.00	0.00	0.00	0.00	34.74
1990	31.94	0.00	0.00	0.00	0.00	31.94
1991	29.18	0.00	0.00	0.00	0.00	29.18
1992	26.61	0.00	0.00	0.00	0.00	26.62
1993	24.21	0.00	0.00	0.00	0.00	24.21
1994	21.77	0.00	0.00	0.00	0.00	21.78
1995	19.34	0.00	0.00	0.00	0.00	19.35
1996	16.95	0.00	0.00	0.00	0.00	16.96
1997	14.65	0.00	0.00	0.00	0.00	14.65
1998	12.46	0.00	0.00	0.00	0.00	12.47
1999	10.43	0.00	0.00	0.00	0.00	10.43
2000	8.57	0.00	0.00	0.00	0.00	8.58
2001	6.91	0.00	0.00	0.00	0.00	6.91
2002	5.45	0.00	0.00	0.00	0.00	5.45
2003	4.21	0.00	0.00	0.00	0.00	4.21
2004	3.18	0.00	0.00	0.00	0.00	3.18
2005	2.34	0.00	0.00	0.00	0.00	2.34
2006	1.68	0.00	0.00	0.00	0.00	1.68
2007	1.17	0.00	0.00	0.00	0.00	1.17
2008	0.78	0.00	0.00	0.00	0.00	0.78
2009	0.49	0.00	0.00	0.00	0.00	0.49
2010	0.26	0.00	0.00	0.00	0.00	0.26
2011	0.11	0.00	0.00	0.00	0.00	0.11
2012	0.03	0.00	0.00	0.00	0.00	0.03
2013	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00	0.00	0.00
2026+	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	595.28	0.05	0.01	0.03	0.10	595.38

KMX 02168

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED MORTALITY
BY CALENDAR YEAR

ALL AGE GROUPS

CAL. YEAR	NORMAL MORTALITY	EXCESS CANCER MORTALITY				TOTAL MORTALITY
		RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS	
1982	778.44	0.18	0.14	0.35	0.67	779.11
1983	796.21	1.65	0.29	0.42	2.37	798.58
1984	813.27	1.86	0.32	0.51	2.69	815.96
1985	829.87	2.08	0.36	0.60	3.03	832.90
1986	846.08	2.32	0.39	0.71	3.42	849.50
1987	861.71	2.57	0.43	0.82	3.82	865.53
1988	876.76	2.82	0.46	0.96	4.24	881.01
1989	891.10	3.08	0.50	1.11	4.69	895.79
1990	904.93	3.34	0.54	1.27	5.15	910.08
1991	918.50	3.60	0.57	1.45	5.62	924.12
1992	931.60	3.82	0.60	1.65	6.07	937.68
1993	943.77	6.48	0.95	1.87	9.30	953.06
1994	954.39	6.82	1.00	2.10	9.92	964.31
1995	963.79	7.19	1.04	2.36	10.58	974.37
1996	972.48	7.55	1.08	2.63	11.25	983.73
1997	980.88	7.90	1.12	2.91	11.93	992.82
1998	988.99	8.27	1.16	3.22	12.65	1001.64
1999	996.22	8.54	1.19	3.55	13.27	1009.48
2000	1002.71	8.79	1.21	3.89	13.89	1016.60
2001	1008.72	8.98	1.23	4.24	14.45	1023.16
2002	1013.95	9.07	1.24	4.61	14.92	1028.86
2003	1018.00	9.03	1.78	4.76	15.57	1033.58
2004	1020.60	9.40	1.83	4.97	16.20	1036.80
2005	1021.76	9.49	1.86	5.18	16.53	1038.29
2006	1022.11	9.46	1.89	5.37	16.71	1038.82
2007	1022.08	9.41	1.90	5.54	16.85	1038.93
2008	1021.47	9.37	1.92	5.70	17.00	1038.47
2009	1019.55	9.12	1.91	5.85	16.88	1036.43
2010	1016.31	8.86	1.90	5.97	16.73	1033.04
2011	1011.92	8.51	1.87	6.08	16.45	1028.37
2012	1006.01	8.18	1.82	6.16	16.16	1022.17
2013	998.04	7.90	1.77	6.22	15.88	1013.92
2014	987.62	7.65	1.79	6.22	15.66	1003.29
2015	974.79	6.87	1.74	6.17	14.79	989.58
2016	960.11	6.14	1.68	6.08	13.90	974.01
2017	944.24	5.46	1.62	5.95	13.03	957.27
2018	926.98	4.84	1.58	5.76	12.18	939.16
2019	907.52	4.27	1.49	5.55	11.31	918.84
2020	885.92	3.75	1.42	5.30	10.46	896.38
2021	862.36	3.27	1.33	5.02	9.62	871.98
2022	836.73	2.83	1.26	4.71	8.79	845.52
2023	808.73	2.43	1.20	4.36	7.98	816.72
2024	778.22	2.06	1.17	3.97	7.19	785.41
2025	745.43	1.76	1.00	3.62	6.37	751.80
2026+	7654.79	8.10	4.59	25.13	37.82	7692.61
TOTAL	48725.65	265.05	58.10	190.85	514.00	49239.66

KMX 02169

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 9

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: <20

EXCESS CANCER MANIFESTATIONS

CAL. YEAR	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.24	0.05	0.06	0.36
1983	0.29	0.05	0.08	0.42
1984	0.34	0.06	0.10	0.50
1985	0.40	0.07	0.12	0.58
1986	0.45	0.08	0.14	0.67
1987	0.51	0.08	0.16	0.76
1988	0.57	0.09	0.19	0.86
1989	0.67	0.11	0.23	1.01
1990	0.83	0.13	0.27	1.22
1991	1.05	0.16	0.31	1.52
1992	1.25	0.18	0.36	1.79
1993	1.37	0.20	0.41	1.98
1994	1.48	0.21	0.47	2.17
1995	1.59	0.22	0.54	2.36
1996	1.70	0.24	0.61	2.55
1997	1.80	0.25	0.69	2.74
1998	1.88	0.26	0.78	2.92
1999	1.95	0.28	0.87	3.10
2000	2.01	0.32	0.97	3.29
2001	2.06	0.38	1.06	3.50
2002	2.13	0.43	1.12	3.67
2003	2.18	0.44	1.19	3.82
2004	2.21	0.46	1.26	3.93
2005	2.22	0.48	1.33	4.03
2006	2.22	0.49	1.40	4.10
2007	2.19	0.49	1.46	4.14
2008	2.15	0.50	1.52	4.16
2009	2.10	0.50	1.57	4.17
2010	2.05	0.49	1.62	4.16
2011	2.00	0.49	1.66	4.15
2012	1.91	0.49	1.69	4.09
2013	1.78	0.49	1.71	3.98
2014	1.62	0.48	1.72	3.81
2015	1.46	0.46	1.71	3.64
2016	1.32	0.45	1.69	3.47
2017	1.19	0.44	1.66	3.29
2018	1.06	0.42	1.62	3.10
2019	0.95	0.40	1.57	2.92
2020	0.83	0.39	1.51	2.73
2021	0.73	0.37	1.43	2.53
2022	0.64	0.35	1.35	2.33
2023	0.55	0.31	1.25	2.12
2024	0.48	0.27	1.16	1.92
2025	0.41	0.23	1.08	1.72
2026+	2.03	1.15	8.21	11.39
TOTAL	60.88	14.86	51.93	127.67

KMX 02181

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 10

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: 20-24

16-20 in 1978

EXCESS CANCER MANIFESTATIONS

CAL. YEAR	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.37	0.07	0.10	0.55
1983	0.45	0.08	0.13	0.66
1984	0.54	0.10	0.15	0.79
1985	0.63	0.11	0.19	0.92
1986	0.73	0.12	0.22	1.07
1987	0.83	0.14	0.26	1.23
1988	0.93	0.15	0.31	1.39
1989	1.08	0.17	0.37	1.62
1990	1.32	0.20	0.43	1.95
1991	1.66	0.25	0.50	2.41
1992	1.97	0.29	0.58	2.83
1993	2.17	0.31	0.66	3.15
1994	2.38	0.34	0.76	3.48
1995	2.58	0.36	0.86	3.80
1996	2.76	0.39	0.98	4.13
1997	2.93	0.41	1.11	4.44
1998	3.08	0.42	1.24	4.74
1999	3.20	0.45	1.39	5.04
2000	3.30	0.51	1.54	5.35
2001	3.40	0.59	1.68	5.67
2002	3.51	0.66	1.79	5.96
2003	3.60	0.69	1.90	6.20
2004	3.64	0.72	2.01	6.38
2005	3.66	0.75	2.12	6.53
2006	3.65	0.76	2.22	6.64
2007	3.61	0.78	2.32	6.70
2008	3.53	0.78	2.40	6.72
2009	3.45	0.78	2.48	6.71
2010	3.36	0.77	2.55	6.68
2011	3.26	0.77	2.61	6.64
2012	3.11	0.77	2.65	6.53
2013	2.88	0.76	2.67	6.31
2014	2.61	0.74	2.67	6.01
2015	2.35	0.72	2.64	5.71
2016	2.10	0.70	2.60	5.40
2017	1.87	0.67	2.53	5.08
2018	1.66	0.64	2.45	4.75
2019	1.46	0.61	2.35	4.42
2020	1.28	0.58	2.23	4.10
2021	1.11	0.56	2.10	3.76
2022	0.95	0.52	1.95	3.42
2023	0.82	0.46	1.79	3.07
2024	0.70	0.40	1.64	2.74
2025	0.59	0.34	1.50	2.43
2026+	2.57	1.46	9.91	13.94
TOTAL	97.63	22.86	77.52	198.01

24 yrs

↓

68+

KMX 02182

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 11

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: 25-34

EXCESS CANCER MANIFESTATIONS

CAL. YEAR	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.56	0.10	0.13	0.79
1983	0.63	0.11	0.16	0.90
1984	0.71	0.12	0.19	1.01
1985	0.79	0.13	0.23	1.14
1986	0.87	0.14	0.26	1.27
1987	0.95	0.15	0.31	1.41
1988	1.03	0.16	0.36	1.55
1989	1.19	0.18	0.41	1.79
1990	1.47	0.22	0.48	2.17
1991	1.89	0.28	0.54	2.71
1992	2.19	0.31	0.61	3.11
1993	2.28	0.32	0.69	3.29
1994	2.37	0.33	0.77	3.47
1995	2.45	0.34	0.86	3.65
1996	2.52	0.35	0.95	3.83
1997	2.58	0.36	1.05	3.99
1998	2.62	0.36	1.15	4.13
1999	2.64	0.38	1.25	4.26
2000	2.63	0.43	1.34	4.40
2001	2.63	0.50	1.41	4.54
2002	2.64	0.55	1.44	4.63
2003	2.65	0.55	1.47	4.67
2004	2.63	0.54	1.50	4.67
2005	2.59	0.53	1.53	4.65
2006	2.53	0.52	1.55	4.60
2007	2.45	0.51	1.56	4.52
2008	2.35	0.49	1.57	4.41
2009	2.23	0.47	1.57	4.27
2010	2.11	0.45	1.57	4.13
2011	1.99	0.43	1.56	3.98
2012	1.85	0.42	1.53	3.80
2013	1.66	0.40	1.50	3.57
2014	1.46	0.38	1.45	3.30
2015	1.27	0.36	1.40	3.03
2016	1.10	0.35	1.33	2.78
2017	0.95	0.32	1.25	2.52
2018	0.81	0.30	1.17	2.28
2019	0.68	0.27	1.08	2.04
2020	0.57	0.25	0.99	1.81
2021	0.47	0.23	0.89	1.60
2022	0.38	0.21	0.79	1.38
2023	0.31	0.18	0.69	1.18
2024	0.25	0.14	0.60	0.99
2025	0.20	0.11	0.51	0.83
2026+	0.60	0.34	2.20	3.14
TOTAL	71.71	14.59	45.87	132.17

KMX 02118

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 12

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: 35-44

CAL. YEAR	EXCESS CANCER MANIFESTATIONS			
	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.45	0.07	0.10	0.63
1983	0.48	0.08	0.12	0.68
1984	0.51	0.08	0.14	0.73
1985	0.54	0.09	0.16	0.78
1986	0.57	0.09	0.18	0.84
1987	0.59	0.09	0.20	0.89
1988	0.62	0.10	0.23	0.94
1989	0.69	0.11	0.25	1.05
1990	0.84	0.12	0.28	1.24
1991	1.05	0.15	0.31	1.51
1992	1.17	0.17	0.33	1.67
1993	1.14	0.16	0.36	1.66
1994	1.11	0.16	0.38	1.65
1995	1.09	0.15	0.40	1.64
1996	1.06	0.15	0.43	1.63
1997	1.03	0.14	0.44	1.62
1998	1.00	0.14	0.46	1.59
1999	0.96	0.14	0.47	1.56
2000	0.92	0.15	0.47	1.54
2001	0.89	0.16	0.47	1.52
2002	0.86	0.17	0.45	1.48
2003	0.84	0.15	0.43	1.43
2004	0.80	0.14	0.42	1.37
2005	0.77	0.13	0.41	1.31
2006	0.73	0.12	0.40	1.25
2007	0.69	0.12	0.38	1.19
2008	0.64	0.11	0.37	1.11
2009	0.59	0.10	0.36	1.04
2010	0.54	0.09	0.34	0.97
2011	0.50	0.08	0.33	0.91
2012	0.44	0.08	0.31	0.83
2013	0.38	0.07	0.29	0.74
2014	0.32	0.06	0.27	0.64
2015	0.26	0.06	0.24	0.56
2016	0.21	0.05	0.22	0.48
2017	0.16	0.04	0.20	0.40
2018	0.13	0.04	0.17	0.34
2019	0.10	0.03	0.15	0.28
2020	0.07	0.03	0.12	0.23
2021	0.06	0.02	0.10	0.18
2022	0.04	0.02	0.08	0.14
2023	0.03	0.02	0.06	0.11
2024	0.02	0.01	0.05	0.08
2025	0.01	0.01	0.03	0.06
2026+	0.02	0.01	0.08	0.11
TOTAL	25.93	4.26	12.41	42.60

KMX 02119

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 13

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: 45-54

CAL. YEAR	EXCESS CANCER MANIFESTATIONS			
	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.23	0.04	0.05	0.32
1983	0.23	0.04	0.06	0.33
1984	0.23	0.04	0.06	0.34
1985	0.23	0.04	0.07	0.34
1986	0.23	0.04	0.08	0.34
1987	0.23	0.04	0.08	0.34
1988	0.22	0.04	0.09	0.34
1989	0.23	0.04	0.09	0.35
1990	0.25	0.04	0.09	0.38
1991	0.29	0.05	0.09	0.43
1992	0.30	0.05	0.10	0.45
1993	0.28	0.04	0.10	0.42
1994	0.26	0.04	0.09	0.39
1995	0.24	0.04	0.09	0.37
1996	0.23	0.03	0.09	0.35
1997	0.22	0.03	0.09	0.34
1998	0.21	0.03	0.08	0.32
1999	0.20	0.03	0.08	0.31
2000	0.19	0.03	0.08	0.29
2001	0.18	0.03	0.07	0.28
2002	0.18	0.03	0.07	0.27
2003	0.17	0.02	0.07	0.26
2004	0.15	0.02	0.06	0.24
2005	0.14	0.02	0.06	0.22
2006	0.13	0.02	0.06	0.20
2007	0.11	0.02	0.05	0.18
2008	0.10	0.01	0.05	0.16
2009	0.09	0.01	0.04	0.14
2010	0.07	0.01	0.04	0.12
2011	0.06	0.01	0.03	0.11
2012	0.05	0.01	0.03	0.09
2013	0.04	0.01	0.02	0.07
2014	0.03	0.00	0.02	0.05
2015	0.02	0.00	0.02	0.04
2016	0.01	0.00	0.01	0.03
2017	0.01	0.00	0.01	0.02
2018	0.01	0.00	0.01	0.01
2019	0.00	0.00	0.01	0.01
2020	0.00	0.00	0.00	0.01
2021	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00
2026+	0.00	0.00	0.00	0.00
TOTAL	6.07	0.92	2.30	9.30

KMX 02120

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 14

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: 55-64

CAL. YEAR	EXCESS CANCER MANIFESTATIONS			
	RESPIR- ATORY	ALL OTHER	MESO- THELIOHA	TOTAL EXCESS
1982	0.04	0.01	0.01	0.06
1983	0.04	0.01	0.01	0.06
1984	0.03	0.01	0.01	0.05
1985	0.03	0.01	0.01	0.05
1986	0.03	0.01	0.01	0.04
1987	0.02	0.01	0.01	0.04
1988	0.02	0.01	0.01	0.04
1989	0.02	0.00	0.01	0.04
1990	0.02	0.00	0.01	0.03
1991	0.02	0.00	0.01	0.03
1992	0.02	0.00	0.01	0.03
1993	0.02	0.00	0.01	0.03
1994	0.02	0.00	0.01	0.03
1995	0.02	0.00	0.01	0.03
1996	0.02	0.00	0.01	0.03
1997	0.02	0.00	0.01	0.03
1998	0.02	0.00	0.01	0.03
1999	0.02	0.00	0.01	0.03
2000	0.02	0.00	0.01	0.02
2001	0.01	0.00	0.01	0.02
2002	0.01	0.00	0.00	0.02
2003	0.01	0.00	0.00	0.02
2004	0.01	0.00	0.00	0.01
2005	0.01	0.00	0.00	0.01
2006	0.01	0.00	0.00	0.01
2007	0.00	0.00	0.00	0.01
2008	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00
2026+	0.00	0.00	0.00	0.00
TOTAL	0.51	0.10	0.21	0.81

KMX 02121

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 15

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

AGE GROUP: >64

CAL. YEAR	EXCESS CANCER MANIFESTATIONS			
	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	0.00	0.00	0.00	0.01
1983	0.00	0.00	0.00	0.01
1984	0.00	0.00	0.00	0.01
1985	0.00	0.00	0.00	0.01
1986	0.00	0.00	0.00	0.00
1987	0.00	0.00	0.00	0.00
1988	0.00	0.00	0.00	0.00
1989	0.00	0.00	0.00	0.00
1990	0.00	0.00	0.00	0.00
1991	0.00	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.00
1993	0.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.00
1995	0.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00
2026+	0.00	0.00	0.00	0.00
TOTAL	0.05	0.01	0.03	0.08

KMX 02122

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

SECTION II
EXHIBIT IV
SHEET 16

DISPLAY OF EXPECTED MANIFESTATIONS
BY CALENDAR YEAR

ALL AGE GROUPS

CAL. YEAR	EXCESS CANCER MANIFESTATIONS			
	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	TOTAL EXCESS
1982	1.91	0.33	0.47	2.71
1983	2.13	0.36	0.55	3.05
1984	2.37	0.40	0.65	3.43
1985	2.62	0.44	0.77	3.82
1986	2.88	0.47	0.89	4.24
1987	3.13	0.51	1.03	4.67
1988	3.39	0.54	1.19	5.12
1989	3.88	0.61	1.36	5.85
1990	4.73	0.72	1.55	7.00
1991	5.97	0.88	1.76	8.62
1992	6.90	1.00	1.99	9.89
1993	7.26	1.04	2.23	10.53
1994	7.62	1.09	2.49	11.20
1995	7.97	1.12	2.77	11.86
1996	8.29	1.16	3.07	12.52
1997	8.58	1.19	3.39	13.15
1998	8.80	1.21	3.72	13.73
1999	8.96	1.28	4.06	14.31
2000	9.07	1.43	4.40	14.90
2001	9.18	1.66	4.69	15.53
2002	9.34	1.83	4.87	16.03
2003	9.45	1.87	5.07	16.39
2004	9.44	1.89	5.27	16.60
2005	9.38	1.91	5.45	16.74
2006	9.27	1.91	5.62	16.80
2007	9.06	1.91	5.77	16.74
2008	8.77	1.89	5.91	16.56
2009	8.45	1.85	6.02	16.33
2010	8.14	1.81	6.12	16.07
2011	7.80	1.78	6.18	15.77
2012	7.37	1.76	6.22	15.34
2013	6.74	1.72	6.19	14.66
2014	6.03	1.67	6.13	13.82
2015	5.36	1.61	6.01	12.98
2016	4.74	1.55	5.85	12.15
2017	4.18	1.48	5.65	11.31
2018	3.67	1.40	5.42	10.48
2019	3.19	1.32	5.15	9.67
2020	2.76	1.25	4.86	8.87
2021	2.37	1.18	4.53	8.08
2022	2.02	1.10	4.17	7.29
2023	1.71	0.97	3.79	6.48
2024	1.45	0.82	3.45	5.73
2025	1.22	0.69	3.12	5.03
2026+	5.23	2.96	20.40	28.58
TOTAL	262.77	57.60	190.28	510.65

127.67
382.98

Less Age Group
Under 20 in 1982
(11 16 in 1980)

KMX 02123

REED DECORATIVE PRODUCTS, INC.

Model Assumptions

- (1) Relationship of individual selected state residential construction workers to countrywide construction workers applied to projected workers exposed in construction industry is valid estimate of residential construction workers exposed in the selected states (factor is 15.7% based on Exhibit V, Sheet 5).
- (2) Adjustment for limited market penetration reflects the expectation that a Kelly-Moore product would have been involved in only 15% and 25% of residential construction situations for the periods 1957-1967 and 1968-1978, respectively. (See Exhibit V, Sheet 6 and text.)
- (3) For normal mortality we have used an accelerated mortality relative to the U.S. Life tables, by use of the 1961 Commissioner's Standard Industrial table. This implies an expectation of a more rapid decrease in the population at risk (essentially, a "blue-collar" population) versus the general public. Male mortality has been used throughout (see Exhibit III, Sheet 2).
- (4) The age distribution for the existing work force in 1957 per data of the United States Statistical Abstract.

Age Group	< 19	20-24	25-34	35-44	45-54	55-64	>64
Percentage	7.3%	10.6%	20.9%	23.1%	20.7%	13.0%	44%

- (5) Age distribution of new entrants to the work force was extracted from a Selikoff analysis. The following distribution was used:

Age Group	<20	20-24	25-34	35-44	45-54	55-64	>64
Percentage	15.2%	27.3%	24.3%	14.6%	10.0%	6.1%	2.5%

- (6) The population by calendar year of entry and age group was matured to 1/1/82. The intent of this maturation was to determine the population at risk still living at 1/1/82. The normal mortality assumption (point (3)) was applied as well as applicable excess cancer mortality described below.
- (7) Disease frequencies are expected to vary by age group. The following factors form the basis for the underlying, or "background", risk of cancer mortality by age group. These values represent frequency per 100,000 persons.

KMX 02180

Type	Age Group						
	<20	20-24	25-34	35-44	45-54	55-64	>64
Respiratory	.1	.2	1.3	4.7	81.3	223.5	203.6
Other	4.5	8.2	13.8	35.1	110.9	298.5	1153.4

- (8) The relative risk of cancer mortality for insulators is defined as a very simple linear relationship by Selikoff. The suggested relationship for "all other cancers" is significantly reduced (factor of 10%) to reflect input from various insurers handling these claims. These insurers indicate that the frequency of asbestos-related other cancers are very infrequent and do not reflect a multiplier to the pre-existing, or background, risk of these cancers. It is worth noting that the studies available also indicate a less certain excess asbestos-related other cancer incidence, particularly of the magnitude expected for excess respiratory cancers. Time is the number of years from onset of exposure and relative risk represents the factor applied to the background cancer mortality in (7) above:

<u>Time</u>	<u>Relative Risk</u>
7.5	1.0
35	6.5
60>	1.8

- ** (9) The relative risks defined in point (7) reflect the exposure of insulation workers with 25 years' exposure. Based on studies of dose, duration and response, it has been estimated that construction exposure represents a relative exposure of 5% of the 25-year insulator exposure, except during the period 1958-1972 when extensive use of spray asbestos was occurring. The factor was amended to 7.5% during this period.
- (10) Changing smoking habits are reflected by factors applied by calendar year of entry and age group. These are described in Exhibit V, Sheet 4.
- (11) Mesothelioma and asbestosis excess mortality were estimated as absolute frequencies. For mesothelioma the frequency below was used, while in the case of asbestosis, one excess mortality was estimated for each four otherwise determined cancer mortalities. Since, for mesothelioma, these frequencies reflect long-term insulator exposure, both the relativities in item (9) and the duration adjustment below are applied.

KMX 02174

	<u>Time from Onset</u>	<u>Frequency</u>	<u>Duration Adjustment</u>
**	<45 Years	$(T^{4.9}) / (100,000)^2$	15.0/25
**	>45 Years	(.012)	15.0/25

(12) The time from manifestation to death is applied to the projected excess asbestos-related mortality. These lags vary by disease type as indicated below:

<u>Number of Years from Manifestation to Death</u>	<u>Lag Factors</u>		
	<u>Respiratory and All Other</u>	<u>Mesothelioma</u>	<u>Asbestosis</u>
1	25%	60%	5%
2	40	30	5
3	25	10	5
4	10		5
5			15
6			15
7			15
8			15
9			10
10			10
	100%	100%	100%

KMX 02175

REED DECORATIVE PRODUCTS, INC.

Percentage of the Male Population
Who Smoke
(000s)

Age Group	1965			1970			1976		
	Present Smokers	Total Population	%	Present Smokers	Total Population	%	Present Smokers	Total Population	%
17-24	4,838	9,962	49%	4,885	12,034	41%	3,508	8,997	39%
25-44	12,814	21,613	59	11,406	22,542	51	10,743	25,966	41
45-64	9,527	18,401	52	8,763	19,644	45	7,551	20,632	37
>65	2,161	7,610	28	1,858	8,090	23	1,939	8,961	22

Development of Relativities
By Calendar Year of Entry

Age Group	Pre-1966		1966-1974		1975 and After	
	Percentage Smokers	Relativity	Percentage Smokers	Relativity	Percentage Smokers	Relativity
17-24	50	1.0000	40	.800	40	.800
25-44	60	1.000	50	.833	40	.667
45-64	50	1.000	45	.900	35	.700
>65	30	1.000	25	.833	20	.667

SOURCE: United States Statistical Abstract

KMX 02117

REED DECORATIVE PRODUCTS, INC.

Construction Employees

Determination of Residential
Portion of All Construction Employees

<u>Category</u>	<u>All Employees</u>	<u>All Construction Workers</u>	<u>Number With Residential Exposure</u>
<u>General Contractors</u>	1,180,747 (27.9%)	963,362 (22.8%)	428,513 (10.1%)
Heavy Construction	917,083 (21.7%)	757,465 (17.9%)	0 (0)
<u>Special Trade Contractors</u>	2,135,828 (50.4%)	1,827,124 (43.2%)	234,625 (5.5%)
Total - All Employees	4,233,658 (100%)	3,547,951 (83.8%)	663,138 (15.7%)

KMX 02184

REED DECORATIVE PRODUCTS, INC.

Expected Kelly-Moore Market Penetration

<u>Calendar Year</u>	<u>Asbestos Used (a)</u>	<u>Index at ___%</u> <u>Market Penetration</u>	
		<u>25%(b)</u>	<u>50%(c)</u>
1958	250	3.0%	6.0%
1959	500	6.0	12.0
1960	700	8.4	16.8
1961	700	8.4	16.8
1962	763	9.2	18.4
1963	713	8.6	17.2
1964	679	8.2	16.4
1965	697	8.4	16.8
1966	617	7.4	14.8
1967	701	8.4	16.8
1968	1,112	13.4	26.8
1969	1,036	12.5	25.0
1970	1,354	16.3	32.6
1971	1,885	22.7	45.4
1972	2,080	25.0	50.0
1973	1,434	17.2	34.4
1974	1,308	15.7	31.4
1975	791	9.5	19.0
1976	724	8.7	17.4
1977	1,276	15.3	30.6
1978	23	.3	.6

Selected Values:

	<u>Period</u>	<u>Expected Factor</u>	<u>Upper Bound</u>
**	1957-1967	15.0%	22.5%
**	1968-1978	25.0%	37.5%

(a) Thousands of tons per Exhibit II of Section VI.

(b) $25\% \times (\text{column (2)}/2,080)$

** (c) $37.5\% \times (\text{column (2)}/2,080)$

KMX 02176

EXHIBIT A

REED DECORATIVE PRODUCTS

ASBESTOS LITIGATION MODEL

DISPLAY OF EXPECTED LOSS COSTS BY CALENDAR YEAR OF MANIFESTATION
ALL AGE GROUPS

CAL. YEAR	DISEASE TYPE				TOTAL EXCESS
	RESPIR- ATORY	ALL OTHER	MESO- THELIOMA	ASRES- EXCESS	
1982	11646	1826	5777	1436	20686
1983	13832	2166	7304	1752	25053
1984	16290	2547	9116	2120	30073
1985	19002	2969	11294	2547	35813
1986	21913	3422	13849	3033	42217
1987	23877	3733	16041	3415	47066
1988	25827	4048	18475	3828	52177
1989	29558	4575	21161	4271	59565
1990	36045	5427	24111	4744	70327
1991	45494	6625	27333	5247	84699
1992	52578	7547	30830	5778	96733
1993	55306	7962	34605	6299	104172
1994	58054	8382	38664	6814	111914
1995	60721	8795	43006	7300	119823
1996	63217	9192	47628	7755	127792
1997	65360	9554	52517	8173	135604
1998	67071	9871	57660	8545	143148
1999	68276	10351	63040	8903	150570
2000	69129	11116	68287	9231	157764
2001	69960	12201	72753	9524	164439
2002	71150	12996	75491	9777	169414
2003	72024	13261	78696	10007	173988
2004	71976	13437	81746	10198	177357
2005	71499	13557	84588	10343	179987
2006	70617	13613	87215	10436	181880
2007	69019	13570	89584	10468	182641
2008	66824	13429	91667	10433	182352
2009	64415	13217	93441	10325	181399
2010	62024	12973	94890	10148	180036
2011	59475	12734	95942	9904	178056
2012	56148	12481	96446	9594	174669
2013	51398	12084	96107	9218	168806
2014	45921	11545	95024	8780	161271
2015	40841	11001	93268	8294	153403
2016	36163	10460	90798	7828	145249
2017	31880	9872	87657	7319	136728
2018	27951	9250	84059	6813	128073
2019	24346	8639	79960	6287	119231
2020	21044	8068	75385	5760	110257
2021	18045	7510	70268	5235	101058
2022	15377	6879	64665	4662	91583
2023	13068	6095	58872	4126	82162
2024	11067	5256	53541	3633	73497
2025	9290	4503	48461	3184	65438
2026+	39823	21976	316409	15968	394176
TOTAL	1994542	410716	2947634	319454	5672345

KMX 02177

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

POPULATION AT RISK
BY CALENDAR YEAR OF ENTRY

CONSTRUCTION WORKERS

Calendar Year	Exposed Construction Workers (A)	Total Residential- Selected States (B)	Total- Country- wide	Ratio of K-M Exposed Workers To Total Workers (5) = (3)/(4)
(1)	(2)	(3)	(4)	(5) = (3)/(4)
1957				
1958 <i>Calif only</i>	738,300 286,700	17387 6752		.00072 .00028
1959 <i>" "</i>	792,900 308,400	18673 7263	24,165,000	.00077 .00030
1960	788,200	18562		.00069
1961	798,000	18793		.00070
1962	820,400	19320		.00072
1963	851,000	20041		.00075
1964	867,400	20427	26,764,000	.00076
1965	872,400	20545		.00077
1966	882,400	20781		.00077
1967	845,200	19904		.00074
1968	887,800	34846		.00130
1969	937,600	36801		.00138
1970	921,000	36149		.00115
1971	951,200	37335		.00118
1972	1,036,400	40679		.00129
1973	1,129,100	44317		.00141
1974	1,133,200	44478	31,529,000	.00141
1975	1,044,400	40993		.00130
1976	1,099,300	43148		.00137
1977	1,225,300	48093		.00153
1978	1,391,700	54624		.00173
1979	1,523,500	0		.0

(A) From Page 36 of the report

(B) Col. (3) = Col. (2) x .157 x .15 from 1958-1967; = Col (2) x
.157 x .25 from 1968-1978.

? includes more than drywall workers

KMX 02126

REED DECORATIVE PRODUCTS
ASBESTOS LITIGATION MODEL

POPULATION AT RISK
BY CALENDAR YEAR OF ENTRY

<u>Calendar Year</u> (1)	<u>Ratio of K-M Exposed Workers to Total Workers</u> (2)	<u>Selikoff's Number of New Entrants</u> (3)	<u>Estimated Number of New Entrants by Cal. Year of Entry</u> (4) = (2) x (3)
1957			17304.4
1958	.00072 .00028		1044.7 406.6
1959	.00077 .00030		1122.0 435.6
1960	.00069		1294.2
1961	.00070		1310.3
1962	.00072		1347.0
1963	.00075		1397.3
1964	.00076	1,866,000	1424.2
1965	.00077		1432.4
1966	.00077		1448.8
1967	.00074		1387.7
1968	.00130		2429.5
1969	.00138		2565.8
1970	.00115		2264.4
1971	.00118		2338.7
1972	.00129		2548.1
1973	.00141		2776.1
1974	.00141	1,925,000	2786.1
1975	.00130		2567.8
1976	.00137		2702.8
1977	.00153		3012.6
1978	.00173		3421.7
1979	.0		.0

Figures in Column (2) are rounded; unrounded figures are used to calculate Column (4).

KMX 02125

50% legal interest 20-15% For legal cost
of Cases w/No Payment. Page 78

Travelers Says It Proposed Plan to Help Manville a Day Prior to Chapter 11 Filing

A WALL STREET JOURNAL NEWS ROUNDUP

Travelers Insurance Cos. said it filed a plan to help Manville Corp. cover costs of asbestos-related, personal-injury claims a day before Manville's filing for protection under Chapter 11 of the federal Bankruptcy Code.

Travelers Insurance, a unit of Hartford, Conn.-based Travelers Corp., said it filed the plan with Superior Court of California at San Francisco Aug. 25, the day before Manville also filed court papers seeking \$5 billion punitive damages from its insurance carriers. Manville alleges that the insurers refused to honor their obligations under various liability policies covering asbestos disease and property damage claims.

Travelers said its plan calls for a pooled fund, to which involved insurers would contribute until the court resolves the complicated coverage issues. Travelers didn't specify the amount of the fund.

While Travelers said it was willing to participate in the pool, the company also said that it has fulfilled product-liability obligations of its contracts with Manville. A Travelers Insurance official said: "We've paid the full amount" of the total aggregate product-liability limits of the policies. "Yet," he added, "we are willing, on an interim basis, to pay into a pool that will pay (Manville's) settlement and defense costs."

As reported, Manville has sought protection under Chapter 11 of the Bankruptcy Code to fend off thousands of lawsuits from plaintiffs who claim they have been injured by asbestos, a product that causes various lung ailments, including cancer.

Under Chapter 11, a company can continue to operate free from creditors' suits. The Manville filing is unusual because the company is financially strong. In bankruptcy cases, usually the party seeking protection is in dire financial straits. Manville has argued that if it didn't seek protection now it soon would have been overwhelmed by the suits, which, according to the company, could number as many as 52,000. Some lawyers representing plaintiffs have called Manville's use of Chapter 11 "fraudulent."

Travelers said it had paid defense and other expenses for Manville as they were incurred "until the limits were exhausted." Travelers provided general liability insurance policies to Manville Corp., previously Johns-Manville Corp., from 1947 through 1976.

One major dispute among insurers and their clients is the "exposure" and the "manifestation" theories of asbestos-related diseases, including lung cancer. Some argue that the insurer that held the policy when the illness manifested itself should pay the damages. Others say the exposure theory should prevail, because it can take 20 to 40 years after exposure to the product for ill effects to be manifested. Thus the formula to make all insurers pay to a general fund

regardless of when their policies were in force, has gained ground.

In an unrelated action, Manville won a victory in federal bankruptcy court in New York. In the first challenge to its Chapter 11 filing, Judge Burton R. Lifland upheld the company. Lawyers for plaintiffs in asbestos-damage cases had requested that the bankruptcy judge lift the Chapter 11 barrier to pending suits filed against Manville to allow them to take a deposition from an ailing 83-year-old witness against Manville.

Manville's lawyers argued that if an exception was made in this case, soon there would be a flood of similar filings. Judge Lifland refused the request and set Sept. 29 to hear further argument.

Meanwhile, no date has been set for preliminary meeting to form a creditors' committee to look into the Manville filing.

KMX 02129

Tillinghast, Nelson & Warren

Manville's Chapter 11 Filing Spotlights Tiny Firm That Probes Health Hazards

By NEIL MAXWELL

Staff Reporter of The Wall Street Journal

DENVER—A tiny consulting firm in suburban Boston is at the center of one of history's biggest and most controversial bankruptcy cases.

Epidemiology Resources Inc., a two-year-old company with a full-time staff of five, conducted research for Manville Corp. on asbestos-related disease. The study led to the company's decision to seek protection of federal bankruptcy laws.

Citing results of the study, Manville said it is being overwhelmed by the cost of litigation. And even though the company acknowledges that it is financially healthy, it filed for reorganization under Chapter 11, halting all claims and litigation against it.

The filing angered attorneys for thousands of plaintiffs who claim to suffer from lung diseases caused by exposure to asbestos made by Manville. And it practically assures a court challenge of the research by Epidemiology Resources of Brookline, Mass.

'How Much Disease'

Manville said it asked Epidemiology Resources to project "how much asbestos-related disease there would be in the future." Manville took the answer and figured there would be 22,000 new plaintiffs along with the 20,000 who have filed suit. Manville has said it could cost more than \$2 billion to resolve that many claims.

"We want to know exactly where those figures came from," said one lawyer, who believes Manville is using the consulting firm's study to exaggerate the seriousness of its financial position.

Manville defended the study as conservative and said Epidemiology Resources was chosen because it was "the best qualified" of several concerns, most connected with universities, that study health hazards.

Manville won't comment on the study's methodology and Nancy Dreyer, 32-year-old chairman and president of Epidemiology Resources, said that "any comment should come from (Manville)."

While Epidemiology Resources is young and small, Miss Dreyer said, it is well qualified to do such studies, and some past customers agree. General Motors Corp., for example, has used the firm to check studies it had done elsewhere. A GM spokesman said the company was satisfied with results.

Checking Others

Some of Epidemiology Resources' projects apparently involved checking others' work and putting it in presentable form. Texaco Inc., for example, hired the consulting firm "to interpret medical data for the media and to add credibility to our own studies," a Texaco spokesman said. The oil company work has involved such things as occupation-related mortality studies of diseases like leukemia, a spokesman said.

Miss Dreyer lists her husband, Kenneth J. Rothman, an associate professor of epidemiology at Harvard University, as a member of the firm's senior advisory board. The other two members, she said, are Philip Cole, chairman of the epidemiology department at the University of Alabama Medical School in Birmingham, and Henry Kohn, retired professor of radiation biology at Harvard. (Prof. Kohn said that he didn't know he was on the board, but that he hadn't seen a corporate letterhead lately and that being considered a senior adviser was fine with him.)

Miss Dreyer declined to disclose owners or other officers in the company, which is closely held. She said that for the year ended June 30 "we did show a small profit," but that as far as current operations go, "I don't know. There are substantial variations from month to month." In addition to staff members the firm said it has a network of consultants it hires to help on specific projects.

Name Problem

But the firm is so obscure that even Manville executives have a tough time with it. At a news conference in Denver the day after its filing for Chapter 11 status, Manville's chairman, John A. McKinney, said he couldn't remember the consulting firm's name. Later, a Manville spokesman said it was Epidemiological Research Inc., San Francisco. Hours later he amended that to the proper name.

Before starting the company, Miss Dreyer worked for Equifac Inc., helping develop a division to perform epidemiological work, but the unit was sold, she said.

Miss Dreyer wouldn't disclose how much the firm was paid for the Manville study or whether it has done work previously for the construction and forest-products company. "I'm not at liberty to talk about that," Miss Dreyer said.

A study by doctors at Mount Sinai Hospital in New York has indicated that nearly 235,000 deaths will result between 1982 and 2027 from asbestos exposure. A smaller number of injuries possibly resulting in lawsuits would also emerge, according to William J. Nicholson, associate professor at Mount Sinai School of Medicine, who helped conduct the hospital's study.

KMX 02130

Manville Filing Expected to Have A Wide Effect

Creditors Are Seen Sharing Estimated \$2 Billion Cost To Settle Health Claims

By DEAN ROTBART

STAFF REPORTER OF THE WALL STREET JOURNAL
DENVER—Although Manville Corp.'s unusual bankruptcy filing last week was intended chiefly to shield the company from thousands of current and future asbestos-related claims, estimated to total \$2 billion, the actual impact will extend far beyond asbestos victims and their families.

Despite the relative strength of Manville's balance sheet and cash flow, dozens, if not hundreds, of the company's creditors and suppliers stand to lose millions of dollars because of Manville's decision to seek protection under Chapter 11 of the federal Bankruptcy Code. "The (reorganization) plan won't be a 100 cents-on-the-dollar plan, or we wouldn't be" in bankruptcy, a company official said.

Many investors, of course, already have suffered huge paper losses on their holdings of the construction and forest-products company's preferred and common stocks. And at the very least, it appears that hundreds of millions of dollars of accounts and notes payable by Manville and other accrued liabilities will remain frozen, barring special court intervention, until all the legal issues of reorganization are resolved. The company concedes that isn't likely to be soon.

The practical effect is that the company's creditors and suppliers "are going to have to share the burden" of paying off individuals who claim health damage from exposure to asbestos made by Manville. Richard von Wald, a company attorney, said. Claiming it is "completely overwhelmed" by the cost of asbestos-related litigation, Manville filed for bankruptcy Thursday morning, halting all claims and litigation against the company. (See related story on page 15).

Seeks Government Aid

Along with other asbestos makers, Manville believes the federal government should pass legislation to help pay asbestos claims, because the product was used during World War II in U.S. shipbuilding efforts. Some critics believe Manville's bankruptcy filing is intended to force the government to provide aid to the industry, and at least one critic labeled the company's action "a fraud on the bankruptcy laws." Many asbestos plaintiffs and their attorneys also blasted Manville's action last week, calling it a dodge.

Manville creditors and suppliers of such goods as pipe resin, utilities, roofing materials and services, reacted with chagrin and anger. "It isn't fair," complained one Colorado small business man, who is awaiting \$50,000 in payments from Manville. "This asbestos business goes back 30 to 40 years and I had nothing to do with it, so why should I pay for it?" he asked. Added an official of a major Eastern supplier that doesn't expect to recover much of its money from Manville: "Once these things get into the courts, you're dead."

In other related developments:

—Some of the company's largest unsecured creditors said they expect to meet with Manville management in Denver today or tomorrow to hear the company's explanation for the filing, its proposed course of action and its pleas for support. "My guess is that they will have (some outline of) their reorganization plan there" for creditors to comment on, said Charles Hazelrigg, an executive at United Bank of Denver, which holds \$6 million of Manville debt.

—Representatives of the Asbestos Litigation Group, consisting of 150 lawyers who are suing Manville and others over health damage claims, planned to meet today in New York to hire a bankruptcy lawyer to lead their attack against Manville's filing and to discuss filing a motion later this week asking that the stay of lawsuits against Manville be lifted. If the judge accepts that motion, he would set a preliminary hearing within 30 days, "and then Manville would have to show its cards," said Fred. M. Baron, a Dallas lawyer who is a trustee of the group.

—The company's Johns-Manville unit, which makes asbestos, filed papers in San Francisco Superior Court seeking \$5 billion in punitive damages from its insurance carriers. The unit alleges that the insurers refused to honor their obligations under various liability policies covering asbestos disease and property damage claims. As a result, the company said it had to spend tens of millions of dollars, which "so strained its financial resources that reorganization proceedings had to be commenced." The filings seek to amend an earlier complaint against two dozen insurers, in which Johns-Manville asked for declaratory judgments, damages and other relief. The company currently faces 16,500 asbestos-related claims.

\$2 Billion Estimate 'Conservative'

(The filing disclosed that the company has spent more on lawyers than on health injury claims so far. It listed legal fees of \$24.5 million, \$24 million for injuries and \$7.5 million for property damage.)

—John H. McKinney, Manville's chairman and president, told a news conference Friday that a company-sponsored study that estimated a total of \$2,000 asbestos-related suits eventually might be filed against Manville is "conservative" in its conclusions, including the estimated \$2 billion cost of the suits. The study was done by a two-year-old Boston consulting concern, Epidemiology Resources Inc., whose president, Nancy Dreyer, said it has had varied experience in conducting environmental and occupational health surveys. Clients include major industrial concerns, she said, and a recent task was to determine if it is safe for natives to return to Bikini Island in the South Pacific, 35 years after an atomic bomb was set off there. (It isn't, she said.) She also said that only the epidemiology part of the survey leading to the prediction of \$2,000 lawsuits was done by her concern, not the arithmetic leading to the \$2 billion damages estimated by Manville. She wouldn't discuss details of the survey.

The study intentionally assessed the company's legal problems on the low side, "so if anyone could attack them (the findings), they'd attack them for being low," Mr. McKinney said. Manville used the study's findings as evidence of its need to seek court protection.

—Mr. McKinney also defended the Chapter 11 filing as Manville's "best chance of coming up whole" (rather than facing) eventual liquidation and cannibalization of the company's assets. He contended that if Manville hadn't sought court protection now, in a position of relative financial strength, the alternative would have been to seek it in a few years after some assets had been depleted by further asbestos claims. Mr. McKinney said the prospect of having to liquidate some assets to help pay legal costs motivated him to drop his personal objections to a Chapter 11 filing.

In Hartford, officials of Travelers Indemnity Co., a unit of Travelers Corp. declined immediate comment, saying they hadn't yet seen a copy of the amended complaint filed in San Francisco by Manville.

Also in Hartford, John Shea, vice president and claims counsel for Aetna Life & Casualty Co., said the insurer hasn't had any direct financial dealings with Manville in settling asbestos claims.

"We really haven't been involved (in the dispute) because our layer of insurance coverage hasn't been reached," Mr. Shea said, adding that Aetna isn't the primary insurer and wouldn't cover claims until several of the other carriers had exhausted their coverage.

Officials of Home Life Insurance Co. of New York were unavailable for comment.

Until Friday's news conference, some Manville suppliers and investors thought they might be spared the pains of the company's bankruptcy. "We were hopeful that they'd at least pay (preferred) dividends and interest on their debt," said Craig Hobbs, an official of Seattle-based Unigard Insurance Group, which holds 16,000 Manville preferred shares.

But Mr. McKinney told reporters that all creditors, whether asbestos-related or not, would be treated the same and face the same potential losses. "Yes, the shareholders and creditors are in a difficult position," he said. Nevertheless, he explained, "when you go into one of these proceedings, you're restructuring everything."

Manville declined to identify its unsecured creditors, ranging from Prudential Corp., with about \$68 million of debt, to small suppliers with only a few dollars in debt. As of June 30, according to the company's Chapter 11 filing, Manville had \$190.9 million in accounts and notes payable, and \$148.6 million in other accrued liabilities. The company's long-term debt at the time was \$498.7 million. In composite trading Friday on the New York Stock Exchange, the company's common stock closed at \$5.125, off \$2.75. The preferred closed at \$18.375, off \$12.625.

'Tremendous' Cash Flow

Because the filing lets it suspend payments on existing obligations, such as debt, dividends and legal claims, Mr. McKinney said Manville should "generate a tremendous amount of cash for running our businesses." As such, he said it won't make any "significant borrowings" in the next year, adding that it is "perfectly possible" that the company will begin paying cash for its materials.

Manville isn't likely to have a choice in the matter, as many suppliers said they will begin shipping products only on a cash-on-delivery basis. Some said they've already halted all shipments on Manville orders, awaiting cash payments. United Bank of Denver froze Manville's payroll account last Thursday and returned all company-issued checks. However, last Friday, Manville opened new accounts in cash with the bank, which then let Friday's payroll checks clear.

Because Manville's decision to file bankruptcy was based principally on legal and political considerations and not on a cash crunch, most investors, creditors and suppliers were caught off guard, and many were overexposed in their financial dealings with Manville.

"When we are worried about the health of companies such as Chrysler or International Harvester, we cover ourselves and require payments every two weeks," said one Manville supplier who could take a loss of as much as \$1 million. "But this bankruptcy came as a complete surprise." Several financial advisers said they had recently been recommending Manville stock as a "bargain."

As recently as two weeks ago, about 75 Manville suppliers turned out at a golf outing in Colorado sponsored by a chemical company. "There wasn't even a peep of a suggestion" about Manville's impending bankruptcy, said one supplier who attended the event. Even now, some creditors say they will need weeks to assess the extent of their possible losses.

The town of Winder, Ga., for example, said it could have a loss of as much as \$400,000 in revenue from utility services it provided Manville's nearby fiberglass insulation plant this month. Ernest Graham, clerk and treasurer of the town, said he doesn't know how much of the town's money will be frozen by Manville's action because the town won't even bill Manville until early next month.

For Winder, which has a population of about 9,000, the loss of \$400,000, even temporarily, would mean forgoing about 6% of its annual revenue. "It would be hard for us to handle," said a somber Mr. Graham. "The first thing we'd have to do is cut back on some of our capital expenditures, and then hope we wouldn't get into any kind of actual service reductions."

KMX 02131

Problems Have Long Plagued Asbestos Firms

By RAYMOND A. JOSEPH

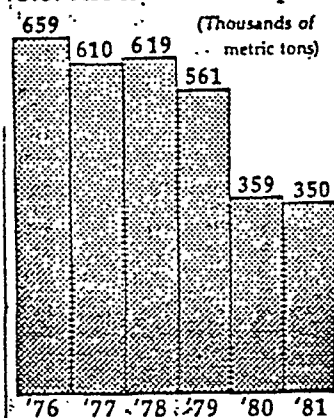
Staff Reporter of THE WALL STREET JOURNAL

NEW YORK—The bankruptcy petition filed Thursday by Manville Corp. was just the latest shock for the battered asbestos industry.

As thousands of cases of asbestos-related diseases among asbestos workers and users have come to light, U.S. asbestos consumption has fallen by about half since 1973. For the past several years asbestos makers have either gotten out of the business entirely, or have tried hard to dissociate themselves from their product.

Some companies have changed their names. The century-old Johns-Manville Corp. became Manville Corp.; Raybestos-Manhattan Inc. became Raymark Corp.; Keene Corp. became Balmco Corp.; Southern Asbestos Co. became Southern Textiles Corp., a unit of H.K. Porter Co.; Union Asbestos & Rubber Co. became Unarco Indus-

U.S. Asbestos Consumption



Source: Interior Department

tries Inc., and then UNR Industries Inc. UNR filed for bankruptcy protection in July.

The change of names was mainly cosmetic, and in some cases reflected corporate diversification. But the structural changes that accompanied some were more significant. A newly organized holding company would assign a percentage of assets to the various units, including one saddled with asbestos products. The idea was that asbestos-related claims could be paid only from that unit's assets, not the parent's.

'A. Tangled Web'

Manville, for example, had assigned 25% of its more than \$2 billion in assets to its asbestos subsidiary. The company hasn't explained how it arrived at that figure. Chicago-based UNR had assigned only pre-1970 assets to Unarco, its asbestos unit, even though UNR hadn't made any asbestos products since 1962. UNR, which has diversified since then, has assets of more than \$200 million now, up from \$24 million in 1969.

But the bankruptcy filings of both Manville and UNR throw those attempts to assign assets into question. Both filings affect the parent companies and most of their subsidiaries, not just the units that make or made asbestos. Malcolm Gaynor, UNR's bankruptcy lawyer, explains: "It was such a tangled web that we decided to file for Chapter 11 protection for all those units whose assets might have been liable" to claims.

Companies have been moving away from asbestos. Raymark, for example, has been replacing asbestos with other fibers, including metal and glass, to make such things as shoe brakes for cars. Southern Textiles, which changed to that name in 1979, says that its use of asbestos has come down steadily. Currently, says a spokesman, the company's products, some of which are used in construction, are about 40% made with asbestos, down from 90% five years ago.

Dangerous Effects

The use of asbestos has been decreasing in this country as the dangerous effects of the product have become known. According to the U.S. Bureau of Mines, U.S. consumption of asbestos fell to about 350,000 metric tons last year from a high of 795,000 metric tons in 1973.

Asbestos, has been used in various applications including shipbuilding and for underground water pipes. Dr. Irving Selikoff, an expert in asbestos-related diseases at New York's Mount Sinai Hospital, says a 700-page report produced for the Department of Labor, states that between 1940 and 1979 more than 27 million Americans were exposed to asbestos in one form or another. Approximately 20 million of those people are still alive. Some will suffer the ill effects of asbestos, he says. He estimates that the industry should anticipate up to 10,000 cancer deaths a year related to asbestos to the end of the century. Asbestos-related diseases include mesothelioma, a cancer of the lining of the lungs, and asbestosis, a lung disease similar to emphysema.

Asbestos products still are being made and used, although under strict safety regulations laid down by the Occupational Safety and Health Administration. Places where asbestos is handled now have signs warning of its health hazards and workers use special masks.

Plaintiffs who suffered from asbestos exposure are fighting across a broad front. Some are challenging the asbestos companies' restructuring, especially that of Manville. In a suit in federal district court in Boston, Manville argues that the suit shouldn't be amended to include parent Manville Corp. as a defendant, because the suit was filed several years ago against Johns-Manville Corp. and Manville Corp. didn't exist until last year.

Judge Robert DeGiacomo last month said he recognized the "concern" of the plaintiff that the changes at Manville might have been intended to shield a good portion of the company's assets.

Ironically, some plaintiffs see Manville's bankruptcy petition as potential good news. "With Chapter 11, it's another ballgame," says Ronald Motley, a Barnwell, S.C., lawyer who represents some asbestos victims. "We will get to see the evidence on which they claim protection," he says.

The Manville filing sent lawyers at other asbestos makers scurrying. After a day of huddling among lawyers and executives at Balmco, the company decided to increase its quarterly dividend to 12 cents a share from 10 cents. Balmco, which makes construction materials, had made asbestos for only four years, ending in 1972. It recently won a court decision requiring its insurers to cover any costs from asbestos claims, and it no longer has to set aside an annual reserve against earnings. "We feel we'll continue to do all right," says a spokesman.

Approximately 300 companies at one time used asbestos in their products. One major user was Eagle-Picher Industries Inc., Cincinnati. The company, a maker of machinery, automotive and industrial goods, has been out of the asbestos business for years. Yet asbestos-related suits have been siphoning off between 10% and 15% of the company's cash flow. But Eagle-Picher says it has no intention of cutting its dividend or of filing for protection under Chapter 11.

Attorneys representing plaintiffs still worry about the possibility that another asbestos concern will follow the industry leader. "Who would have thought that Manville would have made such a desperate move?" asks Thomas Henderson, a Pittsburgh lawyer.

KMX 02132

REVIEW & OUTLOOK

The Price of 'Toxic Torts'

Product liability lawyers have a name for the kind of case that forced Manville Corp. to seek refuge in bankruptcy court last week. It's called a "toxic tort," or a damage claim resulting from exposure to some toxic substance. It's a burgeoning category in a burgeoning field of law. But there must be a better way for victims to be compensated for their losses and manufacturers held accountable for the safety of their products and workplaces.

The Manville case may well prove to be the dramatic event needed to call attention to the waste and injustice that have resulted from the failure of the legal system to deal with product liability in an orderly manner. A very large and financially strong company chose Chapter 11 bankruptcy because it was facing over \$2,000 lawsuits and potential damage awards of \$2 billion arising from health injuries associated with years of making asbestos products.

This is a case of a company attempting to use law in an innovative way to counter the innovative ways law has been used against it. In the hands of modern lawyers, judges and juries, the old English Common Law concept of torts, wrongful acts that entitle the victim to damages, has been stood on its head. In some judicially liberal states like California, a "wrongful act" may consist of nothing more than having fulfilled a government contract years ago to protect seamen from shipboard fires, using a material that was later found to pose health risks to the people who installed it.

Some of the Manville cases are of that type, dating back to worker exposures in World War II shipyards, when asbestosis seemed a minor hazard compared to those that would be risked by sailors on fighting ships. That is not to say that corporations have always been as careful as they should be about work hazards. Damage suits, along with union pressures, safety legislation, workmen's compensation claims and increased medical understanding of occupational hazards all have combined to raise the corporate consciousness. We certainly are not inclined to argue for the abolition of tort law.

On the other hand, the Manville case illuminates serious problems. Lawyers have made product liability a happy hunting ground for fees and, as Manville argued in full-page newspaper ads last week, the lawyers in these cases often fare far better finan-

cially than the victims they represent. Fee limitation might reduce the number of speculative filings.

Findings and awards vary widely from case to case and state to state. The Nebraska Supreme Court last year upheld a state workmen's compensation board award to the widow of a man who had installed asbestos insulation for some 40 firms over 35 years. Lacking a more equitable formula, the board had simply assessed the last company the man had worked for. Statutes of limitations also vary widely from state to state, making it possible for Californians to collect large damages, for example, on claims that could not even be filed in New York. A uniform code may be the answer.

In cases where a widespread hazard has been belatedly discovered, separate court suits are highly inefficient in economic terms. Aside from plaintiff lawyer fees and court costs, product liability cases have piled large new legal costs on business corporations. Newsweek not long ago came up with the estimate that the Fortune 500 spend some \$2.5 billion a year on lawyers. Consumers pay for corporate law just as they pay for the steel, machinery or engineering talent corporations use. Some chemical companies, wary of product liability suits, even have set up "product stewardship" departments, at some cost, to monitor the safety of products their customers make with their chemicals.

In the asbestos field, Congress has been groping for a more efficient way to deal with claims, mainly through an industry-financed fund. This effort, however, also has become adversarial, pitting Democrat George Miller of California against Manville et al. Congressman Miller wants to exclude existing suits. Manville wants them covered and also wants the government to pay part of the cost. Clearly, such funds can become political footballs, as black lung compensation for coal miners has demonstrated. But it should not be beyond the wit of Congress and industry to come up with an efficient way of compensating asbestos victims fairly.

Finally, a word about asbestos itself. It has about 3,000 commercial and industrial uses, some of them vital to human safety. We can't see why the producer of such a valuable product should be forced into bankruptcy for self-protection. Tort law has become a vast tangle, and whatever else Manville has achieved, it has called attention to the need for untangling it.

KMX 02133

THE WALL STREET JOURNAL, AUG. 30, 1982

Dole Says Manville Filing to Affect Review Of U.S. Bankruptcy Code by Senate Panel

By WALL STREET JOURNAL Staff Reporter

WASHINGTON — Manville Corp.'s unusual bankruptcy law filing last week is intensifying a partial review of federal bankruptcy law already under way in Congress.

Manville's decision to seek protection under Chapter 11 of the Bankruptcy Code because of a barrage of lawsuits charging health damages from asbestos it produced was criticized as "dubious and unusual at best," by Sen. Robert Dole (R., Kan.). Sen. Dole heads a judiciary subcommittee that is studying a part of the Bankruptcy Code that apparently is related to Manville's move. Sen. Dole indicated the panel should consider changing the law to ensure that other companies don't file for Chapter 11 protection when faced with product-liability lawsuits.

Manville took the highly unusual action even though its construction and forest-products businesses are, according to the com-

pany, "in good shape." But the company said it is "completely overwhelmed by the cost of asbestos health lawsuits filed against us." The claims against the company will be frozen as a result of the filing.

Also, as a result of filing under Chapter 11, the bankruptcy court, rather than federal and state courts, will decide the outcome of the suits. The company will gain a delay in legal action while its reorganization proceeds, and it won't have to fight thousands of different cases across the country, according to one bankruptcy expert.

According to some legal experts, Manville's situation might have become more complicated if it had delayed its filing. A recent Supreme Court decision called into question a company's use of the bankruptcy code as a means of defense against such issues as product-liability lawsuits. The court ruled that bankruptcy judges should be restricted to ruling on issues directly related to bankruptcy proceedings and shouldn't be permitted to review other issues "arising in or related to" bankruptcy cases, such as product-liability cases.

One of the majority opinions cited the fact that the 1978 law lets bankruptcy judges decide legal issues previously reserved for federal district courts but doesn't give the judges the life tenure or salary protection that other federal judges are provided under the Constitution.

The court's ruling takes effect Oct. 4, unless Congress amends the law to grant federal bankruptcy judges such job protection. Currently, bankruptcy judges are appointed for 14-year terms and their pay can be reduced by Congress.

The House Judiciary Committee earlier this month approved a measure that would give the bankruptcy jurists lifetime tenure and salary protection. Sen. Dole's subcommittee recently held hearings and will begin drafting legislation when Congress returns from its recess Sept. 8.

Sen. Dole said the Manville filing might force the Senate to consider a broader amendment, but he left unclear what it might contain. "America's bankruptcy system can ill afford the additional strains placed upon it by those who would use its protection for shelter against personal or corporate attacks where other remedies . . . would seem more appropriate," the senator said in a statement.

Eagle-Picher to Retain Level of Its Dividend, Despite Asbestos Suits

By WALL STREET JOURNAL Staff Reporter

CINCINNATI—Asbestos-related lawsuits are gobbling between 10% and 15% of Eagle-Picher Industries Inc.'s cash flow, but the company doesn't intend to cut its current 24-cent quarterly dividend and "in no way" is contemplating filing a Chapter 11 petition, company officials said.

Thomas E. Petry, president and chief executive officer, said the 10% to 15% outflow "has an impact but it doesn't hurt our ability to finance moving into new product lines or major capital expenditures because that's the ultimate way to overcome the asbestos problem—to outgrow it."

Manville Corp. filed for protection under Chapter 11 of the federal Bankruptcy Code last week because of asbestos lawsuits. The filing freezes pending litigation and provides court protection from creditors.

Mr. Petry, however, exhibited confidence in Eagle-Picher's ability to handle the asbestos problem, at least for a lengthy period. "Our cash requirements for asbestos, while having grown to the present \$7 million-plus a year, aren't going to mushroom" soon, he said. "We know the pace of actual cash outflows. We can't determine the insurance coverage, but obviously we have some idea of that," he added in an interview.

Eagle-Picher, a maker of machinery, automotive and industrial goods, he said, is prepared to operate on the assumption that the litigation will continue to siphon the 10% to 15% of cash flow "indefinitely" or until a broader resolution of the problem is reached. The company's cash flow has been between \$40 million and \$55 million the past three years.

Eagle-Picher is one of a number of defendant corporations against which individual claims have been filed for alleged damage to health because of exposure to asbestos. Eagle-Picher made asbestos-content insulation under government contract in the 1940s and 1950s. It discontinued using asbestos in 1972.

So far, through 1981, Eagle-Picher settled 1,400 suits of 11,700 filed at an average \$7,000 each, including legal costs.

KMX 02134

Despite Strong Business, Litigation Forces Manville to File for Reorganization

Attention: Manville Corporation Shareholders, Employees, Customers, Suppliers and Creditors

On Thursday, August 26, Manville Corporation and its principal American and Canadian affiliates filed voluntarily for reorganization under Chapter 11 in New York.

In the following interview, John A. McKinney, Manville's Chief Executive, answers questions about the background of this startling development:

Q. Mr. McKinney, this announcement was a surprise. What's wrong with Manville's operations?

A. Nothing is wrong with our business. Filing Chapter 11 does not mean that the Company is going out of business or that its assets will be liquidated. Thousands of asbestos-related lawsuits are the problem. We're the American and world leader in a number of markets, mostly related to construction. During the current recession our sales have held up well and we've operated at better than break even (if you exclude litigation expenses). We've slimmed down too, having eliminated more than 1500 salaried jobs in the last six months. We'll continue to generate substantial cash flow. Our Chapter 11 lawyers tell me Manville has stronger businesses and cash flow than any other big company that's ever filed.

Q. Your businesses are in good shape, but you filed under Chapter 11. Why?

A. We're overwhelmed by 15,500 lawsuits related to the health effects of asbestos, with many more projected. The federal government has refused to assume its responsibility to its shipyard workers. Congress has failed to act to provide compensation for claimants. Chapter 11 is the only orderly way for the Company to handle the litigation and treat everybody fairly. You may have heard recently that another publicly held asbestos manufacturer has taken the same step.

Q. Could you have avoided Chapter 11?

A. No. To avoid Chapter 11, we would have had to strangle the Company slowly, by deferring maintenance and postponing capital expenditures. We would also have had to cannibalize our good businesses just to keep going. If recent trends had continued we would have had to mortgage our plants and properties and new credit would be most difficult and expensive to obtain. This is no way to go forward. Chapter 11 avoids these problems and preserves our operations.

Q. Will Manville go out of business?

A. No. Our businesses will keep operating, very smoothly, we believe.

Q. Will any of your 25,000 employees lose their jobs?

A. I don't think Chapter 11 will cause a single employee to lose a job, pay or benefits. In fact, we believe Chapter 11 is the best way to permit the Company to operate normally, providing jobs and useful products, despite all the litigation. Most important, I want to keep our employees' morale up. They've done a bang-up job to keep Manville lean and competitive.

Q. Can you pay your suppliers?

A. We don't expect any significant problem in making full, timely payment for new shipments after our filing.

Q. What effect will Chapter 11 have on your customers?

A. None. We will continue to manufacture and ship high-quality products and provide the same services, as always.

Q. What will happen to the lawsuits?

A. The Chapter 11 filing automatically stops all lawsuits pending against us. New lawsuits are also automatically stopped. We hope to establish an effective system to handle these claims in Chapter 11.

Q. What are all these lawsuits really about?

A. It's a long story. Here's the bottom line. Not until 1964 was it known that excessive exposure to asbestos fiber released from asbestos-containing insulation products can sometimes cause certain lung diseases. Since the mid-70s, lawsuits have been brought against Johns-Manville, our subsidiary, on behalf of nearly 20,000 people alleging injury from excessive asbestos exposure. We have discussed about 3,500 of these cases by settlement or trial. In a significant number of cases filed, juries have found that we were not at fault and asked responsibility in light of then-existing medical knowledge. Nevertheless, new lawsuits have been coming in at a rate of 500 a month—every month! In the absence of Congressional action, the board of directors concluded there is no conceivable resolution to this burden, other than Chapter 11. Just to put it in perspective, Newsweek has stated that asbestos health litigation surpasses in size all the automobile accident suits pending across the nation before no-fault insurance laws were adopted.

Q. 20,000 plaintiffs? 6,000 new ones a year? Where are these suits coming from?

A. Well, many of them come from workers in shipyards and industries which used our asbestos fiber and products. Decades can pass between excessive exposure to asbestos and onset of the disease. For instance, there was asbestos insulation on the steam pipes and boilers in most ships built or refitted during World War II. The largest group suing us now consists of shipyard workers claiming recently manifested injury from asbestos exposure during wartime service, 40 years ago.

Q. What about your insurance? Shouldn't the insurance companies take care of the problem?

A. Over the years, Johns-Manville Corporation's former insurance broker bought insurance coverage for its tens of thousands of millions of dollars. Right now, however, only one company is paying, and it pays only a small part of each claim.

Q. Why is that?

A. The whole subject disgusts me. Now, when we need the coverage, with one exception, the insurance companies are reneging. We sued them all in California in early 1980 to force payment. You won't believe it, but even now, 30 months later, we still aren't sure which judge will preside over the case. As a result the case has gone nowhere. As much as anything else, the bad faith of insurance companies has made it necessary for us to take this action. I have instructed that our damage claims in the California case be increased by five billion dollars to partially compensate creditors and shareholders for our losses.

Q. How much do the asbestos lawsuits cost you?

A. Including our outside legal fees, the cost is currently over \$40,000 per case. This is sharply higher than our average in prior years. Internal legal staff costs are also substantial.

Q. If all 15,500 lawsuits now pending cost \$40,000 apiece to settle, that would total \$660 million. Without payments from your insurance companies, your problem is obvious.

A. Right. And that doesn't take into account the cases yet to be filed. Talking about legal costs,

one of the truly outrageous aspects of this situation is the amount of money being poured down the drain in litigation expenses and contingent fees paid to plaintiffs' lawyers. Our best guess is that the injured worker receives less than a third of the total cost of these suits. The court system, with separate individual trials, is too inefficient and haphazard for a massive problem like this. We need an effective, practical national system which delivers maximum payments to injured workers, minimizes the costs of delivering those payments and withholds payments to those with no disability.

Q. What do you mean by haphazard?

A. There is no better word to describe our experience to date in the litigation. We had one suit from a plaintiff, with doubtful asbestososis who had retired on a full disability pension with a broken ankle. He received an additional award for asbestos disease of one and a quarter million dollars. We have seen others totally disabled or in fact dead who received no award from the jury. In one recent trial in Texas, five separate juries hearing five different cases were empaneled and heard the same evidence before the same judge in the same courtroom at the same time. Their findings ranged from no liability to punitive awards. Maybe haphazard is too weak a description. This type of toxic tort litigation is an insupportable gambling exercise for both plaintiff and defendant.

Q. Why did you file now?

A. We're a public company. We are required to comply with certain accounting requirements. Under these rules, we're supposed to estimate the costs of current and probable litigation whenever possible and create a reserve for the liability in an amount equal to the estimate. When the asbestos cases began to proliferate, we couldn't estimate their probable number or cost, and our auditors qualified their opinion about our financial statements. When we found that the number of new cases was not declining and our "data base" of pending cases was large enough to assist in making projections, we hired epidemiologists and other professionals to develop an estimate of probable future disease cases. Early this month, they finished their work. On the basis of their work so far, we forecast that we could get at least 32,000 more lawsuits on top of the 20,000 already asserted. Some people outside Manville have estimated many more claims than that.

Q. A total of 52,000 lawsuits at a cost of \$40,000 apiece could mean a total cost of two billion dollars and that doesn't include an inflation factor. Could Manville afford it?

A. Not on our own. Our businesses are strong and viable but they might not be able to pay a bill that big. Even if we could pay, without the protection of Chapter 11, it would cripple us. The cost of handling paperwork for the number of cases is staggering. We have to incur that cost in all events and sometimes we are pressured by the courts to pay settlements without court determination that disability exists. We also might have to sell good businesses to raise cash. In Chapter 11, we can keep those businesses going and use their earnings to pay our liabilities. And timing is of course a problem. We have limited control over the timing of lawsuits and little ability to match timing of litigation payments against available cash. Disregarding the inflation, we are a low-debt company with a book net worth of \$1.1 billion. When a reserve is booked, net worth must also be reduced. The booking of a large reserve now for current and future asbestos health liabilities would wipe out most of our net worth. Without showing a good-sized net worth on our balance sheet, affordable credit would have dried up, and we simply could not have operated. So, when our board of directors learned that month of the probable need for a large reserve, it considered the options and concluded we had to file for relief under Chapter 11.

Q. How do you feel about this?

A. Awful. I've never had to do anything I hated more. Our loyal suppliers, lenders and shareholders all may suffer losses for their credit and investment exposure before our Chapter 11 filing. Losses could be very, very large for our present shareholders. Then, too, the many people who do have disabling injuries from excessive exposure to asbestos will be hurt. Their claims will be delayed and reduced. Still, it seems to us that the only orderly way to treat everyone fairly is through a court-supervised Chapter 11 proceeding.

Q. Most people think disabled workers are fully protected by workers' compensation. How is it they can sue you?

A. You're partly right. Workers' compensation covers an employer's liability to its employees for injury in the work place. The law has been interpreted to make "employer" and "employee" very restrictive terms. This means that a 1940's employee of a shipyard can get workers' compensation from the shipyard, but he can't also sue us for having supplied the allegedly defective product. I don't agree with that, but the fact is we are being sued in virtually every state because of it.

Q. Isn't there some other national program for people injured while on the job?

A. There are programs in other industries, but not for asbestos workers. There should be a statutory compensation program for asbestos injuries. We've tried to get a program passed, but Congress has been preoccupied. This is another reason we've been forced into Chapter 11. No other country uses the court litigation system to provide compensation for occupational disease.

Q. How long will you be in Chapter 11?

A. That depends. I've ordered our lawyers to go full blast. One of the biggest problems will be court approval of the estimated amount due in the future to product liability claimants. Once we get that approval, I think the "getting out of Chapter 11" ought to be just a matter of finishing up the legal proceedings. In the meantime, I understand that a company in Chapter 11 is allowed to conduct its affairs in the ordinary course of business without court approval.

One other thing needs attention. Our lawyers tell me that Congress needs to act by October 4 to straighten out an important technical point of bankruptcy court jurisdiction. Important aspects of our Chapter 11 case could be stalled

Radical Tactic ↓ Manville's Big Concern As It Files in Chapter 11 Is Litigation, Not Debt

Bankruptcy Petition Freezes
Asbestos Suits, May Prod
Government to Help Out

'They Want a Bail-Out Bill'

DENVER—Manville Corp. has filed a bankruptcy petition although it is far from broke.

In a highly unusual—and unexpected—development, the financially strong construction and forest-products giant sought protection yesterday under Chapter 11 of the federal Bankruptcy Code for political and legal reasons.

"Our businesses are in good shape despite this recession," John H. McKinney,

This article was prepared by Wall Street Journal staff reporters Neil Maxwell, G. Christian Hill and Raymond A. Joseph.

Manville's chairman and president, said. But he added: "We are completely overwhelmed by the cost of the asbestos health lawsuits filed against us." The company has 16,500 claims pending against it now, with 500 new ones being filed each month. The lawsuits, which essentially charge health damage from exposure to asbestos produced by Manville, will be frozen as a result of the Chapter 11 filing.

Manville apparently decided to file for Chapter 11 protection after a recent outside study brought its legal problems into sharp focus. The study concluded that 52,000 such suits might eventually be filed, and they might cost \$2 billion. "I think that's what did it," says R. Jerry Falkner, an analyst with Underwood Neuhaus & Co. in Houston. "Under accounting rules, once you have an estimate of a liability, you have to set up a reserve, so their net worth of \$1.1 billion would have been wiped out."

Role of Government Cited

The bankruptcy filing also appears to be an attempt to influence the federal government, which Manville and others in the asbestos business contend should share the burden of liability for asbestos health damage because the product was used in U.S. shipbuilding efforts during World War II. Mr. McKinney said that Manville's Chapter 11 action "might not have been necessary if the government had accepted financial responsibility for its role in causing much of the disease."

Fred M. Baron, a Dallas attorney who represents clients suing Manville and others for asbestos damages, says, "They are trying to force the government's hand. They want a bail-out bill. That's 100% behind their filing."

Manville Corp., formerly Johns-Manville Corp., is the Western world's leading producer of asbestos, and company officials have conceded that this has helped to make Manville one of the most sued companies in the world. In recent years, asbestos has become known as the cause of deadly lung diseases that often don't show up until 20 or 40 years after exposure.

The Manville Chapter 11 filing is the most dramatic in a series of maneuvers within the beleaguered industry to minimize the impact of accumulating asbestos litigation. All told, some 30,000 claims have been filed against some 260 asbestos concerns to date.

UNR's Chapter 11 Filing

A similar Chapter 11 filing was made July 28 by Chicago-based UNR Industries Inc., a steel fabricator that is swamped by damage suits although it hasn't made an asbestos product since 1962. UNR weighed various options—including liquidation—before deciding on Chapter 11 as "the most prudent course," says Malcolm Gaynor, a lawyer who is handling UNR's reorganization.

After UNR filed for bankruptcy, Manville began making the rounds of federal and state courts in which suits had been filed naming UNR and Manville as co-defendants. Manville argued that since it was a co-defendant, legal action should be stayed against it as well as UNR because of the Chapter 11 filing.

Plaintiffs' attorneys in the asbestos litigation are highly cynical about the Chapter 11 action, viewing it as ploy to head off the relentless stream of litigation. "It's a fraud on the bankruptcy laws," declares Ronald L. Motley, a Barnwell, S.C., attorney who represents some 3,000 asbestos plaintiffs.

Alluding to a series of bleak announcements in recent weeks by companies facing asbestos claims, Mr. Motley says: "The script now isn't hard to follow: First you cut the dividend, then you eliminate it, and finally you file for Chapter 11." Manville followed this sequence. Raymark Corp., formerly Raybestos-Manhattan Inc., omitted its dividend earlier this week after reducing it last year. But the company says it has "no intention" of filing for Chapter 11.

Other Filings Predicted

William F. Bailey, senior vice president of Boston-based Commercial Union Insurance Cos., predicts that other asbestos companies "may follow Manville and UNR" into Chapter 11.

The Manville and UNR filings may benefit insurers who are battling one another and their asbestos-company clients over the payment of asbestos damage claims. "As we read it now," Mr. Bailey says, "any suit that Manville may have had going against an insurer will also be stayed."

Manville, on the other hand, cites insurers' role in its Chapter 11 filing. Mr. McKinney, in an advertisement placed in newspapers today, says that Manville's insurers haven't been paying the company's claims, and so "as much as anything else, the bad faith of insurance companies has made it necessary for us to take this action."

One large insurance corporation, Iron-

Please Turn to Page 6, Column 1

KMX 02136

Radical Tactic: Filing Chapter 11 Bankruptcy Plea, Manville Corp. Takes Aim at Costly Asbestos Suits

Continued From First Page

cally, is listed among Manville's largest unsecured creditors — Prudential Insurance Co., holding \$68 million of debt. Other large creditors: Morgan Guaranty Trust Co., \$36 million; Bank of America, Chemical Bank, and Citibank, each for \$20 million; Republic National Bank of Dallas, \$12 million; and Continental Illinois National Bank and Wells Fargo Bank for \$10 million each.

The asbestos battle, meanwhile, has also been heating up in Washington. Congress has three bills pending that would partly bail out asbestos manufacturers, but all have stalled because either industry or labor has strong objections to certain provisions.

Manville has fought for a bill that would require the federal government to pay for almost all of the cost of compensating asbestos victims, but it hasn't gotten to first base. One bill calls for 50% of the cost to be picked up by the government, but observers say that, too, has little chance.

The most talked-about bill is one introduced by Democratic Congressman George Miller of California, chairman of the House Labor Standards subcommittee. It would set up an industry-financed fund to provide pensions for injured workers. It would allow suits already filed to proceed but would prohibit future suits. All industries that used asbestos products would contribute to some degree. But Manville and other manufacturers vigorously contest the bill because of its cost and its failure to deal with present suits.

John Lawrence, staff director of the Labor Standards subcommittee, says Congress is apt to view Manville's bankruptcy filing with deep suspicion. "We are going to make sure this isn't a little corporate shuck and jive" to escape liability, he says.

Congressman Miller suggests that Manville may have escaped the reach of his bill by filing under Chapter 11. "We have to see whether this cuts off our ability to include Manville," he says. "What if Manville won't be there as a contributor to the fund? Will other manufacturers show a greater interest in the bill, or run to bankruptcy court themselves?"

From the standpoint of its balance sheet, Manville Corp. is considered the healthiest giant corporation ever to file for Chapter 11. Its June 30 financial statement boasts a net worth of \$1.1 billion, with Short-term debt of

Dow Jones May Change Industrial Average List

By a WALL STREET JOURNAL Staff Reporter

NEW YORK—Dow Jones & Co. said it is considering possible changes in the list of stocks included in the Dow Jones Industrial Average.

The move was prompted by the bankruptcy petition of Manville Corp., one of the 30 stocks in the average, and the New York Stock Exchange's plan to suspend trading in the stock Sept. 10.

Johns-Manville Corp., which changed its name last year, became a component of the average Jan. 29, 1930, replacing North American Aviation. It is believed to be the first component of the average to file for bankruptcy protection since the 30-component average began Oct. 1, 1928.

If and when a substitution is made for a component of the index, it wouldn't have any immediate effect on the average, because the divisor used to calculate the average is changed when a substitution is made. The change assures that the "new" average is the same as the previous one.

Current calculations of the average include Manville at 7%, the price of its last trade on Wednesday.

\$102 million and long term debt totaling \$496.7 million. This is considerably better than the one-to-one debt-to-equity ratio considered satisfactory for large manufacturers. The company earned \$60.3 million in 1981 but had a loss of \$25.1 million for the first half of 1982, because of a recession-related decline in demand for its products.

The financial statement didn't contain an estimate of the liability from the asbestos suits. The company did, however, make detailed estimates of potential liability in yesterday's bankruptcy petition. It stated that through the first half of this year it had settled about 3,500 asbestos-related claims, for an average of \$16,600 per claim. It said the current cost of settling claims was running about \$40,000 per claim. In addition, Manville said, in five cases decided during the first half of this year, it was held liable for punitive damages averaging \$616,000 per case.

The company said that its board and a special committee formed to review the situation concluded that the potential costs of asbestos cases "could and probably will exceed Manville's ability to pay and finance the continuing operation of Manville's businesses." It added that the total "financial burden" could range from \$2 billion "to many times that amount over the next 20 years."

So-called punitive damages have become a major worry for asbestos concerns. Two years ago, the California Supreme Court ruled that plaintiffs were entitled to punitive or other damages because Manville had fraudulently concealed its knowledge of asbestos hazards from workers. Previously, recovery of damages by Manville employees

had been limited to workers' compensation awards specified by state laws; for plaintiffs not employed by Manville, only compensatory damages had been awarded.

"I think what set them on this course was punitive damages," says Michael P. Mealey, managing editor of the Asbestos Litigation Reporter, a publication devoted to covering the asbestos legal battle. "Those damages aren't covered by insurance—they come right out of the company's pocket."

Filing Chapter 11 halts all legal action against Manville. The bankruptcy judge, rather than federal and state courts, now decides the outcome of cases, according to bankruptcy expert Vern Countryman, a professor at Harvard University. The company will benefit not only from a delay in legal action while its reorganization proceeds, he says, but also from not having to fight thousands of different cases across the country.

Mr. Countryman sees a good chance that Manville will emerge from Chapter 11 proceedings as a sound operation. If the net worth figure of \$1.1 billion "is anywhere in the ballpark," he says, "they should emerge from a reorganization with something left for shareholders."

In a sense, Manville's decision pitted the interests of its shareholders against the growing burden of its legal liability, and the shareholders lost, at least for the time being. Common stock worth about \$609 million in 1981 is now worth little or nothing because it is so illiquid and the ultimate value is so speculative. Preferred shares worth \$142.6 million Wednesday are also now of questionable value.

The market obviously sensed Manville's growing difficulties. The common stock declined from a high of \$26.50 in 1981 to a recent low of \$6.875. It closed at \$7.875 Wednesday on the Big Board. The market value of the common stock at that price is \$186 million. The stocks didn't trade yesterday, and the New York Stock Exchange said it will suspend trading in the shares Sept. 10.

Asbestos has been linked to the development of lung cancer; to mesothelioma, a cancer of the lining of the lungs; and asbestosis, a lung disease similar to emphysema. Asbestos miners, former employees of companies that manufactured asbestos products—and their survivors—now are among those suing for compensation for illness and death allegedly caused by the mineral.

To one victim of asbestosis, Manville's bankruptcy filing is but one more attempt to escape a court award and other litigation that has been pending for five years. Jim Vermeulen, a 55-year-old former worker at Manville's Stockton, Calif., asbestos concrete pipe plant, has a personal injury and fraud suit against Manville, and two years ago the California Supreme Court ordered Manville to pay him \$28,000 in rehabilitation benefits.

Manville is still contesting the \$28,000 award in a lower court, he says. Of the bankruptcy filing, he says "it is as plain as the nose on my face that Manville will do anything it can to evade responsibility."

KMX 02137

Corporate Dividend News

Manville Corp. Skips Payout, Fears Harm From Asbestos Suits

By NEIL MAXWELL,

Staff Reporter of THE WALL STREET JOURNAL

DENVER—Manville Corp., the big asbestos producer, omitted its quarterly dividend and conceded for the first time that the impact of rapidly growing asbestos-related health-damage claims could greatly hurt its financial health.

The company had cut its quarterly paid last May to 20 cents a share from 48 cents, the first reduction since 1940.

The company, the largest producer of asbestos in the non-Communist world and a substantial manufacturer of construction products, said it took the action after receiving an outside consultant's report on the possible impact of asbestos litigation. The company quoted the report as saying that "commencement of new asbestos health litigation against members of the Manville corporate

group may well continue unabated for a number of years."

The board appointed a committee to review the study "and to appraise the potential future impact on the company of pending and anticipated asbestos health cases, the possible need for creation of substantial reserves and the strategic and financial options available."

In the annual report, Manville had maintained there wasn't any reason to set up reserves, as the outcome of the asbestos-suit torrent "cannot be reasonably determined." But the company's auditors have qualified for two years their opinion of the annual report, because of possible liability.

More than 16,000 plaintiffs, mostly former asbestos workers either for Manville customers or for the U.S. government in World War II shipyards (or their survivors) have filed at least 11,000 lawsuits, claiming health damage or death resulted from exposure to company products.

Manville's deepening fiscal troubles have been apparent for some time. In the first quarter the company had its first quarterly loss in 50 years. Then it nearly quadrupled that loss in the second quarter.

Some analysts thought the dividend "was

in jeopardy but the omission came as a jolt to others.

"I'm frankly surprised," said Barbara Alexander of Smith Barney, Harris Upham & Co. "Management had led everybody to believe they would retain the dividend as long as possible."

As recently as June, John A. McKlinney, chairman, said he didn't expect further cuts in the dividend. The Smith Barney analyst said outside directors may have forced the move. "It would appear that the outside directors, who control the board, must believe that they need the cash, or that things are worse than company pronouncements have led people to believe," she said.

Yesterday, Manville said "the burden of the existing case-load, combined with the continued incidence of new asbestos health litigation at current levels, could have a material adverse effect on Manville's consolidated financial position and earnings."

Suits against the company claiming health damage or death from exposure to asbestos has been multiplying for more than 3½ years, but recently its liability has increased, with the allowance, in some cases of punitive damages. Such damages aren't covered by insurance, as actual damages

are. Manville asserts that it has insurance to pay for \$600 million of insured claims.

The company has begun listing "asbestos health costs" as a line item in earnings statements, and it is a growing item. The second-quarter figure rose to \$5 million before taxes from \$2.7 million a year earlier. For the half, it rose to \$8.6 million before taxes from \$5.2 million.

The forest-products and construction company has also been having other problems, including slumping sales of construction products. The second-quarter loss was \$19.9 million, compared with profit of \$11.4 million, or 22 cents a share, a year earlier.